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California Expert Principals' Identification of the Best Strategies for the Implementation of a Transition from a Traditional Grading and Reporting System to a Standards-Based

Grading and Reporting System: A Delphi Study

A Dissertation by

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Submitted in partial fulfillment of the requirements for the degree of

Doctor of Education in Organizational Leadership

November 2019

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Grading and Reporting System: A Delphi Study

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ABSTRACT

California Expert Principals' Identification of the Best Strategies for the Implementation of a Transition from a Traditional Grading and Reporting System to a Standards-Based

Grading and Reporting System: A Delphi Study

by Sean Redmond

Purpose: The purpose of this policy Delphi study was to identify the strategies California K-12 expert principals deem necessary for the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system, utilizing a panel of expert principals to rate the importance of the identified strategies and to recommend the best methods of implementing the five most important strategies.

Methodology: The Delphi method was utilized in this study. An expert panel of California K-12 principals was assembled, and three rounds of electronic surveys were administered. The first-round results identified strategies for implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system. Round 2 results rated each strategy on importance. Round 3 results provided explanations on implementing the five most important strategies.

Findings: An analysis of the first-round survey identified 16 unique strategies for implementing a transition from a traditional grading and reporting system to a standardsbased grading and reporting system. During the second-round survey, the expert panel rated the five most important strategies as: (a) align student information system with standards-based grading; (b) teachers lead the planning and implementing of standardsbased grading and reporting; (c) professional development for teachers; (d) educate parents on standards-based grading and reporting; and (e) coaching from peers and

iv

experts. The third-round survey determined the best methods for implementing the five most important strategies.

Conclusion: According to the expert panel, principals should: (a) ensure their school's student information system is aligned to standards-based grading and reporting; (b) allow teachers to lead the planning and implementing of standards-based grading and reporting; (c) provide professional development for teachers on standards-based grading and reporting; (d) educate parents on standards-based grading and reporting; and (e) provide opportunities for coaching from peers and experts.

Recommendations: The study recommends four areas for further research to further the body of knowledge concerning the implementation of standards-based grading and reporting.

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CHAPTER I: INTRODUCTION

Grading and reporting methods used in public schools in the United States have remained unchanged for almost 100 years (Schneider & Hutt, 2014). Grading and reporting systems have not evolved despite teachers changing the methods in which they instruct and the content they have taught throughout the years. For instance, in 1996, California schools and educators moved toward academic standards and state accountability through standardized assessments, yet traditional grading and reporting practices remained in most schools (California Department of Education [CDE], 2018d). Now, Common Core Standards have recently been adopted by many states including California in 2010, providing a springboard for grading and reporting systems to change from the old traditional methods (CDE, 2018a). Due to this change, some California elementary schools began implementing a new research-based method of grading and reporting that works in collaboration with new educational content standards. This new implementation of grading and reporting is called standards-based grading. Unfortunately, not all transitions from traditional grading and reporting systems to standards-based grading and reporting systems are effective and sustainable (Battistone, 2017; Proulx, Spencer-May, & Westerberg, 2012). Furthermore, secondary schools continue to use traditional grading and reporting systems (Schneider & Hutt, 2014).

Traditional grading and reporting systems are criterion-referenced systems (R. J. Marzano, 2010). In traditional grading and reporting systems, students have learning objectives, and teachers evaluate students' performance based on a variety of academic and non-academic factors such as homework, participation, behavior, and tests (R. J. Marzano, 2010). The traditional grading and reporting system was popularized in the

mid-20th century and remains the most common system for grading and reporting (Schneider & Hutt, 2014)

Proponents of standards-based grading criticize traditional grading and reporting systems. For example, Muñoz and Guskey (2015) suggest traditional grades can be biased and do not thoroughly inform on student academic progress. Researchers such as D. Reeves, Jung, and O'Connor (2017) suggest the primary purpose of reporting academic grades is to inform on a student's academic achievement towards meeting specific learning goals. Traditional grading and reporting systems fail at fulfilling (D. Reeves et al., 2017) purpose for grades.

Educational researchers, such as S. M. Brookhart et al. (2016), define standardsbased grading and reporting as a practice in which teachers use systematic classifications to determine academic progress of students in relation to specific content/ grade level standards. Standards-based grading and reporting systems are fairer and more equitable than traditional grading and reporting systems. Researchers, such as D. Reeves (2011), have vehemently called for an end to traditional grading and reporting. As a result, the implementation of a standards-based grading and reporting system is an important discussion in the current education environment. It would therefore make sense to conduct a study that explores the best methods of transition from a traditional grading and reporting system to implement a new standards-based grading and reporting system.

Background

The origin of grading and reporting in the United States is rooted in the university system, specifically Yale. In 1785, Ezra Stiles was the president of Yale and began to categorize students based on their apparent knowledge (Stiles, 1901). Over the years, the

grading and reporting system took different forms. The evolution went from honor points, to zero to four grades, and finally, to a secret Book of Averages (Pierson, 2001). Eventually, primary and secondary education systems made use of university grading systems. This merge was assisted by the work of Calvin Stowe who studied Prussian schools' grading and reporting practices, which were structured by graded steps rather than a competitive environment (Mann, 1846). By the mid-20th century, traditional grading and reporting practices that utilize A-F grades were in place in the United States (Schneider & Hutt, 2014).

California Standards-Based Assessment System

For nearly a century, grading and reporting systems in the United States have been stagnant (Schneider & Hutt, 2014). Although educational research has been conducted and teaching practices have changed to better educate a growing and diverse population of students, little has been done to address the model of traditional grading and reporting systems. Even during times of educational reform, such as California's standards-based reform movement which began in 1996 when California adopted content and grade level standards, primary and secondary schools held to traditional grading and reporting systems (CDE, 2018e). California developed and administered high-stake standards-based assessments, such as Standardized Testing and Reporting (STAR) beginning in 1997 and California Achievement Test 6th education (CAT/6) beginning in 2002, to monitor student academic achievement (CDE, 2018e). More recently, California adopted Common Core standards in 2010, and a new assessment, Smarter Balanced Assessment Consortium (SBAC), was introduced in 2015 (CDE, 2018b). Unfortunately, after more than 20 years since California adopted content standards and began assessing students with high-stake standards-based assessments, little has changed in the form of grading and reporting systems (K. O'Connor & Wormeli, 2011). When educational researchers, such as S. M. Brookhart (2011), suggest standards-based grading is the counterpart to the standards-based instruction and accountability system, it becomes even more of an issue.

Grading and Reporting in California Schools

Since the adoption of Common Core, some elementary schools have re-evaluated their grading and reporting systems and moved away from traditional grading and reporting systems (S. M. Brookhart et al., 2016). Educational researchers have criticized traditional grading and reporting systems by suggesting they are harmful to students (S. M. Brookhart, 1994; Docan, 2006; T. R. Guskey, 1994; K. O'Connor & Wormeli, 2011; D. Reeves, Jung, & O'Connor, 2017). As a solution, many critics of traditional grading and reporting systems have suggested replacing them with standards-based grading and reporting systems (S. M. Brookhart, 2011; T. R. Guskey & Jung, 2012; Muñoz & Guskey, 2015). T. R. Guskey and Jung (2012) state, "As standards-based curricula and assessments are implemented, grading practices must also change to be meaningful and fair," (p. 23). The proposition begins with the purpose of grading and reporting.

Purpose of Grading and Reporting

There exists no consensus among educators on the primary purpose of grades. T. R. Guskey (2015), in his book *On Your Mark: Challenging the conventions of grading and reporting*, identifies six categories for educators' explanation for grades:

• To communicate information about students' achievement in school to parents and others.

- To provide information to students for self-reflection.
- To select, identify, or group students for certain educational paths or programs.
- To provide incentives for students to learn.
- To evaluate the effectiveness of instructional programs.

To provide evidence of students' lack of effort or inappropriate responsibility. However, many educational researchers agree the primary purpose of grades is to communicate the academic achievement of students with respect to learning goals, objectives, or content standards (Cross & Frary, 1999; Dodd, Greene, & McTighe, 2017; Fisher, Frey, & Pumpian, 2011; Franklin, Buckmiller, & Kruse, 2016; R. J. Marzano, 2000; Muñoz & Guskey, 2015; K. O'Connor, 2011; D. Reeves et al., 2017). The audience for grades is identified as students, parents, teachers, post-secondary institutions, and employers (Bailey & McTighe, 1996; Dodd et al., 2017; T. R. Guskey, 2015). T. R. Guskey (2015) warns that without a clearly defined purpose for grades, schools may try to meet every identified purpose and, as a result, obscure the message communicated by the grade. Schools should build consensus through collaboration among all stakeholders on the primary purpose of grades. Therefore, for this study, the definition of the primary function of grades is to communicate academic achievement to students, parents, teachers, post-secondary institutions, and employers as measured against state-adopted content standards.

Standards-Based Grading and Reporting Systems

S. M. Brookhart (2011) proposes standards-based grading and reporting is superior at communicating academic progress and achievement of students. For

example, a standards-based report card should include a distinction between product, process, and progress criteria for major themes or strands of state-adopted content standards (T. R. Guskey, Swan, & Jung, 2010). When utilizing standards-based grading and reporting, teachers are reporting on student achievement relating to content standards; therefore, teachers must align their instruction and assessments to the content standards. In a phenomenology study of high school teachers' perception of standardsbased grading on planning, instruction, and assessments, Knight (2017) revealed that standards-based grading forces teachers to plan, teach, and assess in a more meaningful way. Therefore, a teacher's grade book in a standards-based grading and reporting system would only include assessments that aligned to content standards. In addition to improving communication, standards-based grading and reporting systems do not have non-academic elements in the grading practices whereas traditional grading and reporting systems do.

Traditional Grading and Reporting Systems

Traditional grading and reporting systems have evolved little over the course of the last one-hundred years (Schneider & Hutt, 2014). Some research shows traditional grading and reporting systems are viewed by some educators as convenient, timeefficient, and a way to protect both students and teachers from negative social or professional consequences (Cross & Frary, 1999; Schiffman, 2016). Some educators suggest that their use of traditional grading and reporting practices allows students to develop life skills and prepares them for the real world; non-academic factors such as behavior, citizenship, and work ethic are included in the students' grade to show empathy to the students and their unique situations (Tierney, 2015; Zoeckler, 2005). Additionally,

traditional grading and reporting systems include practices that are perpetuated not for their effectiveness, but they are the same practices educators had experienced whilst attending school. (Dodd et al., 2017; T. R. Guskey, 2015; K. O'Connor, 2009). Some educational researchers are skeptical of the validity, consistency, and reliability of traditional grading and reporting systems. K. O'Connor (2009) advocates for the idea that percentage-based grades are not valid for determining a student's academic achievement. Also, T. R. Guskey, Swan, and Jung (2010) indicate traditional grades may not be consistent from school to school or even from department to department.

Additionally, T. R. Guskey (2011) found traditional grades often include nonacademic measures such as attitude, responsibility, effort, extra credit, and behavior. S. M. Brookhart (1991) went as far as to label traditional grading and reporting as hodgepodge grades. Therefore, traditional grading and reporting systems may not provide meaningful, equitable, or reliable information about student achievement. Schools should consider transitioning away from traditional grading and reporting to a system that is more valid, consistent, and reliable.

Transitioning to Standards-Based Grading and Reporting

Some research has been done investigating the transition from traditional grading and reporting systems to standards-based grading and reporting systems. T. R. Guskey (2011) identifies five perceptions about grading practices that are rooted in tradition that must be overcome to lead grade reform successfully:

- Grades should provide the basis for differentiating students.
- Grade distribution should resemble a standard bell-shaped curve.
- Grades should be based on students standing among classmates.

- Poor grades prompt students to try harder.
- Student should receive one grade for each subject or course.

Adrian (2012) found that teachers in one elementary school believed collaboration, technology and support, and educating families are three most essential elements for successfully transitioning to standards-based grading. Szymczak (2016) studied the experiences of middle school level teachers from a single Illinois school when transitioning from traditional grading and reporting to standards-based grading and reporting, and several challenges were determined such as lack of information and knowledge of standards-based grading, large number of standards to report, needed time for collaboration, and educating parents on how to read and use the new grading system. Finch (2016) studied an elementary school district in Illinois that transitioned from a traditional grading and reporting system to a standards-based grading and reporting system. Implementation challenges were identified as collecting and organizing student achievement data and the amount of required time needed to provide meaningful feedback to students on assessments and report cards. Carter (2017) surveyed 10 secondary principals spread throughout nine states to determine best practices for leading a transition from traditional grading and reporting to standards-based grading and reporting and determined eight essential steps for leading the transition:

- Establish a sense of urgency.
- Creating a guiding coalition.
- Developing a change vision.
- Communicating the vision for buy-in.
- Empowering broad-based action.

- Generating short-term wins.
- Never let up.
- Incorporating change into the culture.

Research on the transition from traditional grading and reporting systems to standards-based grading and reporting systems comes from different perspectives. When implementing a transition from a traditional grading and reporting system to a standardsbased grading and reporting system, principals must know the most important strategies. However, there has been no study conducted that investigates the best methods for California principals to utilize when applying the implementation.

Statement of the Research Problem

Most secondary public schools in California use traditional grading and reporting systems, and elementary schools that utilize standards-based grading and reporting systems do not do so with fidelity. Educational researchers have discovered many schools that have implemented standards-based grading and reporting practices struggle to have complete buy-in and participation from all stakeholders (Battistone, 2017; M. M. Townsley, 2013). Parents, students, and school board members struggle to understand the reason behind transitioning from a system that has been used for over 100 years. Those schools which have not changed their grading and reporting practices preserve practices that, according to K. O'Connor and Wormeli (2011), "play havoc on the lives of students," (p. 42) and have been shown to hurt students' confidence, decrease motivation, poorly impact students' future performance, threaten emotional well-being, and decrease students' self-efficacy (S. M. Brookhart, 1994; Docan, 2006; T. R. Guskey, 1994; K. O'Connor & Wormeli, 2011; D. Reeves et al., 2017).

Grading and reporting reformers insinuate grades should be objective, accurate, and meaningful if their real purpose is to communicate academic progress and achievement to students, parents, and administrators (Muñoz & Guskey, 2015; K. O'Connor & Wormeli, 2011; T. Schimmer, 2016). However, traditional grading and reporting systems, the most widely used grading and reporting systems, do not meet these criteria. Traditional grading and reporting systems are subjective, inaccurate, and not aligned with student academic achievement (T. R. Guskey, 2011; R. J. Marzano, 2010; Westerberg, 2016).

Since 2010, California public schools have been implementing Common Core Standards and completing the SBAC, a high-stakes state assessment aligned to Common Core Standards (CDE, 2018b). It is common practice for schools to utilize student achievement scores on the SBAC to identify students who are in need of interventions. An intervention may consist of a pull-out session with a reading or math specialist at the elementary, or the student loses an elective course to allow enrollment into an intervention English Language Arts (ELA) or math class at the secondary level (Alawiye & Williams, 2005; R. E. O'Connor, Harty, & Fulmer, 2005; Vaughn, Feldhusen, & Asher, 1991). Unfortunately, in a traditional grading and reporting system, students and parents only become aware of academic achievement of standards when SBAC scores are reported. Students, parents, and teachers need to be cognizant of the academic progress of the student towards meeting content standards, but traditional grading and reporting systems are not structured for this purpose.

Educational researchers agree standards-based grading and reporting systems are more fair, meaningful, and better for students than traditional grading and reporting (T.

R. Guskey & Jung, 2012; Iamarino, 2014; R. Peters, Kruse, Buckmiller, & Townsley, 2017). Expert principals deem certain strategies necessary to successfully implement a transition from a traditional grading and reporting system to a standards-based grading and reporting system. California public schools that are not implementing standards-based grading and reporting systems and standards-based grading with fidelity will benefit from this knowledge. These strategies can be replicated by principals as they lead implementations of standards-based grading and reporting systems; this will increase the fidelity of the implementation of the new grading and reporting system. A school's successful and sustainable implementation of a standards-based grading and reporting system will have teachers utilizing practices that support learning, and students will begin to see themselves as learners (T. R. Guskey, 2011).

Purpose Statement

The purpose of this policy Delphi study was to identify the strategies California K-12 expert principals deem necessary for the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system, utilizing a panel of expert principals to rate the importance of the identified strategies and to recommend the best methods of implementing the five most important strategies.

Research Questions

The following questions were used to address the purpose of the study:

Round 1

1. What strategies do California K-12 expert principals who have implemented a transition from a traditional grading and reporting system to a standards-based grading and reporting system identify as necessary to accomplish the transition?

Round 2

2. To what degree do the California K-12 expert principals rate the importance of the strategies identified in Research Question 1?

Round 3

3. What do the California K-12 expert principals recommend as the best methods of implementing the five most important strategies identified in Research Question 2?

Significance of the Problem

Education content standards do not appear to be going anywhere and are becoming more refined. California adopted Common Core ELA and math standards in 2010, Next Generation Science Standards in 2013, and new history and social-science standards in 2016 (CDE, 2018a). The Smarter Balanced Assessment, which aligns with Common Core standards, has been administered in California since 2015, and the California Science Test, which is aligned with Next Generation Science Standards (NGSS), became operational in 2018 (CDE, 2018b). California has also adopted a new school accountability system, California School Dashboard, as part of the Local Control Funding Formula law passed in 2013 that includes results from high-stakes standardized tests, among other criteria, to hold schools accountable for student achievement (CDE, 2018d). California schools are in need of a grading and reporting system that aligns with content standards, state assessments, and reflects data reported on the California School Dashboard. Traditional grading and reporting systems are not structured to meet the demands of a standards-based education, but a standards-based grading and reporting system that is utilized with fidelity will communicate product, process, and progress towards meeting education content standards; it will have the validity, reliability, and consistency educational researchers plead for in a grading and reporting system.

The transition from a traditional grading and reporting system to a standardsbased grading and reporting system requires a transformational change. D. Anderson and Ackerman-Anderson (2010a) define transformational change as, "a radical shift of strategy, structure, systems, processes, or technology, so significant that it requires a shift of culture, behavior, and mindset to implement successfully and sustain over time," (p. 60). D. Anderson and Ackerman-Anderson (2010a) warn that inadequately led transformational change can result in a breakdown throughout the organization. It is imperative that California principals are equipped with knowledge of the best methods to execute the most important strategies to successfully and sustainably implement a transition from a traditional grading and reporting system to a standards-based grading and reporting system. Principals leading the transformational change to a standardsbased grading and reporting system cannot afford to fail; students, parents, and the future are relying on them.

Definitions

The ensuing words and phrases are used for this study:

Grading. A representative of a teacher's formative and summative evaluation of students' performance (Muñoz & Guskey, 2015).

Grade reporting. The method for communicating the results of a teacher's formative and summative evaluations to students, parents, or others (Muñoz & Guskey, 2015).

Traditional grading and reporting. A system that utilizes A-F or numerical grades, often based on an average score using a 0-100% point scale, and includes academic measures on formative and summative assessment and other non-academic criteria such as behavior, attendance, and late work penalties (K. O'Connor, 2009).

Standards-based grading and reporting. A system that assesses and reports student achievement of standards or learning goals separate from non-academic criteria such as behavior and attendance and provides students with multiple chances to validate their learning over time (M. M. Townsley, 2017).

Expert principal. A principal who successfully led a transition from a traditional grading and reporting system to a standards-based grading and reporting system, has a minimum of three years of experience as a principal, and remained at the school for one year after the implementation was complete.

Successful implementation. Standards-based grading and reporting system remains in practice at least one-year after full implementation where a standards-based report card is used; averages are not used; behavior is reported separately from academic

achievement; students are afforded with multiple occasions to prove their learning over time.

Delimitations

This study was delineated by expert principals in California who have implemented a transition from a traditional grading and reporting system to a standardsbased grading and reporting system.

Organization of the Study

This study is organized into five chapters and closes with a conclusion, a reference page, and appendices. The following chapter, Chapter II, includes a review of available literature on the history of grading and reporting, California's standards-based education movement, the purpose of grades, traditional grading and reporting systems, standards-based grading and reporting systems, and the transition from a traditional grading and reporting system to a standards-based grading and reporting system. Chapter III clarifies the research design, variables, methodology, population, sample, instrumentation, validity and reliability, data collected through the surveys of the Delphi study. Chapter IV is a presentation of data collected through the surveys of the Delphi study. Chapter V reveals the major findings, unexpected findings, conclusions from data, implications for action, recommendations for further research, and concluding remarks and reflections of the study.

CHAPTER II: LITERATURE REVIEW

This literature review is divided into 10 sections. A historical overview of grading and reporting in the United States is provided first, and it is followed by a discussion of California's standards-based reform movement. Next, the purpose of grading and reporting is addressed prior to a discussion on the benefits and criticisms of traditional and standards-based grading and reporting systems. Additionally, grading and reporting systems in California schools are examined, and an overview of organizational change is provided. This chapter concludes by examining current research on transitioning to a standards-based grading and reporting system and identifying a gap in the literature.

History of Grading and Reporting Policies and Practices in the United States

The establishment of grading and reporting systems in the United States can trace its origin back to Yale University during the late 18th century. Ezra Stiles, former president of Yale University, recorded in his diary a process in which students were categorized based on their apparent knowledge (Stiles, 1901). This system evolved into an honors system where students were appointed Orations to Dissertations, Disputes, and Colloquies (Schneider & Hutt, 2014). The appointment system was eventually supported by a zero to four grading scale (Schneider & Hutt, 2014). These grades were kept a secret from students to prevent competition, and they were recorded in the Book of Averages (Schneider & Hutt, 2014).

Calvin Stowe, a theologian and educator who studied Prussian schools, helped promote university level grading and reporting practices to be implemented in primary and secondary education (Mann, 1846). Stowe reported how Prussian schools organized

students and curriculum into graded steps, allowing students to move to the next step once they were proficient at the current step (Mann, 1846). This type of system was contrary to the competitive nature of the United States education system (Schneider & Hutt, 2014). This report inspired a revolution in grading and reporting practices in the United States (Schneider & Hutt, 2014).

By the mid-20th century, grading and reporting systems in the United States almost exclusively utilized A through F grades, commonly referred to as a traditional grading system (Schneider & Hutt, 2014). Traditional grading and reporting remained almost unchecked for nearly 100 years until the beginning of the standards-based reform movement despite some educators questioning the validity, reliability, and consistency of traditional grading and reporting systems (Schneider & Hutt, 2014).

California Standards-Based Reform Movement

Almost 100 years since traditional grading and reporting systems took hold of education in the United States, little reform has taken place concerning grading and reporting systems (Schneider & Hutt, 2014). Primary and secondary schools maintained traditional grading and reporting systems even during times of educational reform such as California's standards-based reform movement that began in 1996 when California adopted content and grade level standards (CDE, 2018e).

California Content and Grade Level Standards

Since their initial construction and adoption in 1997, California's State Board of Education content standards have been through a significant evolution (CDE, 2018e). At the time of adoption, California was amid a standards-based reform movement, and the adoption of content standards was to specify what each student should learn at each grade

level or content course (CDE, 2018e). However, the original content standards, recognized as the 1997 standards, were dubbed by many in education as, "a mile wide and an inch deep," criticizing the lack of depth and extensive breadth the 1997 standards covered.

In 2010, California's State Board of Education adopted new standards that were meant for the 21st century and addressed the criticisms of the 1997 standards: Common Core Standards for ELA and mathematics (CDE, 2018e). In 2013, California's State Board of Education adopted NGSS that followed the same rigor as the newly adopted Common Core Standards (CDE, 2019c). Then, in 2016, California's State Board of Education adopted new History-Social Science standards (CDE, 2019a). These adopted standards have replaced the original content standards of California, and new high-stakes tests were developed to assess student achievement relative to these standards.

California Standards-Based Assessment System

Since California's standards-based reform movement, standards-based assessments have been administered to students in order to determine their proficiency in the state adopted content standards, and they compare their academic achievement to other students and collectively to schools. From 1997 through 2013, California operated the STAR (CDE, 2019d). The STAR was the foundation of the California Public Schools Accountability Act of 1999 to help schools increase the academic achievement of all students (CDE, 2019d).

The STAR was composed of four parts: (1) California Standards Test (CST); (2) California Alternative Performance Assessment (CAPA); (3) California Modified Assessment (CMA); (4) Standards-based Tests in Spanish (STS) (CDE, 2019d). These

criterion-referenced assessments implored the 1997 California content standards in ELA, mathematics, science, and history-social science (CDE, 2019d). The results of these assessments were utilized by the state to determine a school's Academic Performance Index (API) and Academic Yearly Progress (AYP) that were used to rate a school's performance, impacting a school's standing with the state and public opinion (CDE, 2019b). However, the STAR system was terminated in 2013 and followed by the California Assessment of Student Performance and Progress (CAASPP) System (CDE, 2018b).

As California's education system moved into the 21st century, new content standards were adopted, and a new system for accountability was established. In 2014, the CAASPP System was put in place, and a new assessment, Smarter Balanced Assessment, was developed to align with the newly adopted Common Core Standards for ELA and mathematics (CDE, 2018b). As of 2019, the CAASPP System is composed of the Smarter Balanced Assessment for English-language arts and mathematics, California Science Test, California Alternative Assessment for science, ELA, and mathematics, and California Spanish Assessment (CDE, 2018b). These new assessments align with the new standards adopted to replace the 1997 standards that were first developed during California's standards-based reform movement.

Purpose of Grading and Reporting

No consensus exists among educators concerning the purpose of grading and reporting in schools. T. R. Guskey (2002) reports six purposes for grades as identified by educators: (a) communicate the achievement status of students to parents, students, and others; (b) provide information that students can use for self-reflection; (c) select,

identify, or group students for specific educational paths or programs; (d) provide incentives to learn; (e) evaluate the effectiveness of instructional programs and; (f) provide evidence for a student's lack of effort or inappropriate responsibility.

- Communicating information about students' achievement in school to parents and others. Franklin et al. (2016) suggest that the purpose of grading is to communicate the academic achievement of students. Bailey and McTighe (1996) echo Franklin et al. by defining the primary purpose of grades as communicating student achievement to post-secondary institutions, school administrators, parents, and students. Furthermore, S. M. Brookhart (2013) states that the primary purpose of grades is to communicate student achievement of learning goals to students and parents. Also, D. Reeves et al. (2017) reason the primary purpose of grades is to communicate student academic achievement.
- To provide information to students for self-reflection. Erickson (2011) defines the purpose of grades as showing what students know and can do. Students may use their grade to reflect on their progress toward meeting a learning goal or standard.
- To select, identify, or group students for specific educational paths or programs. S. M. Brookhart (2013) proposes that a secondary purpose of grades is to provide students, parents, teachers, and administrator's information for student placement. Airasian (1994) suggests that one purpose of grades is to provide direction to students on future coursework. Schinske and Tanner (2014) imply that one purpose of grades is to compare students.

- To provide incentives for students to learn. Airasian (1994) identifies one purpose of grades as motivating students to learn. Schinske and Tanner (2014) agree that one purpose of grades is a motivator of student effort. Grades can be used to determine the amount of effort a student contributes to an assignment.
- To evaluate the effectiveness of instructional programs. Comparing grades of students participating in a particular program to those who are not can be useful in evaluating the effectiveness of an instructional program (T. R. Guskey, 2002).
- To provide evidence if students lack effort or inappropriate responsibility. Grades can be used to monitor undesirable behavior such as being off task, not following instructions, and not following class rules (T. R. Guskey, 2002).

Many educational researchers concur the primary purpose of grades is to communicate the academic achievement of students with respect to learning goals, objectives, or content standards (Cross & Frary, 1999; Deddeh, Main, & Fulkerson, 2010; Dodd et al., 2017; Fisher et al., 2011; Franklin et al., 2016; R. J. Marzano, 2000; Muñoz & Guskey, 2015; K. O'Connor, 2011; D. Reeves et al., 2017). Serval educational researchers agree that the audience for grades is composed of students, parents, teachers, post-secondary institutions, and employers (Bailey & McTighe, 1996; Dodd et al., 2017; T. R. Guskey, 2015). In fact, a student's grades may be reviewed when applying to a university, college, technical school, or job.

It is apparent that grades have many purposes, and there exists no consensus among educators as to what is the primary purpose of grades. T. R. Guskey (1994) wrote about different forms of grading and reporting and suggested that no one method of grading and reporting could meet the multitude of purposes of grades well. Throughout the history of the United States, grading and reporting systems have taken many forms, but no system has had a tenure as long as the traditional grading and reporting system (Schneider & Hutt, 2014).

Traditional Grading and Reporting Systems

Traditional grading and reporting systems have dominated the education system in California and the United States for the last 100 years (Schneider & Hutt, 2014). Some educators view traditional grading and reporting as convenient, time-efficient, and a way to protect students and teachers from negative social or professional consequences (Cross & Frary, 1999; Schiffman, 2016). Additionally, some educators rationalize the use of traditional grading and reporting policies, such as including non-academic factors into a student's grade: behavior, citizenship, and work ethics. This is intended to help cultivate life skills, prepare students for the real world, and show empathy to students due to their life situations (Tierney, 2015; Zoeckler, 2005).

Policies and Practices

Educational researchers, such as T. R. Guskey (2000) and D. Reeves et al. (2017), have written at length concerning policies and practices of traditional grading and reporting systems. Common practices and policies in a traditional grading and reporting systems include the use of non-academic factors, homework, averaging grades, using percentage grade, curving grades, assigning a zero score, and providing extra credit work (T. R. Guskey, 2000; D. Reeves et al., 2017).

Non-academic factors. Many teachers threaten and carry out the lowering of a student's grade as a form of punishment for misbehavior (T. R. Guskey, 2000). For instance, behaviors such as absences and tardiness are penalized by the reduction in a student's grade (D. Reeves et al., 2017).

Homework. Homework is often assigned to provide students with additional practice working with the class content outside of the classroom. Many teachers assign, grade, and include homework in a student's overall grade (D. Reeves et al., 2017).

Averages. The use of averages dates back to Yale University and the *Book of Averages* in the early 19th century (as cited in Pierson, 2001). To average a student's grade, the sum of all scores on graded assignments is carried out and divided by the total number of assignments. Many teachers will average the scores a student achieves on assessments over time to obtain an overall grade for the course (D. Reeves et al., 2017).

Percentage. Many teachers utilize a percentage to determine a student's final grade based on the total point awarded out of the total possible points available (T. R. Guskey, 2013). A percentage-based grade is determined through dividing the student's total points earned by the total points possible and multiplying by 100 to obtain the percentage.

Curves. The argument for grading on a curve is to provide a normal distribution of grades that is consistent from teacher to teacher and class-to-class (T. R. Guskey, 2000). The z-score is calculated using the algorithm $Z_{X(i)} = (X(i) - M)/s_X$ where X is the mean of the score of the class, and s_X is the standard deviation. Table 1 demonstrates the rule for applying the curved grade to provide a normal distribution of grades.

Table 1

Z-score to Letter Grade

Z _{X(i)}	Grade
≥2	A+
≥1	А
≥ 0	В
≥-1	С
≥-2	D
≤-2	F

Note: Adapted from "Three systems for grading," by California State University Fullerton Psychology Department, n.d. Retrieved from http://psych.fullerton.edu/mbirnbaum/psych101/grading methods.htm

Zeros. Many teachers give no credit and assign a zero to a student's work that is turned in late or not turned in at all (T. R. Guskey, 2000; D. Reeves, 2004; D. Reeves et al., 2017). If the teacher has no assignment to grade, and it is past the due date, the assignment grade in the grade book is recorded as a zero.

Extra credit. Extra credit is used in many traditional grading systems that reward students for bringing in supplies, attending school events, or answering additional questions correct on an assessment (T. R. Guskey, 2015). Extra credit are points awarded that are above beyond the total points possible on an assignment. For example, a teacher may award extra credit to a student for bringing in classroom supplies at the beginning of the year or for attending the homecoming football game.

Benefits

Traditional grading and reporting systems have been widely used throughout the United States for a century, and some educators recognize the benefits of this longstanding grading system. Akins (2017) explains how traditional grading and reporting systems reward participation and homework, allowing lower achieving students to receive a passing grade with little evidence of learning. Additionally, Friess (2008)

expresses his support of traditional grading and reporting systems concerning the 60% minimum achievement standards. University admission officers suggest letter grades from a traditional grading and reporting system are preferred because letter grades fetched superior efficiency to the work of admissions operations (Buckmiller & Peters, 2018). Researchers also found that some educators see traditional grading practices as convenient, time-efficient, and a safeguard from social and professional consequences for teachers and students (Cross & Frary, 1999; Hochbein & Pollio, 2016; Schiffman, 2016). Lastly, some educators believe traditional grading and reporting help manage behavior, teach citizenship, develop a work ethic, teach life skills, and prepare students for the real world (Tierney, 2015; Zoeckler, 2005).

Criticisms

Although traditional grading and reporting have remained the dominate grading system for the past 100 years, it is not flawless. Researchers suggest most traditional grading and reporting practices are perpetuated by educators primarily because it is the grading system they experienced throughout their education (Dodd et al., 2017; T. R. Guskey, 2015; K. O'Connor, 2009). Deddeh et al. (2010) used the term "grade fog" to describe the distortion traditional grading practices have on a grade's ability to demonstrate mastery of a standard due to non-standards-based criteria such as practice, attendance, and behavior being included in the grade. Without meaningful research to support the use of traditional grading and reporting systems, educational researchers have begun to question the validity, consistency, and reliability of traditional grading and reporting systems.

Validity. For any grade to be used to fulfill the many purposes of grades (communicate academic achievement, motivate student learning, and planning future courses), the grade is assumed to be valid. S. M. Brookhart (2015) surmises grades are supposed to be valid measures of student achievement and can be if a teacher's grading practices make them so. However, traditional grading and reporting systems include flaws that limit the validity of the grade reported.

T. R. Guskey (2013) identifies percentage grades found in traditional grading systems as a major hindrance in making grades more fair, accurate, and meaningful. He argues, "percentage grades are difficult to defend from a procedural, practical, or ethical perspective" (T. R. Guskey, 2013, p. 1). Percentage grades are based off 100 percentage points, and the passing cutoff is traditionally set at 60. Researchers suggest the nature of percentage grades, having two-thirds of the scale failing, causes the scale to be invalid (T. R. Guskey, 2013).

Assigning zeros and penalizing late work cause grades to be invalid. T. Schimmer (2014) implies assigning zeros or penalizing late work render some standards as optional, therefore invalidating the grade. One student's grade could not be compared to another student's grade because they would not reflect the same set of standards. T. R. Guskey (2000) inquires if a grade is to reflect a student's mastery level compared to learning standards, then the practice of assigning zeros invalidates the grade.

Consistency. Researchers have found that more proficiency levels in a grading scale, 100 levels in a traditional grading system, increase the likelihood of a student being misclassified (T. R. Guskey, 2013; Schinske & Tanner, 2014). Therefore, percentages

and hundred-point scales lend themselves to classify students' performance levels inconsistently.

R. J. Marzano (2010) criticizes weighted grades and rubrics as causing inconsistency in grades because they often vary from teacher to teacher. Hochbein and Pollio (2016) warn that the use of traditional grading and reporting practices may lead to timely and relevant data about student performance, and the variable composition of traditional grades deteriorates their meaning. Cox (2011) cautions that, although standards and assessments have improved consistency and coherency in curriculum and instruction, grades and grading practices continue to be the discretions of individual teachers in most schools.

Reliability. T. R. Guskey (2013) challenges educational leaders to, "abandon grading scales that distort the accuracy, objectivity, and reliability of students' grades," (p. 1). Studies by Brimi and Elliott on the reliability of grades agree that a 100-point scale lends itself to more significant reliability issues (as cited in T. R. Guskey, 2013). Due to professors concerns with the reliability of the 100-point scale, Harvard made the transition away from an A through E system in the 1890s (Schinske & Tanner, 2014).

Extra credit leads to grade inflation (Erickson, 2011). The grade of one student who earned extra credit will not carry the same meaning as a student's grade that does not include extra credit, causing the grades to be unreliable.

Spencer (2012) suggests traditional grades are frequently based on ambiguous criteria, resulting in an unreliable grade. Bailey and McTighe (1996) had concerns about the reliable application of grading by different teachers within the same school that utilized a traditional grading and reporting system.

Standards-Based Grading and Reporting Systems

Standards-based grading and reporting systems are an alternative to traditional grading and reporting systems. T. R. Guskey (2009) declares that the purpose of standards-based grading is to compare a student's performance against well-defined levels of proficiency in knowledge, understanding, and skills. Students are assessed, and achievements are measured against standards or learning goals separate from non-academic criteria such as behavior and attendance (M. M. Townsley, 2017).

S. M. Brookhart (2011) suggests that standards-based grading and reporting systems are superior to traditional grading and reporting systems at communicating the academic progress and achievement of students. Instead of a letter grade A through F on a report card, a standards-based report card provides information regarding a student's progress toward meeting state-adopted content standards. Many standards-based report cards distinguish between product, process, and progress criteria for major themes or strands of state-adopted content standards (T. R. Guskey et al., 2010).

Policies and Practices

Standards-based grading and reporting systems include practices and policies that promote validity, consistency, and reliability. Items not included in a standards-based grading and reporting system that are typically found in traditional grading and reporting systems include attendance, extra credit, participation, homework, grading on percentages, and curves (T. R. Guskey, 2009). T. R. Guskey et al. (2010) suggest that standards-based grading and reporting systems include evaluations of students' product, process, and progress.

Product criteria. Product criteria communicate a student's level of performance based on a standard or the final result of their learning (T. R. Guskey, 2002). For example, product criteria focus on what a student knows at a point in time. Often, this is determined by the final demonstration of knowledge whether it be a presentation, research paper, or multiple-choice exam.

Process criteria. Process criteria communicate how a student got to their final point in learning the standard (T. R. Guskey, 2002). For example, product criteria include quizzes, homework, and other classroom assignments that are formative in nature.

Progress criteria. Progress criteria communicate the gain in knowledge the student obtained from the beginning to the final results of their learning of a standard (T. R. Guskey, 2002). For example, progress criteria would be the difference in the pre-assessment and post-assessment results.

Benefits

Standards-based grading and reporting provide many benefits over traditional grading and reporting systems. Knight (2017) identified five benefits perceived by teachers when implementing standards-based grading at a high school:

- Planning, instruction, and assessment become more purposeful.
- Communication is clearer.
- Student conversations became more learning focused.
- Students shift toward a growth mindset.
- Students take more ownership of their learning.

Educational researchers suggest standards-based grading and reporting systems may result in more valid, consistent, and reliable grades (Cizek, Fitzgerald, & Rachor, 1995; T. R. Guskey, 2009; K. O'Connor & Wormeli, 2011; Pollio & Hochbein, 2015).

Validity. T. R. Guskey (2009) reports that standards-based grading may improve validity by making it simpler to report student academic achievement. Furthermore, T. R. Guskey proclaims standards-based grading and reporting practices may lead to more exceptional student motivation achievement by means that are more valid than traditional grading and reporting practices.

Consistency. A component of standards-based grading and reporting is establishing consistency among teachers on each performance level. K. O'Connor and Wormeli (2011) suggest that clearly defining performance standards are essential in establishing consistency in a standards-based grading and reporting system. Also, standards-based grading and reporting systems have demonstrated some consistency between reported achievement and student performance on state tests (Welsh, D'Agostino, & Kaniskan, 2013).

Reliability. Standards-based grades utilize integers, whether it be 0 to 4 or below basic to exceed standard, to qualify a student's academic achievement. T. R. Guskey (2013) claims that utilizing a system with a limited number of levels may lead to higher reliability.

Criticisms

Some educators believe standards-based grades pose a threat to a student's postsecondary opportunities due to the non-traditional reporting methods (R. Peters et al., 2017). Additionally, M. M. Townsley (2017) compared ACT scores of students from

traditional grading and reporting systems to standards-based grading and reporting systems, and he found students from traditional grading and reporting systems scored higher on ELA and Math ACT.

In one school district in Washington, parents became unsatisfied with standardsbased grading and reporting after several years; students became less motivated to study for tests because they had the option to retake the test (Spencer, 2012). Some educators argue that standards-based grading does not prepare students for college or teach life skills (R. Peters et al., 2017).

Some parents prefer nonacademic factors, such as cooperation, to be included in an overall grade (Spencer, 2012). Also, some educators believe students are less motivated to complete homework when it is not part of their grade, passing up opportunities to practice (Schiffman, 2016).

Many teachers who have experienced both traditional grading and reporting and standards-based grading and reporting systems criticize the amount of time required to fill out a standards-based report card (Spencer, 2012; Swan, Guskey, & Jung, 2014). Some standards-based report cards include each standard within the content area or grade level, whereas other standards-based report cards include grades for significant strands. Therefore, standards-based report cards can become cumbersome to interpret due to the amount of information included in the report (Spencer, 2012).

Franklin et al. (2016) studied parents' aversion to standards-based grading and reporting and identified eight reasons parents dislike standards-based grading:

- Confidence in traditional grading accuracy.
- Felt the letter grade gave a good idea of the level of understanding of their child.
- Less assured of standards-based grading accuracy.
- Less confident in interpreting the standards-based grade.
- Looked at traditional grading with a sense of pride as a competitive badge of honor.
- Lack of parent voice in the development and implementation of standardsbased grading and reporting systems.
- Poor communication from the district when developing and implementing standards-based grading and reporting.
- Felt confused and uncertain about standards-based grading and reporting.

Kohn (2012) takes the grading argument to the extreme by suggesting that any type of grading is not beneficial to students. He suggests that grades diminish students' interest in what is being learned, and the intrinsic motivation to earn a grade has a negative impact on learning (Kohn, 2012). Also, Kohn explains how grades cause students to seek the path of least resistance to accomplish a task. Specifically, targeted at standards-based grading, Kohn identifies three critical flaws:

- Standards-based grades do nothing to address the fundamental problem with grading.
- Standards are often too specific, age inappropriate, superficial, and standardized.

• There are extrinsic motivations, numerical ratings, and promotion of achievement at the expense of learning.

Grading and Reporting Systems in California Schools

Since 1996, California's education system has focused on standards to ensure consistency in the content being taught to students (CDE, 2018e). As early as 2001, the California Department of Education (CDE) has endorsed standards-based grading and reporting for elementary and middle schools (Spencer, 2012).

A review of several school districts' grading policies in California reveals the current state of standards-based grading and reporting. Los Angeles Unified School District (LAUSD) describes the purpose of grades at the secondary level as providing feedback to families concerning their students' progress toward mastery of content standards, guidance for future coursework, guidance for instructional planning and interventions, and guidance on future professional development for teachers (Ephraim, 2004). The policies stress standards-based instruction and providing grades that reflect student achievement toward mastering the standards (Ephraim, 2004). However, the reporting system utilized by LAUSD at the secondary level remains the traditional A through F system (Ephraim, 2004).

Fontana Unified School District's (FUSD), located in southern California, secondary school grading policy describes the purpose of grades as helping identify areas of strength and areas of improvement for students (Fontana Unified School District [FUSD], 2012). The grading policy emphasizes, "The district's grading policy shall be administered in a uniform manner based on standards that apply to all students in that course and grade level," (FUSD, 2012, p. 2). The grading policy further defines how

grades are weighted greater than or equal to seventy percent of formal assessments and less than or equal to informal assessments (FUSD, 2012). Additionally, a grading rubric is included in the policy that demonstrates the conversion of percentages, performance bands, rubric scores, and letter grades (FUSD, 2012). Therefore, FUSD's grading policy reflects a traditional grading and reporting system.

Colton Unified School District's (CUSD), also located in southern California, grading policy for secondary schools follows traditional grading and reporting practices (Colton Unified School District [CUSD], 2019). However, the school district's grading policy for elementary schools implores standards-based grading and reporting practices (CUSD, 2019). The elementary schools use a 1 through 4 scale where one equals "minimal," two equals "partial," three equals "adequate," and four equals "thorough" to report academic achievement. A plus sign stands for "strong effort," a check mark equates to "adequate effort," and a minus sign shows a "lack of effort" (CUSD, 2019).

Although peer-reviewed studies on standards-based grading and reporting in California are limited, many news articles have been written addressing changes in grading and reporting in California schools. In 2006, *East Bay Times* published an article addressing the implementation of standards-based grading and reporting systems in many elementary schools in the San Francisco area (Mills Faraudo, 2006). Concurrently, *The Record*, a newspaper in Stockton, California, published an article expressing parent and teacher confusion over the new standards-based report card implemented in Lodi Unified School District (Reid, 2006). In 2013, a new article reported the shift to standards-based grading and reporting of elementary schools in Long Beach Unified and Torrance Unified

School Districts (Guzman-Lopez, 2013). However, secondary schools in California that have taken on reforming grading and reporting struggle with abandoning letter grades (Cox, 2011).

Organizational Change

Change will occur within an organization, whether it is planned or not. In the 1990s, organizations began to give greater attention to how changes occurred within their organization, and they began to strategically plan change (D. Anderson & Ackerman-Anderson, 2010b). Three types of organizational change are identified as (a) developmental change, (b) transitional change, and (c) transformational change (D. Anderson & Ackerman-Anderson, 2010a).

Developmental change is defined by D. Anderson and Ackerman-Anderson (2010a) as, "improvement of what is; new state is a prescribed enhancement of the old state," (p. 53). For example, the change from taking attendance on paper to taking attendance electronically is a developmental change.

Transitional change is described by D. Anderson and Ackerman-Anderson (2010a) as, "designing and implementation of a desired new state that solves an old state problem," (p. 53). For example, a school that changes from having seventh and eighth graders to having sixth, seventh, and eighth graders is a transitional change.

Transformational change is explained by D. Anderson and Ackerman-Anderson (2010a) as when, "market requirements force fundamental changes in strategy, operations, and worldview," (p. 53). For example, the change from punitive discipline to positive behavior intervention with multi-tiered systems of support.

Organizational Change Models

Many models of organizational change have been developed since the emergence of organizational change as a topic of interest. Kotter's change model, presented in his seminal work *Leading Change*, is one of the most popular change models in the literature of organizational change (as cited in Hughes, 2016). Kotter's (1996) model defines the change process in eight steps:

- Establishing a sense of urgency.
- Creating the guiding coalition.
- Developing a change vision.
- Communicating the vision for buy-in.
- Empowering broad-based actions.
- Generating short-term wins.
- Never letting up.
- Incorporating change into the culture.

D. Anderson and Ackerman-Anderson (2010a) developed a robust change process model titled the Change Leader's Roadmap. Recognizing the complexity and multidimensionality of organizational change, D. Anderson and Ackerman-Anderson (2010a) provide a roadmap that describes nine phases of activity that depict how transformational change generally takes place as opposed to a sequence of steps. D. Anderson and Ackerman-Anderson (2010a) nine phases of activity are:

- 1. Prepare to lead the change.
- 2. Create organizational vision, commitment, and capability.
- 3. Assess the situation to determine design requirements.

- 4. Design the desired state.
- 5. Analyze the impact.
- 6. Plan and organize for implementation.
- 7. Implement the change.
- 8. Celebrate and integrate the new state.
- 9. Learn and course correct.

Principals as Change Agents

Each change model requires a facilitator. As far back as 1972, during the desegregation of schools, principals have been viewed as the administrator most centrally involved in school site changes (Turnage, 1972). Successful principals can typically be identified as successful change agents (Hussain, Haider, Ahmed, & Ali, 2016). In some school districts in California, principals are expected to be change agents, or they can find a new place of employment (Martineau, 2012). Principals are the managers of their school sites, and they are expected to establish a vision, create climate, cultivate leadership, improve instruction, and manage people, data, and processes (Wallace Foundation, 2013). Fullan (2014) identified seven steps for a principal to become a change agent:

- 1. Challenge the status quo.
- 2. Build trust through clear communication and expectations.
- 3. Create a commonly owned plan for success.
- 4. Focus on team over self.
- 5. Have a high sense of urgency for improving student achievement.

- 6. Have a commitment to continuous improvement for self and organization.
- 7. Build external networks and partnerships.

California Principals and Change

California is a state with unique challenges. School leaders manage diverse student bodies, changing school budgets, and teacher shortages. Additionally, California principals are expected to lead their schools through education changes such as Common Core State Standards, the new California School Dashboard, and differentiated assistance for schools that are struggling academically. Recent research from Ching (2018), Tiu (2017), and Benton (2018) provide insight into the roles and practices of California principals in leading change within their schools.

Ching (2018) investigated the role of secondary principals as transformational leaders in high performing, project-based learning schools in California. Ching revealed six conclusions about transformational leader principals of PBL schools in California:

- They relied upon the experience, feedback, and leadership of their staff for successfully accomplishing the vision and mission of the school.
- They arranged time for collaboration and planning amongst teachers and administrators to reflect and provide feedback on student project design.
- They established a common language amongst teachers and students, often including school-wide events to reinforce the mission and vision.
- They ensured students were empowered with voice and choice in their projects.
- They established a strong culture of learning by understanding the communities they serve, establishing clear expectations and goals, and

implementing culture-based activities to reinforce the mission and vision of the school.

• They established a consistent process of improvement through effective communication with staff, seeking feedback from stakeholders, utilizing surveys, and structuring time with staff for assessment progress.

Tiu (2017) examined the inner leadership of California school principals and its role in transforming schools. Tiu concluded school transformation requires a principal with a deep and grounded belief that all children can learn and achieve, and the principal must have a profound desire and willingness to manifest this belief even at significant personal cost. Tiu suggests the findings coincide with the belief, action, result (BAR) cycle.

Benton (2018) investigated the leadership practices of elementary principals in urban inner-city schools of south Los Angeles that impact the successful implementation of school reform. Benton (2018) found that:

- The school community severely impacts the principal's decision-making towards school improvement.
- The teacher quality and buy-in impacts reform efforts.
- The principal's style of leadership influences teacher commitment and work ethic.
- The political/district influences can limit reform efforts.

Transitioning to a Standards-Based Grading and Reporting System

The transition from a traditional grading and reporting system to a standardsbased grading and reporting system requires a transformational change. D. Anderson and Ackerman-Anderson (2010a) define the requirements for a transformational change as, "a radical shift of strategy, structure, systems, processes, or technology, so significant that it requires a shift of culture, behavior, and mindset to implement successfully and sustain," (p. 60). Leading a transition from grading practices that are ingrained in American culture requires a change in culture, mindset, behavior, strategies, structure, and systems.

Some research has been completed on transitioning to a standards-based grading and reporting system. Szymczak (2016) completed a case study involving the transition of a middle school in northeast Illinois to standards-based grading, focusing on educators' experiences with transitioning from traditional grading and reporting to standards-based grading and reporting. Additionally, MacCrindle (2018) completed another case study that examined one suburban elementary school's transition to standards-based grading as perceived by the teachers. Furthermore, Adrian (2012) carried out a mixed-methods study exploring the beliefs, practices, and concerns of elementary teachers in one school district as they prepared to transition to a standardsbased grading and reporting system. Finally, Carter (2017) performed a Delphi study involving secondary principals across the nation to determine the best practices for leading a transition to standards-based grading. Therefore, some challenges and strategies for implementing a standards-based grading and reporting system have been identified by the research.

Challenges

Many educational researchers have reported on the challenges of implementing a standards-based grading and reporting system. T. R. Guskey (2009) advocates that no aspect of education is as resistant to change as grading and reporting. S. M. Brookhart

(2011) writes about starting the conversation about grading with stakeholders. He recognizes that the stakeholders often become sidetracked, and they may waste energy discussing grading practices that have little impact on true grading reform. T. R. Guskey (2011) has written extensively on obstacles and challenges when implementing standards-based grades, and he suggests five obstacles that prevent grade reform:

- Grades should provide the basis for differentiating students.
- Grade distributions should resemble a normal bell-shaped curve.
- Grades should be based on students standing among classmates.
- Poor grades prompt students to try harder.
- Students should receive one grade for each subject or course.

Likewise, Greene (2016) identified obstacles for implementing standards-based grading: (a) gaining buy-in from teachers and administrators, (b) providing professional development on standards-based grading for teachers and administrators, and (c) parent concerns with standards-based grading due to a lack of communication between the school and parents. T. R. Guskey (2009) also identifies the challenges of assigning fair and accurate standards-based grades to English language learners and students with special needs when implementing standards-based grading.

Proulx, Spencer-May, and Westerberg (2012) reflected on their experience implementing standards-based grades in a large urban school district by identifying three challenges:

- Teachers struggled to abandon a grading system they could use to motivate students and punish students for misbehavior.
- Teachers struggled with the philosophical shift of standards-based grading.

• Teachers opposed giving students multiple opportunities to assess and accepting late work without penalties.

Winton (2015) examined student and teacher perception of standards-based grading and found one of the most significant struggles was parent perception that standards-based grading does not prepare student for the real world. Szymczak (2016) identified challenges when a middle school transitioned to standards-based grading:

- 1. Lack of knowledge of standards-based grading.
- 2. Large number of standards to report on.
- 3. Creating a new report card.
- 4. Lack of meaningful staff development.
- 5. Cumbersome report card.
- 6. Lack of community input.

Strategies

Some educational researchers have examined the implementation process of standards-based grading and reporting systems and identified useful strategies. Three key strategies repeatedly appear throughout the research. First, researchers suggest establishing the purpose of grades before moving forward with any implementation (S. M. Brookhart, 2011; T. R. Guskey, 2015; T. R. Guskey & Jung, 2012; MacCrindle, 2018; R. J. Marzano, 2000; K. O'Connor & Wormeli, 2011; D. Reeves, 2011). Second, researchers recommend educating staff on standards-based grading and reporting to ensure staff members have the foundational knowledge to carry out the implementation (Adrian, 2012; Deddeh et al., 2010; MacCrindle, 2018; Proulx et al., 2012; Szymczak, 2016). Lastly, researchers propose communicating with families during the implementation process to gain parent buy-in to the implementation of standards-based grading and reporting (Adrian, 2012; S. M. Brookhart, 2011; MacCrindle, 2018; R. Peters & Buckmiller, 2014; Proulx et al., 2012; Szymczak, 2016). However, the research was not limited to these three strategies.

Additional strategies were also identified in the research. For instance, S. M. Brookhart (2011) warned of getting sidetracked by secondary issues and implores leaders to focus on the central issues. D. Reeves (2011) also stresses the importance of discussing principles and constants before discussing policies and change. MacCrindle (2018) advocates for focusing on shifting teacher's and student's mindset to a growth mindset. Furthermore, Adrian (2012) adds strategies involving technology and support for teachers in setting up and managing a standards-based grade book. Finally, Proulx et al. (2012) include involving the teacher's union as an essential strategy when implementing a standards-based grading and reporting system.

Research Gap

The standards-based reform movement in California that began in 1996 has caused a shift toward focusing instruction and curriculum on state adopted education standards (CDE, 2018e). California has recently adopted new standards such as Common Core standards for ELA and math, science, and social science. The CAASPP system now assesses ELA, math, and science with computer-adapted tests that align to standards, and the results are provided in a standards-based format. It is time the grading and reporting systems in California align themselves with the standards-based mindset that is demonstrated by instruction, curriculum, and high-stakes tests.

Many elementary schools in California have implemented standards-based grading and reporting. However, many of these schools do not implement the system with fidelity. Often a standards-based report card is utilized, but the day-to-day standards-based practice is not in place. Most secondary schools in California continue to use traditional grading and reporting systems.

Research has provided examples of schools who have attempted to implement standards-based grading and reporting in the school systems outside of California (Adrian, 2012; Carter, 2017; Greene, 2016; MacCrindle, 2018; R. Peters & Buckmiller, 2014; Proulx et al., 2012; Szymczak, 2016; Winton, 2015). Their strategies and recommendations may help lead California in the transition from traditional grading and reporting to standards-based grading and reporting. However, no research has been conducted in California to determine the most important strategies California K-12 expert principals deem necessary for the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system. This study will identify the most important strategies a principal should utilize when leading a transition from traditional grading and reporting to standards-based grading and reporting in California K-12 public schools.

Summary

The purpose of this literature review was to provide a background for this research study. A synthesis matrix (see Appendix A) was utilized to sort relevant literature to this study and monitor the advancement of this literature review. A synopsis of the history of grading and reporting in the United States and an overview of the standards-based reform movement in California was provided. The different purposes of

grading and reporting were discussed, and the benefits and criticisms of traditional grading and reporting and standards-based grading and reporting were addressed. A discussion on the current state of grading and reporting in California is included, and the role of principals as change agents is provided. Finally, the challenges and recommended strategies for implementing standards-based grading and reporting identified by the research are examined. Chapter III will provide an overview of the research method that will be utilized in this study.

CHAPTER III: METHODOLOGY

Chapter III includes a review of the purpose and research questions of this study. The explanation of the research design describes how the Delphi study is carried out to answer the research questions. The methodology, population, sample, and instrumentation used in the study are explained as well. This chapter also includes a discussion on the validity and reliability of the methodology, and it concludes with the limitations of this study.

Purpose Statement

The purpose of this policy Delphi study was to identify the strategies California K-12 expert principals deem necessary for the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system, utilizing a panel of expert principals to rate the importance of the identified strategies and to recommend the best methods of implementing the five most important strategies.

Research Questions

The following questions were used to address the purpose of the study:

Round 1

 What strategies do California K-12 expert principals who have implemented a transition from a traditional grading and reporting system to a standards-based grading and reporting system identify as necessary to accomplish the transition?

Round 2

2. To what degree do the California K-12 expert principals rate the importance of the strategies identified in Research Question 1?

Round 3

3. What do the California K-12 expert principals recommend as the best methods of implementing the five most important strategies identified in Research Question 2?

Research Design

The research study utilized a modified version of the policy Delphi method as the research design. The Delphi method has many variations, but its origin begins in the 1950s at the RAND Corporation with the support of the United States Air Force (H. A. Linstone & Turoff, 2011). The primary function of the Delphi method, as developed by the RAND Corporation, was to collect and employ feedback from experts in the field of study through the systematic use of questionnaires (H. A. Linstone & Turoff, 2011). H. A. Linstone and Turoff (1975) provided a general definition of the Delphi method: "a method 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" (p. 3). However, the Delphi method, as with other research methods, is only applicable under certain conditions. H. A. Linstone and Turoff (1975) explained seven properties of a study that may warrant the use of the Delphi method:

• The problem does not lend itself to precise analytical techniques but can benefit from subjective judgments on a collective basis;

- The individuals needed to contribute to the examination of a broad or complex problem, have no history of adequate communication, and may represent diverse backgrounds with respect to experience or expertise;
- More individuals are needed than can effectively interact in a face-to-face exchange;
- Time and cost make frequent group meetings infeasible;
- The efficiency of face-to-face meetings can be increased by a supplemental group communication process;
- Disagreements among individuals are so severe or politically unpalatable that the communication process must be referred and/or anonymity assured;
- The heterogeneity of the participants must be preserved to assure the validity of the results, i.e., avoidance of domination of quantity or by the strength of personality ("bandwagon effect," p. 4).

As a result of the many applications in which the Delphi method could be employed, variants of the Delphi method have been developed. Most Delphi method variants can be classified into one of three general categories: classical, decision, and policy (van Zolingen & Klassen, 2003). For the purpose of this study, a modified version of the policy Delphi method was utilized.

Policy Delphi

The policy Delphi is one type of variation of the classical Delphi method. Turoff (1970) explained the policy Delphi, "seeks to generate the strongest possible opposing views on the potential resolution of a major policy issue" (p. 80). Furthermore, Turoff suggested the primary purpose of the policy Delphi is not to establish a consensus or

make a decision, but it is intended to analyze policy issues. According to Turoff, to accomplish the purpose of the policy Delphi, six phases are carried out:

- 1. Formulation of the issues.
- 2. Exposing the options.
- 3. Determining initial positions on the issues.
- 4. Exploring and obtaining the reasons for disagreements.
- 5. Evaluating the underlying reasons.
- 6. Reevaluating the options.

The iterative process of the policy Delphi provides a range of ideas about the policy issues from a diverse group (van Zolingen & Klassen, 2003).

Modifications to Policy Delphi

A modified version of the policy Delphi method was utilized for this research study. Of the six phases of the policy Delphi, as identified by Turoff (1970), phases four and five were excluded due to the purpose of the study: *to identify the strategies California K-12 expert principals deem necessary for the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system, utilizing a panel of expert principals to rate the importance of the identified strategies and to recommend the best methods of implementing the five most important strategies.* Therefore, the research design mirrored the following phases from Turoff's work:

- 1. Formulating the issues.
- 2. Exposing the options.

- 3. Determining initial positions on issues.
- 4. Reevaluating the options.

Phase one involved formulating the issues surrounding strategies for implementing a transition from a traditional grading and reporting system to a standardsbased grading and reporting system. This phase took place during the first round of data collection. Phase 1 consisted of exposing the options surrounding the issues for implementing a transition from a traditional grading and reporting system to a standardsbased grading and reporting system. Phase 3 includes the process of determining initial positions on issues surrounding the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system. Phase 2 and 3 took place during the second round of data collection. Phase four of the modified version of the policy Delphi was purposed to reevaluate the options surrounding the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system to a standards-based grading and reporting system. Phase 4 was the final phase of the modified version of the policy Delphi, and it took place during round three of data collection.

Population

The population is the complete group that the results of a study can be generalized (McMillan & Schumacher, 2010). The population for this study includes all principals of public schools in California. This population comprises of principals from elementary, middle, junior high, high, K-12, continuation, alternative, community day, special education, and other public-school types. In July 2018, the CDE (2018c) reported 10,473

public schools in the state. Each school will typically have one principal; therefore, the

total population size of the study is 10,473 (see Table 2).

Table 2

Type and Number of Public Schools in California

School Type	Number of Schools
Elementary	5,873
K-12	339
Middle	1,296
Junior High	49
High	1,311
Alternative	260
Community day	164
Special education	136
Other	610
Total:	10,473

Note: Adapted from "Fingertip Facts on Education in California," by California Department of Education, 2018. Retrieved from https://www.cde.ca.gov/ds/sd/cb/ceffingertipfacts.asp

Target Population

The target population is defined by McMillan and Schumacher (2010) as the group that agrees to certain conditions and to which researchers intend to generalize the results of their study. The target population for this study is school administrators who, as principals, successfully led the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system. To identify the implementation as a success, the new standards-based grading and reporting system must remain in place for one year after full implementation where a standards-based report card is used. Averages are not used, behavior is reported separately from academic achievement, and students are afforded with multiple occasions to prove their learning over time.

Sample

The sample of the population is, "the group of subjects or participants from whom the data are collected," (McMillan & Schumacher, 2010, p. 129). The sample population for this study is composed of 14 school administrators working in California public schools who, as principals, successfully led the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system. School principals are ideal for determining most important strategies for leading an implementation of a transition from traditional grading and reporting to a standardsbased grading and reporting system; they are tasked with roles such as providing a vision for academic success for all students, improving instruction, and collecting and evaluating data to analyze improvement (Wallace Foundation, 2013).

Purposive sampling is utilized in this study. Purposive sampling is described as selecting specific characteristics from the population that will be descriptive or informative about the research interest (McMillan & Schumacher, 2010).

Purposive Selection

In order to be selected as a participant of this study, school administrators had to meet the following requirements:

- Must have been a principal in one of California's public schools.
- Must have been a school principal during the time of implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system.
- Must have remained a school principal at the school in which the implementation took place for at least one year after full implementation.

• The school must have continued to utilize the standards-based grading and reporting system for at least one year following full implementation.

Sample Selection Process

The steps for selecting the sample for this study are provided below:

- 1. The purposive process used the selection requirements to ascertain potential sample participants.
- 2. The researcher reached out to their personal network and used snowball sampling to solicit a list of potential school administrators.
- 3. From the list of potential school administrator participants, e-mails and phone calls were made to potential participants to confirm compliance with criteria and request participation.
- 4. From the list of potential participants that met the study requirements, 15 participants were selected at random to compile a 15-expert panel.
- The selected experts were emailed the following documents: Letter of Invitation (see Appendix B); Informed Consent (see Appendix C); Participant Bill of Rights (see Appendix D); Demographic Questionnaire (see Appendix E).

Participants in a Delphi study are selected based on their knowledge and expertise

in the field being studied (de Loë, Melnychuk, Murray, & Plummer, 2016; Nworie, 2011). Therefore, the participants of this study were purposefully selected for their expertise based on the criteria of having been a principal in a California public school while successfully leading the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system.

Sample Size

Nworie (2011) suggests a Delphi study can be carried out with sample sizes anywhere from four to 50 participants. Nworie states a smaller sample size is typically based off the logistics and practicality of Delphi study activities. Sample size ranging from 10 to 17 participants has been successfully used for Delphi studies related to K-12 education (Carter, 2017; Ching, 2018; Howland, 2017; Stackelhouse, 2015).

Instrumentation

The researcher utilized three rounds of questioning to answer the research questions of the study. The first round consisted of an open-ended question. The second round utilized the results of the first round to create a survey that implemented a six-point Likert scale to rate the importance of the strategies identified during the first round. The third and final round provided participants the opportunity to refine their responses from the second round and deliver feedback on actions that principals could take when implementing a transition from a traditional grading and reporting system to a standardsbased grading and reporting system.

The researcher developed the surveys using Survey Monkey, a commonly used online-based survey instrument. For each round, a hyperlink to the survey was e-mailed to participants with instructions on completing the survey.

Round 1 Survey Question

Round 1 Survey Question asked: *What strategies do you, a California K-12expert* principal who has implemented a transition from a traditional grading and reporting system to a standards-based grading and reporting system, identify as necessary to accomplish the transition?

After participants completed the Round 1 survey, the results were gathered using Survey Monkey and a list of strategies for the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system. The list of unique strategies was used to generate the survey for Round 2.

Round 2 Survey Question

The participants were asked to use a six-point Likert scale to rate the importance of each of the strategies revealed during Round 1. Round 2 Survey Question asked: *From the list of strategies identified in Round 1, how important is it when implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system*?

The mean score for each strategy when implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system was calculated, and strategies were listed from highest to lowest mean score. The five strategies with the highest mean score were implored in the development of the Round 3 survey.

Round 3 Survey Question

Round 3 asked the expert panel to describe the five necessary strategies for implementing a transition from a traditional grading and reporting system to a standardsbased grading and reporting system which were identified in Round 2. Round 3 Survey Question asked: *Referring to the list of five necessary strategies for implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system determined from Round 2, describe the method for implementing each strategy.*

Validity and Reliability

A field test was conducted utilizing the instruments before disseminating the surveys to the expert panel members. Five volunteer school administrators familiar with the topic participated in the field test. The field test volunteers did not participate in the study. The volunteers completed each survey and provided feedback to ensure the readability of each question, the questions properly elicited the anticipated information, and the information obtained is accurate. The feedback from field-test volunteers was used to improve the survey questions and to ensure the validity and reliability of the surveys.

Round 1

Feedback from the Round 1 survey was collected, reviewed, and adjustments to the survey were made accordingly. One volunteer suggested including definitions to key terms in the survey directions. Other feedback provided was related to grammar.

Round 2

Feedback from the Round 2 survey was also collected, reviewed, and implemented was deemed necessary. For example, the scale descriptors initially used the term effective. One volunteer suggested aligning the scale descriptors with purpose and research questions by modifying them to use the term importance. Other feedback from volunteers were related to grammar.

Round 3

Feedback from the Round 3 survey was collected, reviewed, and utilized as needed. For instance, one volunteer suggested that the last two paragraphs of the directions for the survey were redundant. Also, one volunteer pointed out that the Round

3 survey used the term effectiveness and suggested the term be changed to importance. Other feedback from volunteers were related to grammar.

Data Collection

Shortly following approval by the Brandman University Institutional Review Board (BUIRB) (see Appendix F) and the necessary course work was completed, The National Institute of Health granted a Certificate of Completion (see Appendix G) and the researcher began to reach out to their personal network to obtain potential expert principals to participate in the study.

This research study consisted of three questionnaires that were developed to have California K-12 expert principals describe the most important strategies for implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system. Three rounds of surveying took place, and all data were collected from the expert principals using Survey Monkey, an online-based survey program (see Appendix H).

Round 1

On September 19, 2019 the 15-member expert panel of California K-12 principals were sent an e-mail outlining each step round of the study, the target dates for each questionnaire to be completed, a link to the Round 1 survey, and the contact information of the researcher. The panel was asked to respond to the following question: "*What strategies do California K-12 expert principals who have implemented a transition from a traditional grading and reporting system to a standards-based grading and reporting system identify as necessary to accomplish the transition?*"

The responses from the survey were compiled into one list from Survey Monkey. The researcher, along with a doctoral candidate and outside reader, combined like strategies in preparation for the Round 2 survey. The doctoral candidate and outside reader assisted in limiting researcher bias.

Round 2

The Round 2 survey was developed from the responses collected during Round 1. An e-mail was prepared and disseminated to the expert panel of California K-12 principals on September 25, 2019. The e-mail included instructions, the target date for completion, and a link to the Round 2 survey as well as the contact information of the researcher. The expert panel was asked to respond to the following question: "*From the list of strategies identified in Round 1, how important is it when implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system*?"

After the Round 2 surveys were completed, the researcher gathered the responses from Survey Monkey. Then, the researcher, a doctoral candidate, and an outside reader tallied the scores and calculated the mean score for each strategy. Strategies were then organized from highest mean score to lowest mean score. The doctoral candidate and outside reader assisted in limiting research bias.

Round 3

To develop the Round 3 survey, the researcher identified the five strategies that had the highest mean score based on Round 2 survey results. An e-mail was prepared and sent to the expert panel of California K-12 principals on September 29, 2019. The email included instructions and the target date for the completion of the Round 3 survey, a

link to the Round 3 survey, and the contact information of the researcher. The expert panel was asked to respond to the following question: "*Referring to the list of five necessary strategies for implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system determined from Round 2, describe the strategies necessary for implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system.*"

After the Round 3 surveys were completed, the researcher compiled the responses from Survey Monkey. Then, the researcher, a doctoral candidate, and an outside reader coded the descriptions of each of the five necessary strategies provided by each member of the expert panel.

Data Analysis

Qualitative data were collected through each round of the study. After each round, similar responses were combined. Data were analyzed and utilized to create the survey for the next round. After Round 2, means scores for each strategy were calculated, and strategies were placed in order from the highest mean score to lowest mean score. After Round 3, the descriptions of each of the five necessary strategies from each of the expert principals were coded and analyzed for themes. A summary was prepared to describe the five necessary strategies for implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system.

Round 1

The first round sought responses to the following question: "*What strategies do California K-12 expert principals who have implemented a transition from a traditional grading and reporting system to a standards-based grading and reporting system identify as necessary to accomplish the transition?*" Responses to the question from the expert panel were compiled into one list, and similar responses were combined by the researcher, a doctoral candidate, and an outside reader. The finalized list from the first round was used in the formulation of the second-round survey.

Round 2

The second round sought responses to the following question: "*From the list of strategies identified in Round 1, how important is it when implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system?*" The researcher, a doctoral candidate, and an outside reader summed up the scores for each strategy and calculated the mean score for each strategy. The strategies were then listed from highest to lowest mean score. The five strategies with the highest mean score were utilized in the formulation of the third-round survey.

Round 3

The third round sought responses to the following question: "*Referring to the list* of five necessary strategies for implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system determined from Round 2, describe the strategies necessary for implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting a transition from a standards-based grading and reporting a transition from a traditional grading and reporting system to a standards-based grading and reporting system." The researcher, a doctoral candidate, and an outside reader organized the

responses by strategy, coded the responses, and analyzed the responses for themes in each strategy. A summary was prepared to describe the five necessary strategies for implementing a transition from a traditional grading and reporting system to a standardsbased grading and reporting system.

Limitations

The limitations of this Delphi study are listed below:

- The size of the sample population is a potential limitation. Although Nworie (2011) suggests a sample size of 15 is acceptable for Delphi study, McMillan and Schumacher (2010) recommend sample sizes from one to 40 or more in any qualitative study. Additional expert principals on the panel may have changed the mean score for the strategies in Round 2.
- The study must assume the members of the expert panel were honest in their responses to the surveys, and the expert principals were the ones completing the survey.
- The study assumes an expert principal is one who has successfully led a transition from a traditional grading and reporting system to a standards-based grading and reporting system, has a minimum of three years of experience as a principal, and has remained at the school for one year after the implementation was complete.
- The study assumes the definition of a successful implementation to a standards-based grading and reporting system when the system has remained in practice for at least one-year after full implementation where a standards-based report card is used; averages are not used; behavior is reported

separately from academic achievement; students are afforded with multiple occasions to prove their learning over time.

• The researcher is a proponent of standards-based grading. Therefore, the researcher's bias may have influenced the development of the surveys.

Summary

Chapter III reiterated the purpose and research questions for this research study. The research methodology was identified as a modified policy Delphi method and was determined to be the ideal methodology based on the purpose and research questions. Background on the Delphi method, its original use, and further details were provided concerning the policy Delphi. Modifications made to the policy Delphi that were implored for this study were also discussed. Additionally, the process of selecting a sample, collecting data, and analyzing data were addressed. The validity and reliability of the instruments used in this study were justified, and the limitations of this study were made known.

The following chapter, Chapter IV, will provide an extensive analysis of the data collected in each round and a summary of the findings.

CHAPTER IV: RESEARCH, DATA COLLECTION, AND FINDINGS

Chapter IV is a presentation of the data collected from this Policy Delphi study. The study strived to determine the most important strategies for the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system. Additionally, the study aimed to discover the best methods for implementing the five most important strategies. Chapter IV restates the purpose of the study, the research questions, and the methodology. Furthermore, this chapter reiterates the population and sample before presenting the data from each round of surveys. Finally, chapter IV ends with a summary of the findings.

Purpose

The purpose of this policy Delphi study was to identify the strategies California K-12 expert principals deem necessary for the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system, utilizing a panel of expert principals to rate the importance of the identified strategies and to recommend the best methods of implementing the five most important strategies.

Research Questions

The following questions were used to address the purpose of the study:

Round 1

1. What strategies do California K-12 expert principals who have implemented a transition from a traditional grading and reporting system to a standards-based grading and reporting system identify as necessary to accomplish the transition?

Round 2

2. To what degree do the California K-12 expert principals rate the importance of the strategies identified in Research Question 1?

Round 3

3. What do the California K-12 expert principals recommend as the best methods of implementing the five most important strategies identified in Research Question 2?

Methodology

The participants in this Delphi study took part in three rounds of surveys using Survey Monkey, a commonly used online-based survey instrument. The first-round survey asked, "What strategies do California K-12 expert principals who have implemented a transition from a traditional grading and reporting system to a standardsbased grading and reporting system identify as necessary to accomplish the transition?" The responses were collated, and like responses were merged. The second-round survey utilized a 6-point Likert scale and asked, "From the list of strategies identified in Round *I*, how important is it when implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system?" The mean score was calculated for each strategy when implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system, and strategies were listed from highest to lowest mean score. The five strategies with the highest mean score were used to develop the third-round survey. The Round 3 survey asked participants, "Referring to the list of five necessary strategies for implementing a transition from a traditional grading and reporting system to a standards-based grading

and reporting system determined from Round 2, describe the strategies necessary for implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system."

Population

The population is the complete group that the results of a study can be generalized (McMillan & Schumacher, 2010). The population for this study includes all principals of public schools in California. This population comprises of principals from elementary, middle, junior high, high, K-12, continuation, alternative, community day, special education, and other public-school types. In July 2018, CDE (2018) reported 10,473 public schools in the state. Each school will typically have one principal. Therefore, the total population size of the study is 10,473.

Target Population

The target population is defined by McMillan and Schumacher (2010) as the group that coincides with certain conditions and to which researchers intend to generalize the results of their study. The target population for this study is school administrators who, as principals, successfully led the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system. To identify the implementation as a success, the new standards-based grading and reporting system must remain in place for one year after full implementation where a standards-based report card is used; averages are not used, behavior is reported separately from academic achievement, and students are afforded with multiple occasions to prove their learning over time.

Sample

The sample of the population is, "the group of subjects or participants from whom the data are collected," (McMillan & Schumacher, 2010, p. 129). The sample population for this study is 15 school administrators working in California public schools who, as principals, successfully led the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system. School principals are ideal for determining most important strategies for leading an implementation of a transition from traditional grading and reporting to a standards-based grading and reporting system because they are tasked with roles such as providing a vision for academic success for all students, improving instruction, and collecting and evaluating data to analyze improvement (Wallace Foundation, 2013).

Presentation of Data

Data for each research question collected through correlating surveys are presented. The results from the Round 1 survey were utilized to create a Round 2 survey, and the results from the Round 2 survey were applied to the Round 3 survey.

Round 1 Survey

Research Question 1 asked: *What strategies do California K-12 expert principals* who have implemented a transition from a traditional grading and reporting system to a standards-based grading and reporting system identify as necessary to accomplish the transition?

In the Round 1 survey, participants were asked to respond to the open-ended question: What strategies do California K-12 expert principals who have implemented a transition from a traditional grading and reporting system to a standards-based grading and reporting system identify as necessary to accomplish the transition? Participants made their replies via an anonymous electronic survey.

A link to the Round 1 electronic survey was sent on September 19, 2019 to 14 identified expert principals who met all criteria for participation in the study and completed the informed consent form. A reminder e-mail to complete the Round 1 survey was sent on September 22, 2019. All 14 participants completed Round 1 survey, and their responses were reviewed, and the researcher, a doctoral candidate, and an outside reader amalgamated similar strategies to form a list of 16 important strategies for implementing a transition from a traditional grading and reporting system to a standardsbased grading and reporting system.

The important strategies identified for implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system from Round 1 are:

- Calibrate and align assignments and rubrics with standards.
- Calibrate and align grades in each grade level with standards.
- Professional development for teachers.
- Educate parents on standards-based grading and reporting.
- Educate students on standards-based grading and reporting.
- Formation of a standards-based report card committee to lead the change.
- Creating curriculum maps that align with standards.
- Professional development for administrators.
- Slow transition, not rushed.

- Administration provides feedback to teachers concerning data analysis and evaluation to assist with standards-based grading and reporting.
- Align student information system with standards-based grading.
- Coaching from peers and experts.
- Educate external entities about standards-based grading (NCAA, Universities, School Athletics).
- Revamp credit recovery to be aligned with a standards-based system.
- Utilize Professional Learning Communities for developing and implementing standards-based grading and reporting.
- Teachers lead the planning and implementing of standards-based grading and reporting.

Round 2 Survey

Research Question 2 asked: *To what degree do the California K-12 expert* principals rate the importance of the strategies identified in Research Question 1?

In the Round 2 survey, participants were asked to rate the importance of each of the 16 strategies identified in Round 1. The question posed to the participants in the Round 2 survey was: *From the list of strategies identified in Round 1, how important is it when implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system*? Each strategy was listed, and participants were asked to rate each strategy on importance using a six-point Likert scale. The six-point Likert scale consisted of Extremely Unimportant, Moderately Unimportant, Slightly Unimportant, Minimally Important, Moderately Important, and Extremely Important. Each degree of the Likert scale was given a point value ranging from 1 for Extremely Unimportant to 6 for Extremely Important.

A link to the anonymous, electronic Round 2 survey was sent to participants on September 25, 2019. A reminder e-mail was sent to participants on September 27, 2019. Of the 14 participants, 13 completed the Round 2 survey. A weighted average for each strategy was calculated to determine the importance rating of each of the 16 important strategies identified in Round 1. The responses were reviewed by the researcher, a doctoral candidate, as well as an outside reader.

See Table 3 for the weighted averages for each of the 16 strategies listed by the participants.

Table 3

<i>Strategies</i>	Listed by	Weighted	Average	Importance	Rating
		····			

Strategy	Weighted Average
Align student information system with standards-based grading.	5.85
Teachers lead the planning and implementing of standards- based grading and reporting.	5.77
Professional development for teachers.	5.46
Educate parents on standards-based grading and reporting.	5.46
Coaching from peers and experts.	5.38
Utilize Professional Learning Communities for developing and implementing standards-based grading and reporting.	5.08
Educate students on standards-based grading and reporting.	5.00
Calibrate and align assignments and rubrics with standards.	4.85
Calibrate and align grades in each grade level with standards.	4.85
Slow transition, not rushed.	4.69
Creating curriculum maps that align with standards.	4.62
Formation of a standards-based report card committee to lead the change.	4.38
Professional development for administrators.	4.31
Administration provides feedback to teachers concerning data analysis and evaluation to assist with standards-based grading and reporting.	4.31
Educate external entities about standards-based grading (NCAA, Universities, School Athletics).	4.23
Revamp credit recovery to be aligned with a standards-based system.	4.15

The five important strategies with the highest weighted average importance rating were identified as:

- 1. Align student information system with standards-based grading.
- 2. Teachers lead the planning and implementing of standards-based grading and reporting.
- 3. Professional development for teachers.
- 4. Educate parents on standards-based grading and reporting.
- 5. Coaching from peers and experts.

These five important strategies with the highest importance rating were applied to the Round 3 survey.

Round 3 Survey

Research Question 3 asked: What do the California K-12 expert principals recommend as the best methods of implementing the five most important strategies identified in Research Question 2?

In Round 3 survey, participants were asked to respond to five open-ended questions via an anonymous, electronic survey: *Referring to the list of five necessary strategies for implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system determined from Round 2, describe the method for implementing each strategy.* (1) Align student information system with *standards-based grading;* (2) Teachers lead planning and implementing of standardsbased grading and reporting; (3) Professional development for teachers; (4) *Educate parents on standards-based grading and reporting;* (5) Coaching from peers *and experts.* A link to the electronic survey was sent to participants on September 29, 2019. A reminder e-mail was sent on October 3, 2019. Thirteen participants responded to the survey. The methods described by each participant for each strategy were reviewed, and similar methods were amalgamated into one by the researcher, a doctoral candidate, and an outside reader.

Align the student information system with standards-based grading. The most important strategy, as rated by the expert panel, was to *Align the student information system with standards-based grading*. Based on the responses from the expert panel, the methods were categorized as either *Mandatory functions of the student information system* or *Utilization of the student information system*.

Some members of the expert panel included comments in their responses that stressed the importance of having a student information system that is aligned to standards-based grading. For instance, Participant A stated, "This has been the biggest challenge." Also, Participant B explained, "This is crucial."

The expert panel identified four mandatory functions a student information system must have to be aligned with standards-based grading and reporting. These functions are: (a) have an option to use standards-based report cards, (b) ability to indicate what standards each assessment aligns with, (c) be able to synthesize a grade on the standards-based report card based on assessment results placed in the grade book, and (d) the ability to show student growth from formative and summative assessments.

In addition to mandatory functions, the expert panel identified two methods for utilizing the student information system to be aligned with standards-based grading and reporting. These methods were identified as having clear guidelines on how teachers are

to utilize the student information system to input their grades, and teachers must be trained on how to use standards-based grading and reporting with the student information system. One expert panel member expressed the need for lots of professional development opportunities around the student information system.

Table 4 displays the top rated strategy from Round 3, as described by the expert participants, as well as the two methods and six mandatory functions to support each method.

Table 4

Strategy	Method		
Align the student information system with			
standards-based grading and reporting	Mandatory functions of the student information system	Utilization of the student information system	
and top or mg	Functions		
	Must have an option to use a standards-based report card.	Establish clear guidelines on how teachers are to utilize the student information system to	
	Must be able to indicate what standards each	input their grades.	
	assessment aligns with.	Teachers must be trained on how to use standards-	
	Must be able to synthesize a grade on the standards- based report card based on assessment results placed in the grade book.	based grading and reporting with the student information system.	
	Must provide results from formative and summative assessments to show student growth.		

Method for Implementing the Strategy: Align Student Information System

Teachers lead the planning and implementing of standards-based grading

and reporting. The second most important strategy, as rated by the expert panel, was that *Teachers lead the planning and implementing of standards-based grading and reporting*. The responses from the expert panel were combined to form five methods for implementing the strategy *Teachers Lead Planning and Implementing of Standards-based Grading and Reporting*.

The expert panel's explanations of methods for implementing the strategy *Teachers Lead Planning* and *Implementation* were combined into five methods. These methods involve selecting teacher leaders from among that staff who are well respected by their peers, providing them with the necessary training so that they can lead the planning and implementation, and giving them time to work in the professional learning communities, staff meetings, or other teacher groups.

Table 5 displays the second most important strategy from Round 3, as described by the expert participants, as well as the five methods identified.

Table 5

Method for Implementing the Strategy: Teachers Lead Planning and Implementation

Strategy	Method
Teachers Lead Planning and Implementing of Standards-based Grading and Reporting	Professional learning community leaders work with standards-based report card committee lead to facilitate information to their professional learning community's.
	Train teachers who are highly respected by their peers first so they can lead the training and calibrations for standards-based grading and reporting.
	Select lead teachers in each grade level or department to lead the training and support their grade level or department as the transition moved forward.
	Provide lead teachers time during staff meetings to present on standards-based grading and reporting.
	Establish collaborative teacher groups that facilitate training on standards-based grading and reporting through the school year.

Professional development for teachers. The third most important strategy rated by the expert panel was *Professional development for teachers* — this strategy brought about the most diverse responses. The methods were categorized as either *Delivery of professional development* or *Content of professional development*.

The expert panel's responses, related to how professional development should be delivered, were aggregated into four methods. The expert panel suggested using monthly staff meetings, during school day training, partial school day training with a roving substitute teacher, and time at the beginning and end of the school year. Therefore, any opportunity to provide professional development to teachers to support the implementation of standards-based grading and reporting should be utilized to ensure a successful transition.

Table 6 displays the third most important strategy from Round 3, as described by the expert participants, as well as the two methods and 16 functions to support each method.

Table 6

Strategy	Method			
Professional Development	Delivery of Professional	Content of Professional		
for Teachers	Development	Development		
	Functions			
	Utilize weekly staff	Mastery learning.		
	development time.			
		Develop and standards-		
	Utilize training during the	based aligned syllabi and		
	school day.	grade books.		
	Utilize roving substitute to	Establish baseline data on		
	allow teachers to be pulled	teachers' understanding,		
	out of their classes to work	awareness, usage, and		
	together with the lead	comfortability with		
	facilitator.	standards-based grading		
	Dianning time at the and and	and reporting and base professional development		
	Planning time at the end and start of the school year.	on needs identified from		
	start of the school year.	the data.		
		the data.		
		Begin with covering the		
		rationale for the transition		
		to standards-based grading		
		and reporting.		
		The new marking system.		
		How to complete the		
		report card.		
		How to communicate the		
		information in the report		
		card to parents.		
		(continue		

Method for Implementing the Strategy: Professional Development for Teachers

Table 6

Method for Imp	lementing th	ie Strategy: 1	Professional	Develo	opment f	for Teacl	hers
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Strategy	Μ	ethod		
Professional Development	Delivery of Professional	Content of Professional		
for Teachers	Development	Development		
	Fur	Functions		
	-	Opportunities for teachers to learn, practice, and refine the knowledge and skills of standards-based grading.		
		Knowledge and skills of standards-based grading and reporting.		
		The disposition toward standards-based grading and reporting.		
		Creating standards-based formative and summative assessments.		
		Create curriculum maps that align with standards- based grading and reporting.		

Educate parents on standards-based grading and reporting. Tied as the third most important strategy as deemed by the expert panel, but placed as fourth in the list, is *Educate parents on standards-based grading and reporting*. Based on the responses from the expert panel, the methods were categorized as either *Communication Method* or *Content of the Message*.

The expert panel's responses produced 10 different functions related to how schools can communicate information to parents about standards-based grading and

reporting. Some forms of communication were straightforward such as hosting parent nights or coffee with the principal. Additionally, the expert panel suggested utilizing other meetings where parents are present such as parent-teacher organization (PTO) meetings, school site council meetings, and Title 1 parent meetings. Other forms of communication were indirect. For example, the expert panel identified sending home flyers and newsletters with information about standards-based grading and reporting, including information on the school's webpage, and teachers utilizing other means of communication such as the Bloomz, Class Dojo, and e-mails.

The expert panel also described six different methods related to how the content should be included in these communications with parents. The content ranges from explaining the "why" behind the transition to the new grading and reporting system to walking parents through a unit of study that is standards-based with standards-based assessments. The expert panel found it important to educate parents on the basics of standards-based grading and reporting and how to read the new standards-based report card.

Table 7 displays the third top rated, but listed fourth, strategy from Round 3, as described by the expert panel, as well as the two methods and 16 functions to support each method.

Table 7

Strategy	Method		
Educate parents on standards-based grading			
and reporting	Communication Method	Content of the Message	
	Func	tions	
	Send home flyers/newsletters	Explain the "why" for the transition.	
	Parent-teacher organization (PTO) meetings	Educate on basics of standards-based grading and reporting.	
	Coffee with the principal meetings	Provide direction of the school concerning the	
	School site council meetings	future of grading and reporting.	
	Beginning of school orientation	Obtain feedback.	
	Back to school night	How to read the new standards-based report card.	
	Host parent nights		
	School webpage	Walk parents through a unit of study that is aligned with standards-	
	Title 1 Parent information meetings	based grading, including formative and summative assessments and how	
	Teacher/Parent communication through Bloomz, Class Dojo, email, etc.	students will demonstrate mastery of standards.	

Method for Implementing the Strategy: Educate Parents

Coaching from peers and experts. The fifth most important strategy identified by the expert panel was *Coaching from Peers and Experts*. The responses from the expert panel were amalgamated into four methods for implementing coaching from peers and experts. Participant C explained, "Once you begin talking about standards-based grading and reporting with your staff, you will be able to identify your expert teachers quickly, and these teachers are the ones that should be allowed to coach their peers." Although peer coaching is important, the expert panel saw a need to leverage the experience of experts from the outside who have been through the transition to standards-based grading and reporting so they can discuss potential pitfalls and provide insight on how to overcome them.

Table 8 displays the fifth most important strategy from Round 3, as described by the expert participants, as well as the four methods identified.

Table 8

Strategy	Method
Coaching from Peers and Experts	Providing side-by-side time with teachers and coaches and experts during the school day.
	Coaches and experts meeting with teachers between professional development sessions during professional learning communities and individually as needed.
	Experts from the outside who have experienced transitioning to standards-based grading provide insight to school on potential pitfalls and how to overcome them.
	Coaches and experts make presentations to the staff.

Method for Implementing Strategy: Coaching from Peers and Experts

Summary

Chapter IV presented the data collected for this Policy Delphi study. The Round

1 survey produced a list of 16 unique strategies for implementing a transition from a

traditional grading and reporting system to a standards-based grading and reporting

system. These strategies were utilized in the Round 2 survey, which asked the expert panel to rate each strategy by their importance. The five strategies with the highest weighted average were:

- 1. Align student information system with standards-based grading.
- 2. Teachers lead the planning and implementing of standards-based grading and reporting.
- 3. Professional development for teachers.
- 4. Educate parents on standards-based grading and reporting.
- 5. Coaching from peers and experts.

The expert panel was then asked to explain the best methods for implementing these five strategies. The methods for implementing each strategy were presented in tables and discussed in order of importance as rated by the expert panel. Chapter V discusses the major and unexpected findings from the study and provides implications for action and recommendations for future research.

CHAPTER V: SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

This chapter provides a summary of the Policy Delphi study, restating the purpose, research questions, and methodology. Additionally, major and unexpected findings based on the data presented in Chapter IV will be outlined. Finally, the chapter concludes with a discussion of conclusions from the data, implications for action, recommendations for further research, and closing remarks.

Purpose Statement

The purpose of this policy Delphi study was to identify the strategies California K-12 expert principals deem necessary for the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system, utilizing a panel of expert principals to rate the importance of the identified strategies and to recommend the best methods of implementing the five most important strategies.

Research Questions

The following questions were used to address the purpose of the study:

Round 1

1. What strategies do California K-12 expert principals who have implemented a transition from a traditional grading and reporting system to a standards-based grading and reporting system identify as necessary to accomplish the transition?

Round 2

2. To what degree do the California K-12 expert principals rate the importance of the strategies identified in Research Question 1?

Round 3

3. What do the California K-12 expert principals recommend as the best methods of implementing the five most important strategies identified in Research Question 2?

Methodology

The participants in this Delphi study took part in three rounds of surveys using Survey Monkey, a commonly used online-based survey instrument. The first-round survey asked, "What strategies do California K-12 expert principals who have implemented a transition from a traditional grading and reporting system to a standardsbased grading and reporting system identify as necessary to accomplish the transition?" The responses were collated, and like responses were merged. The second-round survey utilized a 6-point Likert scale and asked, from the list of strategies identified in Round 1, "How important is it when implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system?" The mean score for each strategy when implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system was calculated, and strategies were listed from highest to lowest mean score. The five strategies with the highest mean score were used to develop the Round 3 survey. The Round 3 survey asked participants, "Referring to the list of five necessary strategies for implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting

system determined from Round 2, describe the strategies necessary for implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system."

Major Findings

The major findings of this Policy Delphi study are presented with respect to each research question.

Research Question 1

Research Question 1 asked: *What strategies do California K-12 expert principals* who have implemented a transition from a traditional grading and reporting system to a standards-based grading and reporting system identify as necessary to accomplish the transition?

The expert panel identified 16 unique strategies necessary for accomplishing the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system in California K-12 schools:

- Calibrate and align assignments and rubrics with standards.
- Calibrate and align grades in each grade level with standards.
- Professional development for teachers.
- Educate parents on standards-based grading and reporting.
- Educate students on standards-based grading and reporting.
- Formation of a standards-based report card committee to lead the change.
- Creating curriculum maps that align with standards.
- Professional development for administrators.
- Slow transition, not rushed.

- Administration provides feedback to teachers concerning data analysis and evaluation to assist with standards-based grading and reporting.
- Align the student information system with standards-based grading.
- Coaching from peers and experts.
- Educate external entities about standards-based grading (NCAA, Universities, School Athletics).
- Revamp credit recovery to be aligned with a standards-based system.
- Utilize Professional Learning Communities for developing and implementing standards-based grading and reporting.
- Teachers lead the planning and implementing of standards-based grading and reporting.

A close look at these strategies indicates addressing the implementation from multiple angles. First, five strategies are related to aligning, calibrating, or revamping something that already exists. For example, assignments, rubrics, grades, curriculum maps, credit recovery, and the student information system are all items that already exist but require a developmental change, defined by D. Anderson and Ackerman-Anderson (2010a) as, "improvement of an existing skill, method, performance standard, or condition that for some reason does not measure up to current or future needs" (p. 52).

The strategies identified by the expert panel revealed five groups that require some form of education about standards-based grading and reporting. Educating parents, students, and external entities about standards-based grading and reporting are identified as necessary strategies. Providing professional development for teachers and school administrators on standards-based grading and reporting was also identified as a necessary strategy. These strategies are not focused on informing groups of changes, instead of helping these groups have a shift in mindset. This type of change is transformational. D. Anderson and Ackerman-Anderson (2010a) suggest a transformational change demands a "fundamental shift in mindset, organizing principles, behaviors, or culture" (p. 53).

Lastly, the strategies identified by the expert panel revealed who should be leading the transition. The expert panel lists a standards-based grading committee, coaching from peers and experts, professional learning communities, and specifically teachers. A common thread in all these responses is teacher involvement and leadership. D. Anderson and Ackerman-Anderson (2010a) identify strategies for leading a transformational change:

- High stakeholder engagement, especially early in the change process.
- Leadership development.
- Visioning and understanding the case for change.

These strategies identified by Anderson and Ackerman-Anderson go together with teachers leading the transition from a traditional grading and reporting system to a standards-based grading and reporting system. Principals should engage teachers early in the change process and develop leadership in their teachers to prepare them to lead the transition. Additionally, principals should help these lead teachers to see the vision and understand the case for standards-based grading and reporting.

Research Question 2

Research Question 2 asked: *To what degree do the California K-12 expert* principals rate the importance of the strategies identified in Research Question 1?

The expert panel rated each strategy on a 6-point Likert scale of importance, ranging from Extremely Unimportant to Extremely Important. The weighted average rating for each strategy was calculated, and all strategies were rated as either Minimally Important or Moderately Important. A Minimally Important rating ranged from four or greater but less than five. A Moderately Important rating ranged from five or greater but less than six. No strategy was rated as any degree of unimportance.

Seven strategies were rated as Moderately Important:

- 1. Align the student information system with standards-based grading.
- Teachers lead the planning and implementing of standards-based grading and reporting.
- 3. Professional development for teachers.
- 4. Educate parents on standards-based grading and reporting.
- 5. Coaching from peers and experts.
- 6. Utilize Professional Learning Communities for developing and implementing standards-based grading and reporting.
- 7. Educate students on standards-based grading and reporting.

An examination of these strategies reveals that all, except Align the student

information system with standards-based grading, are strategies that correlate to strategies D. Anderson and Ackerman-Anderson (2010a) identified as needed for transformational change. However, the most important strategy rated by the expert panel was to *Align the student information system with standards-based grading*, which is related to developmental change.

Research Question 3

Research Question 3 asked: What do the California K-12 expert principals recommend as the best methods of implementing the five most important strategies identified in Research Question 2?

The expert panel described the best methods for implementing the five most important strategies for accomplishing a transition from a traditional grading and reporting system to a standards-based grading and reporting system. The five most important strategies were identified as:

- 1. Align the student information system with standards-based grading.
- Teachers lead the planning and implementing of standards-based grading and reporting.
- 3. Professional development for teachers.
- 4. Educate parents on standards-based grading and reporting.
- 5. Coaching from peers and experts.

Align the student information system with standards-based grading and

reporting. Methods for implementing Align the student information

system with standards-based grading and reporting were broken up into two categories, Mandatory functions of the student information system and Utilization of the student information system. The expert panel described the need to have a student information system that could do standards-based grading, indicate standards connected to assessments, generate a grade on the standards-based report card from the grade book, and have the ability to show student progress on standards throughout the school year, through formative and summative assessments in the grade book. In addition to functions of the student information system, the expert panel explained that clear guidelines should be in place as to how the student information system should be utilized as methods for implementing the strategy *Align the student information system with standards-based grading and reporting*. These guidelines explain how to input grades and suggest training for teachers to help them utilize the student information system according to the established guidelines.

Teachers lead planning and implementing of standards of standards-based

grading and reporting. Methods for implementing *Teachers lead planning and implementing of standards-based grading and reporting* addressed the different opportunities teachers could have to leading the planning and implementing of the new grading system. For example, methods included utilizing the professional learning communities, establishing collaborative teacher groups, and providing time in staff meetings for teachers to lead the planning and implementation of the new grading and reporting system. To support the implementation of the new grading and reporting system, the expert panel stressed the importance of having teacher leaders who are respected by their peers and providing these teacher leaders with professional development to help them become experts on the topic of standards-based grading and reporting.

Professional development for teachers. Methods for implementing *Professional development for teachers* were categorized as *Delivery of professional development* or *Content of professional development*. Concerning the methods for delivering professional development to teachers, the expert panel identified using weekly staff meetings, training during the school day, and specific time in the end and the start of the

school year as times when the professional development should take place. In other words, professional development should be continuous and different settings for the professional development may be necessary based on the needs of the teachers.

In addition to the delivery of professional development, the expert panel described the content of professional development. Operational topics for professional development include creating assessments aligned to standards, creating curriculum maps, how to use the new report card, creating syllabi, and providing teachers the opportunity to practice and refine their skills of standards-based grading. Topics related to teachers' disposition toward standards-based grading and reporting include collecting baseline data on the understanding, awareness, and comfortability of teachers with standards-based grading and covering the rationale for the transition to standards-based grading and reporting. Furthermore, the expert panel suggested specific training on how to communicate the information in the report card to parents.

Educate parents on standards-based grading and reporting. Methods for implementing *Educate parents on standards-based grading and reporting* were categorized as *Communication method* or *Content of the message*. The communication methods for educating parents show using many different settings to connect with parents. Some settings are more formal such as school site council and PTO meetings. Other settings are informal such as back to school night and coffee with the principal. Some methods did not require face-to-face contact including sending home flyers/newsletters and providing information on the school webpage or having teachers utilize classroom management applications such as Bloomz or Class Dojo to provide information about standards-based grading and reporting to parents. In these different

settings identified by the expert panel, the content addressed when educating parents on standards-based grading was identified as explaining the "why" for the transition, obtaining parent feedback, teaching how to read the new report card, and walking parents through a unit of study that is standards-based in its assessments.

Coaching from peers and experts. Methods for implementing the strategy *Coaching from peers and experts* described by the expert panel suggest utilizing coaching during the school day and staff meetings. A relevant comment was made by an expert panel member that expressed the need for these experts to have had experience with such a transition so they can provide insight on potential pitfalls and how to overcome them.

The major findings in this study align with previous research related to transitioning to standards-based grading and reporting. Carter (2017) identified strategies for leading a transition to standards-based grading in secondary schools that include:

- Lead members of the staff through professional development about researchbased best grading practices.
- Get school teacher leaders on board early.
- Develop professional development modules for teachers on all aspects of the grading practice transformation.
- Align continued professional development with standards-based grading.

The importance of professional development and obtaining the buy-in from the teachers is well established.

Unexpected Findings

One unexpected finding appeared from the data collected during this Policy Delphi study. All strategies rated in the top five most important were aligned with transformational change except the strategy rated most important, *Align the student information system with standards-based grading and reporting.* The literature validates the need for teachers leading the planning and implementing of the new grading system, professional development for teachers, educating parents, and having peers/experts coach teachers during the transition (S. M. Brookhart, 2011; Carter, 2017; MacCrindle, 2018; Proulx et al., 2012). However, alignment of the student information system with standards-based grading and reporting is not a significant theme in the literature.

Conclusions

This Policy Delphi study sought to identify the five most important strategies for implementing a transition from a traditional grading and reporting system to a standardsbased grading and reporting system in California K-12 public schools and to describe the best methods for implementing these strategies as deemed necessary by California K-12 expert principals. The following conclusions can be drawn from this study.

Conclusion 1

Based on the findings from this study, it is concluded that the student information system has been overlooked as an essential factor in successfully implementing a transition to a standards-based grading and reporting system. Popular student information systems such as Aeries and PowerSchool have the option to do standardsbased grading and reporting. However, the process of making the student information system align with standards-based grading and reporting requires more than creating a report card. The system must allow assessments to be connected to standards, track student progress toward meeting standards, and synthesize a mark on the report card for each standard based on the associated assessments. Although present student information

systems have the capacity to deliver standards-based grading systems, in most cases, they are just used to continue past practices. To produce meaningful data on student progress toward meeting standards, teachers and administrators need training to ensure they can use the student information system according to the adopted guidelines of the school.

Conclusion 2

Based on the findings from this study, it is concluded that implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system requires a transformational change. Principals need to consider the knowledge teachers require in order to be successful at implementing standards-based grading and reporting with fidelity. However, they must also consider the disposition of their teachers, how attitudes need to be changed, and how the school culture, norms, and behaviors regarding grading must be changed.

Conclusion 3

Many teachers feel their method of grading is sacred, and any recommended change to this system is blasphemous. Based on this finding, it is concluded that looking into educational research on equitable grading practices and mastery learning will help teachers understand the "why," and this will aid in changing teachers' disposition toward the new grading system. Therefore, they will be more open to the practical professional development on the skills and practices of standards-based grading.

Conclusion 4

The findings indicate that parent participation and knowledge are key components to successfully implementing a standards-based system. Based on this finding, it is concluded that educating parents on standards-based grading and reporting requires

principals to take advantage of every opportunity to share information about the new grading system. Both face-to-face and indirect interaction are beneficial to the explanation for the new grading system. These interactions include meetings in person, such as school site council, coffee with the principal, and parent night meetings specifically for discussing standards-based grading and reporting as well as information shared via flyer/newsletter, school webpage, e-mail, and classroom management applications such as Bloomz and Class Dojo. The information shared through these mediums includes explaining the "why" behind standards-based grading and practical knowledge such as how to read the new standards-based report card.

Implications for Action

California began implementing a standards-based education in 1996 with the standards-based reform movement, which produced the 97 Standards and high-stakes standardized tests such as the STAR (CDE, 2018e). Twenty-three years later, most secondary schools have not evolved their grading and reporting systems to align with a standards-based education, and many elementary schools utilize a system that may resemble a standards-based grading and reporting system but employ practices that are contrary to an accurate standards-based system as determined by seminal authors such as Thomas Guskey (T. R. Guskey, 2015).

Implication for Action 1

California principals must work with their district office to ensure the student information system adopted by the school district can work intuitively in a standardsbased grading and reporting system. Although the adopted student information system may have an option to do standards-based grading and reporting, it is most often just used

to continue former practices. Teachers need to know how to operate the system to easily monitor and report student progress toward meeting standards present on the report card.

Implication for Action 2

California principals must plan professional development that not only addresses operational changes in a standards-based grading and reporting system, such as assessments, syllabi, and curriculum maps, but also teacher disposition toward standardsbased grading and reporting. California principals should make optimal use of the relationship their teacher leaders have with their staff, who have the respect of these peers, to carry out the planning and implementing of the new grading and reporting system. These teacher leaders should be utilized as coaches, so teachers feel comfortable with reaching out to them for help. Additionally, these teacher leaders need to be provided time in a variety of settings to provide professional development on standardsbased grading and reporting. For example, they can use the time during a staff meeting, during school hours, and at the end and the start of the school years to provide the necessary training.

Implication for Action 3

California principals need to communicate the transition to parents through a variety of mediums. Information can be provided at prior planned parent meetings such as school site council, PTO meetings, Title 1 parent information meetings, orientation, and back to school night. However, meetings for the specific purpose of educating parents about standards-based grading and reporting are needed. The content of these meetings should provide not only practical information about standards-based grading and report card and walking parents through a

unit of study, but also address educational research on standards-based grading and reporting to allow parents the ability to understand the reason for the transition.

Recommendations for Further Research

Although many elementary schools in California utilize a standards-based grading and reporting system, few middle schools and even fewer high schools have transitioned to a standards-based grading and reporting system. Additionally, of the elementary schools that utilize a standards-based grading and reporting system, some schools do not do so with fidelity, intermingling practices from traditional grading and reporting systems that are contrary to a standards-based grading and reporting system. Therefore, the following recommendations are made for further research that are resultant from the findings and conclusions of this Policy Delphi study:

- Replicate this study using expert teachers to determine the most important strategies for implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system.
- What implementation steps differ between elementary schools that utilize standards-based grading with fidelity and those who do not?
- What are the most important strategies for implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system as determined by California veteran teachers?
- What are the most important strategies for implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system as determined by California directors and coordinators?

- What are the most important methods for communicating a transition from a traditional grading and reporting system to a standards-based grading and reporting system to California parents?
- What do California schools that utilize standards-based grading and reporting use for their student information system, and how are the student information systems being utilized by teachers?
- What should the composition of a standards-based grading and reporting leadership team be to ensure a successful transition?

Concluding Remarks and Reflections

Traditional grading and reporting have been around for over a century, and although our understanding of how students learn and best practices in teaching have evolved, most secondary schools continue to use the same grading and reporting system they have always used. Since the adoption of Common Core standards in California, many elementary schools have moved away from a traditional grading and reporting system to a standards-based grading and reporting system. However, many of these schools mingle traditional grading and reporting practices in a standards-based grading and reporting system, preventing the system from producing meaningful, reliable, and consistent grades.

Knowing that grades can impact a student's self-image, educators must strive to provide meaningful, reliable, and consistent grades. A traditional grading and reporting system has too many pitfalls that dilute the meaning of the grade and provides an obscured message of student learning.

Although I realize students do not need to be given a grade to show learning, I believe standards-based grading and reporting can provide a more equitable, reliable, and meaningful assessment of student learning. I hope more schools can take a closer look at their grading and reporting practices as they strive to adopt a system that is more equitable than traditional grading and reporting, one that is based on sound research, such as standards-based grading and reporting. I hope that this research can assist California principals in successfully implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system.

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 /embedded/WTUEEE36UUBZ4K3T?source=fedsrch Available from EBSCOhost
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APPENDICES

APPENDIX A

Literature Matrix

References	History of Grades	Purpose of Grading	Ca Standards based reform movement	Traditional Grading Practices	Ca Traditional Grading	Criticism Traditional Grading	SBG Practices	SBG in Ca	Criticism of SBG	SBG challenges	Implementing SBG	Principal as Change Agent
Adrian, C. A. (2012). Implementing standards-based grading: Elementary teachers' beliefs, practices and concerns.							х				х	
Akins, J. (2017). Secondary principals' perceptions of grading and grade reporting practices. (77), ProQuest Information & Learning, US.							X					
Bailey, J., & McTighe, J. (1996). Reporting achievement at the secondary level: What and how, 119.		х				х	х			х		
Barnes, C. (2016). Standards-based grading: Moving toward equality of opportunity and advancement of learning for all students.							x					
Battistone, W. A., Jr. (2017). A phenomenological study on the lived experience of first and second year teachers in standards-based grading districts.							X			X		
Brookhart, S. M. (2008). How to give effective feedback to your students				x								

I	I	1	I	l						
Brookhart, S. M. (2011). Starting the Conversation About Grading. <i>Educational</i> <i>Leadership</i> , 69(3), 4.					x	х		х		
Brookhart, S. M. (2015). Graded achievement, tested achievement, and validity.	x									
Brookhart, S. M., Guskey, T. R., Bowers, A. J., McMillan, J. H., Welsh, M. E., Stevens, M. T., Smith, J. K. (2016). A century of grading research: Meaning and value in the most common educational measure.	x									
Bryk, A. S., Gomez, L. M., Grunow, A., & LaMahieu, P. G. (2015). Learning to improve: How America's schools can get better at getting better								X	X	x
Buckmiller, T. M., & Peters, R. E. (2018). Getting a fair shot?					x	x		x		
Buttrey, K. M. (2014). The effects of standards-based grading on student achievement, grade alignment, and teacher perceptions. (Doctoral dissertation)					x	x				
California Department of Education. (2018, November 28). Timeline of California standards-based reform.			x							
California Department of Education. (2018, March 6). All curriculum frameworks.			X							

1	1	1	I			1	 I		1	
California Department of Education. (2018, November 2). CAASPP description.		х								
California Education Code 49066.				x						
Carey, T., & Carifio, J. (2012). The Minimum Grading Controversy: Results of a Quantitative Study of Seven Years of Grading Data From an Urban High School, 201.						X		X		
Carifio, J., & Carey, T. (2013). The Arguments and Data in Favor of Minimum Grading. <i>Mid-Western</i> <i>Educational</i> <i>Researcher</i> , 25(4), 19- 30.						X				
Carter, A. B. (2017). Best practices for leading a transition to standards-based grading in secondary schools.						х		Х		
Cizek, G. J., Fitzgerald, S. M., & Rachor, R. A. (1995). Teachers' assessment practices: Preparation, isolation, and the kitchen sink.					x	X				
Cox, K. B. (2011). Putting classroom grading on the table: A reform in progress. <i>American Secondary</i> <i>Education</i> (1), 67.						x		x		
Cross, L. H., & Frary, R. B. (1999). Hodgepodge Grading: Endorsed by Students and Teachers Alike. <i>Applied Measurement</i> <i>in Education</i> , 12(1), 53.	х				х					

Dean, M. G. (2015). Grade retention rates: Impact of standards- based grading as compared to a traditional grading system in 3rd and 5th grades.			X			x				
Deddeh, H., Main, E., & Fulkerson, S. R. (2010). Eight steps to meaningful grading.					x	X		x		
Docan, T. N. (2006). Positive and negative incentives in the classroom: An analysis of grading systems and student motivation.			X							
Dodd, T., Greene, A., & McTighe, J. (2017). Alternative grading systems: Is it time for a change?	x				x			x		
Dueck, M. (2011). How I broke my own rule and learned to give retests. <i>Educational</i> <i>Leadership</i> , 69(3), 72- 75.						х		x		
Dueck, M. (2014). The problem with penalties.					x	x				
Dyb, D. C. (2013). Teacher perceptions of middle level grading practices.						x		Х		
Else, D. F. (2013). The role of principal leadership in achievement beyond test scores: An examination of leadership, differentiated curriculum and high- achieving students.									x	x
Ephraim, R. (2004). Marking practices and procedures in secondary schools. Los Angeles Unified School District	x	х		x						

Erickson, J. A. (2011). How grading reform changed our school. <i>Educational</i> <i>Leadership</i> , <i>69</i> (3), 66- 70.				x	x			
Finch, P. (2016). A school district's change to standards- based grading: A conduit to student learning.					х		x	
Fink, A. M. (2015). A comparative analysis of a standard based grading system versus a traditional based grading system with respect to student academic achievement and motivation.				x	X			
Fisher, D., Frey, N., & Pumpian, I. (2011). No penalties for practice. <i>Educational</i> <i>Leadership</i> , 69(3), 46- 51.		x		x	x		x	
Franklin, A., Buckmiller, T., & Kruse, J. (2016). Vocal and vehement: Understanding parents' aversion to standards- based grading.		X			X		X	
Fullan, M. (1997). What's worth fighting for in the principalship?								x
Fullan, M. (2014). The principal: Three keys to maximizing impact.								x
Gibbs, J., Barnes, C., & Andrews, C. (2016). Standards-based grading: Moving toward equality of opportunity and advancement of learning for all students.	х							

Greene, G. L. (2016). An analysis of the comparison between classroom grades earned with a standards-based grading system and grade-level assessment scores as measured by the Missouri Assessment Program.					х		x		
Grodner, A., & Rupp, N. G. (2013). The role of homework in student learning outcomes: Evidence from a field experiment.				X					
Guskey, T. R. (1994). Making the grade: what benefits students? <i>Educational</i> <i>Leadership</i> (2), 14.	x			x	x				
Guskey, T. R. (2000). Grading policies that work against standards and how to fix them. <i>National</i> Association of Secondary School Principals, 20.		X	x	X	X				
Guskey, T. R. (2001, September). Helping standards make the grade.		x	x	x	x	x	x	x	
Guskey, T. R. (2002). How's my kid doing? A parent's guide to grades, marks, and report cards.		х	x	x	x	х	х	х	
Guskey, T. R. (2002). Perspectives on grading and reporting: Differences among teachers, students, and parents.		х	х		х				
Guskey, T. R. (2009). Bound by tradition: Teachers' views of crucial grading and reporting issues.		х	х		х		х	х	

Guskey, T. R. (2009). Practical solutions for serious problems in standards-based grading.		x	x		х	x	x	x	
Guskey, T. R. (2011). Five obstacles to grading reform. <i>Educational</i> <i>Leadership</i> , 69(3), 16- 21.		X	x	X	X		X	X	
Guskey, T. R. (2013). The case against percentage grades.	x	х	x	х	х				
Guskey, T. R. (2015). On your mark: Challenging the conventions of grading and reporting. Bloomington, IN: Solution Tree.		X	X	X				X	
Guskey, T. R. (2017). Where do you want to get to? <i>Learning</i> <i>Professional</i> , 38(2), 32-37.								х	
Guskey, T. R., & Anderman, E. M. (2013). In search of a useful definition of mastery.			x	х	х			х	
Guskey, T. R., & Jung, L. A. (2012). Four steps in grading reform.		x	x	x	x		x	x	
Guskey, T. R., Swan, G. M., & Jung, L. A. (2010). Developing a statewide, standards- based student report card: A review of the Kentucky initiative.					X	X			
Hardegree, A. C. (2012). Standards- based assessment and high stakes testing: Accuracy of standards- based grading.					x				
Hochbein, C., & Pollio, M. (2016). Making grades more meaningful. <i>Phi Delta</i> <i>Kappan, 98</i> (3), 49.		X	X	X	X	X	X	X	

Hoernke, M. A. (2015). Perceived effects of standards- based grading on student assessments.					х		Х		
Hooper, J., & Cowell, R. (2014). Standards- based grading: History adjusted true score.		x	x	x	X	x	X	X	
Iamarino, D. L. (2014). The benefits of standards-based grading: A critical evaluation of modern grading practices. <i>Current Issues in</i> <i>Education, 17</i> (2).					X			X	
Isnawati, I., & Saukah, A. (2017). Teachers' grading decision making.		x	x						
Jones Miller, J. (2013). A better grading system: Standards- based, student- centered assessment. <i>The English Journal</i> (1), 111.				х	х				
Knight, M. E. (2017). A phenomenology examining high school teachers' perceptions of the effects of standards-based grading on planning, instruction, assessment, classroom environment, and students' characteristics and behaviors							x	x	
Kohn, A. (2012). The case against grades.				X		x			
MacCrindle, A. N. (2018). Effective change: A case study of implementation of a standards based grading initiative.					Х		х		
Marzano, R. J. (2000). Transforming classroom grading.	x	х	X	x	х	X	х	х	

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Muñoz, M. A., & Guskey, T. R. (2015). Standards-based grading and reporting will improve education. <i>The Phi</i> <i>Delta Kappan</i> (7), 64.	X				х		Х	Х	
Norton, J. B. (2014). The impact of traditional and standards-based grading on teacher- issued grades, student achievement, and parental understanding of grades.					x				
O'Connor, K., & Wormeli, R. (2011). Reporting Student Learning. <i>Educational</i> <i>Leadership</i> , 69(3), 40- 44.	x				x			x	
O'Connor, K. (2009). Reforming grading practices in secondary schools.	X	X		X	X			X	
O'Connor, K. (2011). A repair kit for grading: 15 fixes for broken grades (2nd ed.). Botson, MA: Pearson.	X	X		x	X			X	
Peters, R., & Buckmiller, T. M. (2014). Our grades were broken: Overcoming barriers and challenges to implementing standards-based grading.							X	X	
Peters, R., Grundmeyer, T., & Buckmiller, T. M. (2016). An educational leaderships program's continuous improvement journey toward a standards- based system.					X	X	X		
Peters, R., Kruse, J., Buckmiller, T., & Townsley, M. (2017). "It's just not fair!" Making sense of secondary students' resistance to a standards-based grading.	x			x	x	x	x	x	

I	I								
Pierson, G. (2001). A Yale book of numbers, historical statistics of the college and university 1701-1976.	x								
Pollio, M., & Hochbein, C. (2015). The association between standards- based grading and standardized test scores as an element of high school model reform.			x	X	X				
Proulx, C., Spencer- May, K., & Westerberg, T. (2012). Moving to standards- based grading: Lessons from Omaha. <i>Principal</i> <i>Leadership</i> , <i>13</i> (4), 30- 34.					X		x	X	
Rainey, L. S. (2016). The effect of standards-based grading on student achievement: A correlational investigation.					х				
Reeves, D. (2004). The case against the zero.			x	x	х		x		
Reeves, D. B. (2000). Standards are not enough: Essential transformations for school success. <i>NASSP</i> <i>Bulletin, 84</i> (620), 20.			x	x	х				
Reeves, D. B. (2011). Taking the grading conversation public. <i>Educational</i> <i>Leadership</i> , 69(3), 76- 79.				x	x		x	x	
Reeves, D. B. (2016). The elements of grading: A guide to effective practice (2nd ed.). Bloomington, IN: Solution Tree.		х		х	х				

Reeves, D. B., Jung, L. A., & O'Connor, K. (2017). Special Topic: What's Worth Fighting against in Grading? <i>Educational</i> <i>Leadership</i> , 74(8), 42- 45.		x		х	х	Х		х	х	
Richardson, J. (2013). Staring down policy makers.			x						х	
Schaffer, C. L. (2014). When assessment and accountability intersect, good things can happen.				x						
Schiffman, M. P. (2016). Standards- based grading: Educators' perception of the effects on teaching, student motivation, and assessment at the high school level.						x		x		
Schimmer, T. (2016). Grading from the inside out.	x			x	x			x		
Schimmer, T. (2014). Grading with a standards-based mindset: Changing how we think about grading is necessary for long-lasting grading reform.					x	x		х	х	
Schinske, J., & Tanner, K. (2014). Teaching more by grading less (or differently).	x	x		x	x					
Schneider, J., & Hutt, E. (2014). Making the grade: A history of the A-F marking scheme. <i>Journal of Curriculum</i> <i>Studies, 46</i> (2), 201- 224.	X	X		x	x		x			

Scriffiny, P. L. (2008). Seven reasons for standards-based grading: Why report cards should abandon the point system.				x	x					
Spencer, K. (2012). Standards-based grading: New report cards aim to make mastery clear. Education Digest: Essential Readings Condensed for Quick Review, 78(3), 4-10.					x	x	x	x		
Stiles, E. (1901). The literary diary of Ezra Stiles: 1782-1795 (Vol. 3). New York, NY: Charles Scribner's Sons.	x									
Stitt, J. L., & Pula, J. J. (2014). Voting for subjectivity: Adding some gray areas to black-and-white, objective grading practices.							X			
Stowe, C. E. (1838). Report on the elementary public instruction in Europe.	x									
Swan, G. M., Guskey, T. R., & Jung, L. A. (2014). Parents' and teachers' perceptions of standards-based and traditional report cards. <i>Educational</i> <i>Assessment</i> , <i>Evaluation and</i> <i>Accountability</i> ,					х			х	х	
Syed, S. (2013). Leading Schools through Major Change. <i>Principal Leadership</i> , 14(2), 30-33.										x
Szymczak, J. S. (2016). Transitioning to a standards-based grading model at the middle level: A case study.					Х			Х		

Timmons, B. A. (2018). Challenging standard grading practices: A qualitative Action Research study.			x	x	х	x			
Townsley, M. M. (2013). Redesigning grading-districtwide. <i>Educational</i> <i>Leadership</i> , 71(4), 68- 71.							х	х	
Townsley, M. M. (2017). Impact of standards-based grading practices on post-secondary readiness as measured by standardized college entrance exams.					x		X		
Townsley, M. M. (2018). Mastery- Minded Grading in Secondary Schools. <i>School Administrator</i> , 75(2), 16-21.					х	х	х	х	
Tyree-Hamby, A. L. (2015). An examination of the correlation between teacher-assigned standards-based grades and teacher- assigned traditional grades and student achievement.					x				
Wallace Foundation. (2013). The school principal as leader: Guiding schools to better teaching and learning.									x
Welsh, M. E., D'Agostino, J. V., & Kaniskan, B. (2013). Grading as a reform effort: Do standards- based grades converge with test scores? <i>Educational</i> <i>Measurement: Issues</i> <i>and Practice, 32</i> (2), 26-36.						x		x	
Westerberg, T.R., (2016). Charting a course to standards- based grading.	x	X	X	X	X		X	X	

Winton, T. W. (2015). Student and teacher perceptions of standards-based grading and student performance.			х	х		х	
Wormeli, R. (2011). Redos and retakes done right.	x			x			

APPENDIX B

Letter of Invitation

Date: Dear Prospective Study Participant:

You are invited to participate in a research study designed to discover and describe strategies California K-12 expert principals deem necessary for the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system. The principal researcher of this study is Sean Redmond, Doctoral Candidate for Brandman University's Doctor of Education in Organizational Leadership program. You were chosen to participate in this study because you were a California K-12 principal who successfully led the transition from a traditional grading and reporting system to a standards-based grading of present principals will engage in this study. Participation should require approximately 30 minutes of your time over the course of three Delphi surveys and is entirely voluntary. You may withdraw from the study at any time without consequences.

PURPOSE: The purpose of this policy Delphi study was to identify the strategies California K-12 expert principals deem necessary for the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system, utilizing a panel of expert principals to rate the importance of the identified strategies and to recommend the best methods of implementing the five most important strategies.

Results from the study will be summarized in a doctoral dissertation.

PROCEDURES: If you decide to participate in the study, you will be sent three rounds of a survey via email by the researcher. The survey will be via Survey Monkey and your responses will remain anonymous.

RISKS, INCONVENIENCES, AND DISCOMFORTS: There are no known major risks or discomforts associated with this research.

POTENTIAL BENEFITS: There are no major benefits to you for participation, but a potential benefit may be that you have an opportunity to contribute to research that may impact the field education. The information from this study is intended to inform California K-12 principals the best methods of implementing the five most important strategies for the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system.

ANONYMITY: Records of information that you provide for the research study and any personal information you provide will not be linked in any way. It will not be possible to identify you as the person who provided any specific information for the study.

You are encouraged to ask any questions, at any time, that will help you understand how this study will be performed and/or how it will affect you. You may contact the principal researcher, Sean Redmond, by phone at [redacted], or email [redacted]. If you have any further questions or concerns about this study or your rights as a study participant, you may write or call the Office of the Executive Vice Chancellor of Academic Affairs, Brandman University, and 16355 Laguna Canyon Road, Irvine, CA 92618, (949) 341-7641.

Respectfully,

Sean Redmond Principal Researcher

APPENDIX C

Informed Consent

RESEARCH STUDY TITLE: Expert Principals' Identification of the Best Strategies for Transition from a Traditional Grading System to a Standards-Based Grading System: A Delphi Study

BRANDMAN UNIVERSITY 16355 LAGUNA CANYON ROAD IRVINE, CA 92618

RESPONSIBLE INVESTIGATOR: Sean Redmond, Doctoral Candidate **TITLE OF CONSENT FORM**: Research Participant's Informed Consent Form **PURPOSE OF THE STUDY**: The purpose of this policy Delphi study is to identify the strategies California K-12 expert principals deem necessary for the implementation of a transition from traditional grading and reporting system to a standards-based grading and reporting system, utilizing a panel of expert principals to rate the importance of the identified strategies and to recommend the best methods of implementing the five most important strategies.

In participating in this research study, you agree to complete three electronic surveys (via Survey Monkey). The surveys will take approximately 10 -15 minutes to complete. The surveys will ask questions designed to determine strategies necessary for the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system. Additionally, you will be asked to complete a demographic questionnaire that will include questions that capture your background information.

I understand that:

a) There are no known major risks or discomforts associated with this research.
b) There are no major benefits to you for participation, but a potential benefit may be that you have an opportunity to contribute to research that may impact the field education. The information from this study is intended to inform California K-12 principals the five most important strategies experts deem necessary for the implementation of a transition from a traditional grading and reporting system to a standards-based grading and reporting system.

d) Any questions I have concerning my participation in this study will be answered by Sean Redmond, Brandman University Doctoral Candidate. I understand that Sean Redmond may be contacted by phone at [redacted] or email at [redacted].

e) I understand that I may refuse to participate or withdraw from this study at any time without any negative consequences. Also, the investigator may stop the study at any time.

h) I also understand that no information that identifies me will be released without my separate consent and that all identifiable information will be protected to the limits allowed by law. If the study design or the use of the data is to be changed, I will be so

informed, and my consent re-obtained. I understand that if I have any questions, comments, or concerns about the study or the informed consent process, I may write or call of the Office of the Executive Vice Chancellor of Academic Affairs, Brandman University, and 16355 Laguna Canyon Road, Irvine, CA 92618, (949) 341-7641.

I acknowledge that I have received a copy of this form and the Research Participant's Bill of Rights.

I have read the above and understand it and hereby voluntarily consent to the procedures(s) set forth.

Signature of Participant or Responsible Party

Date

Signature of Principal Investigator Brandman University IRB, DATE Date

APPENDIX D

Participant's Bill of Rights

	MAN Chepman University System		
BR	RANDMAN UNIVERSITY	INSTITUTIONAL REVI	EW BOARD
	Research Par	ticipant's Bill of Rights	
	erson who is requested to cons o is requested to consent on be		-
1. T	To be told what the study is atte	empting to discover.	
	o be told what will happen in t Irugs or devices are different fr		
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	To be allowed to ask any questi be involved and during the cour		h before agreeing to
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research Institutic research contacte writing t	y time you have questions mers to answer them. You onal Review Board, which is a projects. The Brandman U ed either by telephoning the O to the Vice Chancellor of Acade Road, Irvine, CA, 92618.	also may contact the B concerned with the protect Iniversity Institutional Revi ffice of Academic Affairs at (randman University ion of volunteers in ew Board may be 949) 341-9937 or by
Brandman (University IRB	A dopted	November 2013

APPENDIX E

Demographic Questionnaire

INSTRUCTIONS: Please write or the response with which you most closely identify. Your name will remain confidential throughout the duration of this study.

- 1. Name
- 2. Position:
- 3. How many years of experience as a California principal?
- What school level were you a California principal? (elementary, middle, high school, etc.)
- 5. As a principal, did you implement a transition from a traditional grading and reporting system to a standards-based grading and reporting system?
- 6. How many years following the implementation of a standards-based grading and reporting system did you remain at the school?
- 7. Check all standards-based grading and reporting practices that your school continued to utilize following one-year after the transition to a standards-based grading and reporting system was completed:
 - \Box A standards-based report card is used
 - Averages are not used to determine a grade
 - □ Behavior is reported separately from academic achievement
 - □ Students are afforded multiple occasions to prove their learning over time

APPENDIX F

BUIRB Approval

From: MyBrandman my@brandman.edu ubject: BUIRB Application Approved As Submitted: Sean A. Redmond Date: September 6, 2019 at 11:38 AM To:	
Dear Sean A. Redmond,	
Congratulations, your IRB application to conduct research has been approved by the Brandman University Institutional Review Board. This approval grants permission for you to proceed with data collection for your research. Please keep this email for your records, as it will need to be included in your research appendix.	3
If any issues should arise that are pertinent to your IRB approval, please contact the IRB immediately at <u>BUIRB@brandman.edu</u> . If you need to modify your BUIRB application for any reason, please fill out the "Application Modification Form" before proceeding with your research. The Modification form can be found at the following link: <u>https://irb.brandman.edu/Applications/Modification.pdf</u> .	
Best wishes for a successful completion of your study.	
Thank you, Doug DeVore, Ed.D. Professor	
Organizational Leadership	
BUIRB Chair	
ddevore@brandman.edu	
www.brandman.edu	

APPENDIX G

National Institute of Health Certificate



APPENDIX H

Delphi Survey Monkey

[SURVEY PREVIEW MODE] D	Delphi - Round 1 Survey	7/1/19, 10:26 PM
	Delphi - Round 1	
	Delphi - Round 1	
	Thank you for your participation in this Delphi study to identify the strategies California K-12 expert principals deem necessary for the implementation of a transition from a traditional grading and reporting system to a standards- based grading and reporting system. As a member of the expert principal panel, you will be identifying the strategies necessary to accomplish this transition based on your past	
	experience implementing this transition.	
	ОК	

SURVEY PREVIEW MODE] Delphi - Round 1 Survey	7/1/19, 10:26 F
0 of 1 answered 1. What strategies do you, a California K-12 expert principals who has implemented a transition from a traditional grading and reporting system to a standards-based grading and reporting system, identify as necessary to accomplish the transition? (List all necessary strategies)	
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Powered by	
See how easy it is to <u>create a survey</u> .	
Privacy & Cookie Policy	
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Delphi - Round 2

Delphi - Round 2

Thank you for taking the time to complete the second round survey. This round of the Delphi study includes aggregated responses from Round 1. Responses were consolidated based on common responses from participants from various schools in California.

Round 2 asks participants to determine the degree of importance of each of the strategies identified in Round 1. Please read all items in each section and consider the degree of importance of each strategy before rating. A summary of the items is attached to the email if you prefer to read a list of factors before completing Round 2. Participants' ratings in Round 2 will be aggregated to determine the most important strategies a California principal can use to ensure a successful transition from a traditional grading and reporting system to a standards-based grading and reporting system.

Please rate the effectiveness of each of these practices from 1) "Extremely Unimportant" to 6) "Extremely Important," on the Likert Scale provided.

ОК

[SURVEY PREVIEW MODE] Delphi - Round 2 Surve	SURVEY PREVIEW	MODE] Delph	i - Round 2 Survey
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7/1/19, 10:30 PM

0 of 1 answered

1. From the list of strategies identified in Round one, how important is it when implementing a transition from a traditional grading and reporting system to a standards-based grading and reporting system?

	Extremely Unimportant	Moderately Unimportant	Slightly Unimportant	Minimally Important	Moderately Important	Extremely Important	
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Delphi - Round 3

Thank you for your participation in this study. I appreciate your time, knowledge, and expertise you have shared throughout these three surveys.

In Round 2, you determined the effectiveness of each strategy identified in Round 1. Round 2s results decided the five most important strategies for California K-12 principals could use to ensure a successful transition from a traditional grading and reporting system to a standards-based grading and reporting system.

In the third and final round of this study, please review the five strategies rated "Extremely Important" from Round 2 and describe the method for implementing each strategy for the transition from a traditional grading and reporting system to a standards-based grading and reporting system.

Referring to the list of five necessary strategies for implementing a transition from a traditional grading and reporting system to a standardsbased grading and reporting system determined from Round 2, describe the strategies necessary for implementing a transition from a traditional

grading and reporting system to a standards- based grading and reporting system.	
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<u></u>	
0 of 5 answered	
1. Strat #1	
2. Strat #2	
3. Strat #3	
5. Strat #5	
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