

SECONDARY TEACHERS' PERCEPTIONS
OF GRADING POLICIES AND PRACTICES:
A PHENOMENOLOGICAL APPROACH

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ABSTRACT

SECONDARY TEACHERS' PERCEPTIONS OF GRADING POLICIES AND PRACTICES:

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The purpose of this study was to explore teachers' perceptions of grading policies and practices. A phenomenological study was pursued as the method allows for a deeper, more meaningful investigation into the lived experiences of subjects. In this case, a sample of secondary teachers working for a district that has recently adopted a mastery-based grading policy. This study sought to answer the following questions: RQ1: How do secondary teachers understand grading student work within the context of the district's mastery-based grading policy? RQ2: How do secondary teachers practice grading students' work within the district's mastery-based grading policy? RQ3: How do secondary teachers' personal beliefs about grading students' work factor into the successful implementation of the district's mastery-based grading policy? Findings were examined through Festinger's Theory of Cognitive Dissonance. Themes revealed that there are wide-ranging emotions associated with grading systems and policies, which complicates their implementation and delivery. Therein, understanding teacher perceptions of grading policies and practices may support policymakers and educational leaders in future grading policy decisions that overwhelmingly support increasing grading validity.

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CHAPTER ONE: INTRODUCTION

Letter grades have provided students and their families with feelings ranging from accomplishment to failure. Grades have promoted stress and anxiety (Bloodgood et al., 2006), cheating (Pulfrey & Butera, 2013), critical thinking, and feelings of trust between teachers and students (Tannock, 2015). Letter grades have also impacted students' academic future. A failing grade in high school increases the chances of dropping out by 33%, according to Nield et al. (2008). Letter grades can be life-altering marks that are detrimental to future academic progress.

Grading the quality of work is not unique to contemporary education, as grades have been used to communicate students' academic progress dating back to as early as 1646 (Crawford, 1936). Since the 17th century, grading practices have continued to change and letter grades to communicate students' performance became widely accepted in the 1970s (National Education Association, 1971). Letter grades were originally used solely as a communication tool between higher education institutions as a common way to level student performance (Grant & Green, 2013). Contemporary letter grades are now used on an everyday basis and counted on, among other purposes, to increase students' motivation (Bowles & Gintis, 2016; Chamberlin et al., 2018; Pulfrey et al., 2011).

The realm of academic grading is influenced by many different philosophies ranging from traditional letter grades to portfolio assessments. These differing and constantly evolving perspectives on grading have created an expanded and vibrant dialogue on the purpose, validity, and impact of academic grades on students' lives (Lynch & Hennessey, 2015; Ryan & Deci, 2017).

Advocates of grading policy changes need to examine teachers' perceptions of contemporary grading practices and policies. Without a strong understanding of the perceptions

held by those that determine and distribute student grades, educational leaders and researchers alike will continue to miss an important component of creating authentic grading practices implemented with fidelity. This project sought to specifically target teachers' perceptions of grading to give these educators a voice and further inform grading policy changes, the implementation of grading policies, and the fidelity of grading practices implementation by contributing to the existing research in the field.

Background

One of the most important responsibilities a teacher has is providing their students with accurate grades (Isnawati & Saukah, 2017). Grades carry significant importance as they can lead to students dropping out of school (Nield, et al., 2008), impact students' mental health (Chamberlin et al., 2018), and impact their future employment opportunities. Finally, students' grades communicate students' achievement in the classroom but also determine the types of opportunities students will have in the future, making inconsistent grading policies from classroom-to-classroom problematic (DeLuca et al., 2017; DeLuca et al., 2019; Guskey & Link, 2019; Isnawati & Saukah, 2017).

Although educators have generally established a consensus that grades should represent the academic achievement abilities of students, many non-academic factors contribute to a student's grade (Chen & Bonner 2017). A major non-academic factor that impacts students' grades is the school or district's grading policy (DeLuca et al., 2017). A district's grading policy carries such importance because grades vary in validity due to the policy and teachers' expectations. Instructional practices also vary due to the policy and students' self-esteem. Students' mental health varies due to the adopted grading policy (Chamberlin et al., 2018). One

example of a grading policy that was featured in this project is a mastery-based grading (MBG) policy.

Mastery-based grading is an approach that focuses on a student's ability to demonstrate mastery of a specific skill or concept rather than completing tasks or assignments in order to achieve a particular grade. Teachers who use mastery-based grading create environments where students are assessed based on their understanding and mastery of a skill or standard and allowed multiple opportunities to demonstrate mastery. This grading philosophy provided continuous opportunities for students to excel at a concept, while still getting feedback on any needed improvements. Behavior-related tasks, such as earning grade points for turning in an assignment, were removed from mastery-based grading. In fact, Dueck (2014b) advocated for the outright elimination of allowing homework to be included in student grades. Dueck continuously expressed that grades should focus on mastery of the standards. Advocates of mastery-based grading believe in removing all grades that do not directly apply to the standards, including attendance, behavior, and homework (Cox, 2011 et al.). By design and intent, mastery-based grading should reflect what students know at any point in time (Dueck, 2014b). With this philosophy in mind, students who did not show mastery during the first assessment should be given other opportunities to show that they have mastered the content.

Research has shown that teachers' perceptions and personal biases play a vital role in grading (Vatterott, 2015), even if schools implement an adopted grading policy because of struggles with grading practices. Grade inflation occurring in high-poverty schools is also a curious phenomenon that handicaps students by not notifying parents and future teachers of needed academic interventions (U.S. Office of Research, 1994). Considerable study has targeted grading policy that is effective at measuring student outcomes while removing bias. However,

these concerning factors impacting student grades will likely continue without a better understanding of teacher perceptions of grading policies and their impact upon the implementation of grading practices. Much research has been completed on which grading policy is the most effective at measuring student outcomes while also removing bias, but without a better understanding of teacher perceptions of grading policies and their implementation of grading practices, these concerning factors impacting student grades will likely continue. Further research is needed within the field of grading practices and policies, especially in the context of examining the consistency of grading practices within the same network of schools that shares a common grading policy (Anderson, 2018; DeLuca et al., 2017). Qualitative studies can shed light on educators' beliefs and perspectives regarding grading practices and policies and increase transparency on the conflict between district-level grading policies and educators' personal beliefs about grading (Chen & Bonner, 2017; Widiastuti, 2018).

This study sought to contribute to the literature regarding secondary educators' perspectives about grading practices. Their values matter, particularly if they find themselves in conflict with district grading policies. Though regularly held accountable to standards and standardization by society, teachers are human beings. As such, it would be expected to adhere to Festinger's (1962) theory of cognitive dissonance that expresses that psychological discomfort will follow and individuals are likely to modify their beliefs and change their actions in order to cease psychological discomfort and restore unity. This study stands to help educational leaders better understand teachers' perspectives regarding grading policies.

Statement of the Problem

Grading practices and policies are under-researched, resulting in a need for continued research in those fields (Anderson, 2018). More specifically, more needs to be known about how

secondary teachers perceive district grading policies, as well as how these perceptions may influence their actions. Finally, little is known about this line of inquiry as it pertains to public college preparatory schools. Exploring teachers' perceptions and grading practices as well as the possible conflicts between perceptions of grading and school district grading policies is important (Chen & Bonner, 2017; Widiastuti, 2018). There is a need to better understand the relationship between teachers' perceptions of grading and their adherence to district grading policies (Chen & Bonner, 2017). Researching secondary teachers' perceptions of grading policies stands to help fill the previously mentioned void in research.

Adding to the significance already shared, grading policies are arguably the largest factor in the decisions educators make when grading and can change drastically from each district and even from schools within the same district (DeLuca et al., 2017). Inconsistencies in grading policies and practices are a major concern due to grades being used to determine academic promotions, college acceptance, financial scholarships, and future employment opportunities (DeLuca et al., 2017; Isnawati & Saukah, 2017). Furthermore, the differences between teachers' perceptions and district grading policies can lead to cognitive dissonance (Wall, 2018).

Further investigating how grading policies impact the grading practices of secondary teachers may lead to help improve grading policies and practices. Understanding teachers' perceptions and attitudes toward grading will influence needed recommendations when creating and implementing new grading policies (Unal & Unal, 2019). This study will directly explore secondary teachers' perceptions of the grading policies of their district using a phenomenological approach to collect data through teacher interviews.

Purpose of the Study

This qualitative study aimed to identify secondary teachers' perceptions of grading policies in a charter school district in the Southwestern United States. The phenomenon is the unique blending of external factors, such as the district's mastery-based grading policies, and internal factors, such as teachers' perceptions of the grading policies and how these external and internal factors impact grading practices. The decisions educators make when grading is significantly influenced by grading policies, which can vary considerably, even within the same district (DeLuca et al., 2017). A better understanding of how teachers interact with grading policies may support school leaders in predicting how teachers react to other educational policies and support the implementation process in a strategic way that will better capture teacher support (Trinidad, 2018). Furthermore, this research may lead to recommendations for teachers on influencing bureaucratic decisions and highlighting the necessity of involving teachers in adopting policy changes.

The target population was secondary teachers who work in a charter school district in the Southwestern United States. The research participants came from all content areas and were certified teachers. This study was expected to show that teachers experience dissonance between their perceptions about grading and the grading policies adopted by their school district as suggested by Trinidad (2018). Creating research that leads to a better understanding of teachers' perceptions of grading policies will continue to support educational leaders in improving the implementation of grading policies and practices.

Research Questions

Grading as a phenomenon represents a unique blending of external factors, including the district's mastery-based grading policies and internal factors, such as teachers' perceptions of the grading policies and how these external and internal factors impact grading practices. DeLuca et

al. (2017) argued that grading policies are the most critical consideration in educators' grading decisions, and these policies can experience substantial shifts across various districts and even within schools within the same district. The fact that grades are being used to determine and award academic promotions, college acceptance, financial scholarships, and future employment opportunities leads to a greater need to eradicate inconsistencies in grading practices and policies (DeLuca et al., 2017; Isnawati & Saukah, 2017).

Evidence may highlight teachers experiencing feelings of dissonance from their perceptions about grading and the grading policies adopted by the school district that they work for (Trinidad, 2018). Teachers may need to confront their perceptions of grading when made responsible for following district grading policies that lead to feelings of dissonance (Wall, 2018). When this occurs, teachers may attempt to reestablish consistency by changing their beliefs or changing their actions (Festinger, 1996). Thus, further examination is needed to investigate teachers' perceptions of a mastery-based grading policy. Secondary teachers' perceptions of mastery-based grading policies have not been formally explored. The following research questions will frame this study:

RQ 1: How do secondary teachers understand grading student work within the context of the district's mastery-based grading policy?

RQ 2: How do secondary teachers practice grading student work within the context of the district's mastery-based grading policy?

RQ3: How do secondary teachers' personal beliefs about grading student work factor into successfully implementing the district's mastery-based grading policy?

Significance of the Study

This study accessed teachers from multiple content areas with varying lengths of experience teaching to contribute their ideas, opinions, perceptions, expertise, or lack of expertise through participation in phenomenological interviews. Current educator voices were heard and taken into account to investigate the perceptions teachers have regarding grading policies and practices. Classroom teachers have the largest impact on student grades (Unal & Unal, 2019), therefore successful implementation of large school district grading policies cannot be fully measured without exploring teachers' perceptions of grading policies and their practices.

Grading policies and practices largely influence teachers and impact students' lives (DeLuca et al., 2017). Due to this, exploring teacher perceptions, grading practices, and the possible conflicts between grading perceptions and school district grading policies is important (Chen & Bonner, 2017; Widiastuti, 2018). If there is a difference between a teacher's beliefs on grading student work and the district's grading policies, the teacher can experience feelings of dissonance (Festinger, 1962). Furthermore, grades can significantly alter students' lives, as the consistency of grading policies can differ greatly from each district and even from schools within the same district (DeLuca et al., 2019). This study contributed to the literature by providing a perspective into how teachers' perceptions of grading policies in the Southwestern United States were impacting their grading practices.

Finally, classroom teachers are not often included in the development of policies that they are then required to implement. Highlighting classroom teachers' perceptions may increase the value of their insights during future education policy development (Hinnant-Crawford, 2016). The lack of inclusion during policy development can lead to some teachers countering the adopted grading policies, while lying about being in compliance (Hinnant-Crawford, 2016). Festinger's (1962) theory concludes that teachers who disagree with a district's grading policy

may change their actions to avoid feelings of dissonance. Further examining grading policies and teachers' grading practices is important toward a better understanding how to support teachers in implementing grading policies (Widiastuti, 2018). As a result, supporting teachers with divergent mindsets in providing valid and authentic grades may be achievable.

Definition of Terms

To ensure a strong understanding of the background information and research, the definitions of terms used often need to be defined. The following terms are used throughout the study:

Cognitive dissonance. Refers to the psychological discomfort felt when a conflict arises between an individual's belief system and their actions (Festinger, 1962).

Description. Using robust language to further explain an experience (Giorgi, 2018).

Explain. A logical occurrence from the law of nature in addition to a set of conditions, initially (Blackburn, 2005).

Grade. Refers to a place of quality, largely based on academic achievement but can contain nonacademic factors, which can then be represented by letters, numbers, or descriptors (Anderson, 2018).

Grade validity. Refers to the accuracy of a grade's reflection of a student's achievement (Haladyna, 2019).

Interpretation. Assigning meaning or logical value to something (Blackburn, 2005).

Mastery-based grading. A system for evaluating students and promoting deeper learning. Does not focus on a letter grade, but focuses on mastering a concept before moving on to new curriculum (Gallegos, 2019).

Minimum grading policy. Generally refers to the practice of assigning a minimum grade on individual assignments, usually 50% (Carifio & Carey, 2015).

Phenomenon. Anything that is revealed or shown in experience (Blackburn, 2005).

Portfolio assessment system. Includes either a hard copy or digital collections of students' produced work and correlating artifacts used to measure academic achievement (Mui et al., 2021).

Secondary teacher. Refers to a high school teacher, someone who teaches students in grades 9 through 12 (U.S. Bureau of Labor Statistics, 2022).

Standards-based grading. Removes behavior-related factors from grade reports and focuses on the students' proficiency toward a set of skills or standards (Scriffiny, 2008).

Theory of cognitive dissonance. When there is a lack of consistency between what someone believes and their actions and the psychological discomfort that can follow the lack of consistency (Festinger, 1962).

Traditional grading system. A holistic view of a student's performance through a single letter or numerical indicator (Bouchrika, 2022).

Understand. To be in control of a skill or technique (Blackburn, 2005).

Acronyms Used

CA: Conversion Analysis

COVID-19: Coronavirus Disease 2019

DA: Discourse Analysis

ELL: English Language Learner

ESEA: Elementary and Secondary Education Act

IEP: Individualized Education Plan

IPA: Interpretive Phenomenological Analysis

LMS: Learning Management System

MBG: Mastery-Based Grading

Limitations

Factors outside of the researcher's control could have impacts on the data collection (Charles, 1995; McBrady, 2009). The following factors are outside of the researcher's control and could limit the results of the study:

1. Qualitative studies rely on the researcher gathering and conveying the perspectives and experiences of their participants correctly (Sandelowski, 2000). There is a limitation of possible researcher bias in this study. The researcher has been a secondary teacher in the past, which could lead to bias when analyzing and interpreting the data.
2. The researcher recognizes that the responses from the teacher interviews may be limited to how the teacher is feeling that day and the answers could be dishonest or inaccurate.
3. The questionnaire and interview questions could be a limitation. The questions may not completely capture the perspectives and experiences of the study participants.
4. The population was limited to 13 teachers during the 2023–2024 school years that worked at a specific charter school network in the Southwestern United States.

Delimitations

The researcher may inflict some constraints that may or may not affect the outcome of the study (Charles, 1995; McBrady, 2009). The constraints for this study are as follows:

1. The data collection process was done with teachers all employed by the same charter school network in the Southwestern United States that has a network mastery-based grading policy.

2. The data collection process was done during the school years 2023–2024.
3. The research is a school administrator within the charter school network.

Summary

One of the most important and highly scrutinized responsibilities a teacher has is to provide students with accurate grades (Isnawati & Saukah, 2017). Student grades communicate students' achievement in the classroom and determine opportunities students will have in the future, making inconsistent grading policies extremely impactful (DeLuca et al., 2017; DeLuca et al., 2019; Guskey & Link, 2019; Isnawati & Saukah, 2017). Although educators frequently abide by a general consensus that grades should represent the academic achievement abilities of students, multiple non-academic factors such as behavior, attendance, and late work contribute to a student's grade (Chen & Bonner 2017). A non-academic factor that impacts students' grades is the school's or district's grading policy (DeLuca et al., 2017). One example of a grading policy is a mastery-based grading policy.

Mastery-based grading provides endless opportunities for students to excel at a concept, while still getting feedback on any needed improvements. Behavior-related tasks are removed from mastery-based grading. Dueck (2014b) calls for the elimination of allowing homework to be included in student grades. Dueck continuously calls for grades to focus on mastery of the standards. Advocates of mastery-based grading express a desire to remove all grades that do not directly apply to the standards, including attendance, behavior, and homework (Cox, 2011; Dueck, 2014b; Erickson, 2011b; Tierney et al., 2011). Mastery-based grading needs to reflect what students know at any point in time (Dueck, 2014b). Thus, a student who did not show mastery during the first assessment should be given other opportunities to show that they have mastered the content, which also supports a growth mindset (Dweck, 2006).

The purpose of this qualitative study is to attempt to identify teachers' perceptions of grading policies. Grading policies, as noted by DeLuca et al. (2017), are a key determinant in the decision-making process of educators when it comes to grading and these policies can have substantial differences between different districts and even among schools within the same district. Gaining a better understanding of how teachers interact with grading policies may support school leaders in predicting how teachers react to other educational policies and support the implementation process in a strategic way that will better capture teacher support (Trinidad, 2018). Using the theory of cognitive dissonance (TCD) as a framework, which states that dissonance is experienced when there is no harmony between a person's beliefs and actions (Festinger, 1962), assists in framing the research questions.

Chapter Two provides a review of the existing research related to grading practices and mastery-based grading. Chapter Three provides a description of the methodology, research design, and procedures for this study. Chapter Four will report the findings. Chapter Five provides an interpretation of the results, and offers further recommendations for continued research, and a summary of all the findings in this study.

CHAPTER TWO: LITERATURE REVIEW

Student grading is an important topic, albeit one that may largely be taken for granted and at the same time abject to change. Grading can serve as a motivator, an assessment, and even an indicator of future potential for success. There are many grading policies being implemented throughout the United States. However, ensuring whether these policies are being followed with fidelity is challenging due to major gaps in the literature on teachers' perceptions of grading policies (Anderson, 2018; DeLuca et al., 2017). This chapter summarizes the history and impact of grades. It follows with an examination of grade validity and ethical concerns, including various grading policies currently being used in the United States. Finally, it considers the changes in grading practices, and offers context for the research questions from this project.

The purpose of this research was to gain a stronger understanding of teachers' perceptions of grading policies and how these perceptions impact grading practices. The review of grading history begins at Harvard in 1646 (Crawford, 1936) and advances all the way to *A Nation at Risk* (National Commission on Excellence in Education, 1983). This report was significant in as much as it helped establish the preeminence of which prompted policymakers to critique traditional grading practices and spur future innovation. The research then focused on the significant impact grades can have on students. Poor grades may lead to an increased likelihood of students dropping out of school (Neild et al., 2008), depression, low self-esteem (Chamberlin et al., 2018), delinquency, eating disorders (Gual et al., 2002), and low levels of happiness. A culture of importance for grades adds pressure and creates heightened negative outcomes for poor grades (Lynch & Hennessey, 2015; Molesworth et al., 2009; Pulfrey & Butera, 2013; Taylor et al., 2014). Districts across the country are attempting to implement innovating grading policies to address the harmful impacts grades are having on students, but

without having a better understanding of teachers' perceptions of grades, successful implementation will be difficult to obtain. Understanding this research assisted in understanding what barriers exist for implementing innovative grading policies that allow students to have a positive experience with grading that accurately measures their learning outcomes. This was analyzed with Festinger's (1962) theory of cognitive dissonance in mind, which claimed that when people experience psychological discomfort by being asked to do something they do not believe in, they change their mindsets and actions to alleviate discomfort. The following research guided this study, identified gaps in the research, and situated the overall study with the ongoing research within grading policies.

Introduction

Modern grades can reflect any type of response or even personal quality. Grades can be represented on a report card as an "F", communicating failure, or as an "A", representing academic excellence. Students' grades carry longstanding consequences, including entry to advanced courses, entrance to colleges and universities, and even career opportunities (Binder, et al., 2016). Recent research on grades stresses the importance of the mental health aspect of grades as grades can promote

...stress and anxiety (Bloodgood et al., 2009) and cheating (Pulfrey & Butera, 2013) and reduce cooperative learning (Rohe et al., 2006), critical thinking (Tannock, 2015), autonomous academic motivation (Pulfrey et al., 2011), and feelings of trust between teachers and students (Tannock, 2015). (Chamberlin et al., 2018)

Due to the increasing importance that grades played in a student's life, grading practices were becoming more of a priority for educational leaders. Grades were impacting students'

futures more than ever before, and this brought consideration into understanding more about the history of student grades and where grades came from.

Teachers' perceptions about grading policies and their many different recommendations continued to change. Long (2017) expressed a need to explore whether there was a correlation between how long someone has been teaching and their attitude about grading policy changes. These findings helped educational researchers craft constructive professional development that addressed these differences in mindsets.

History of Grades

The earliest known grades were given at Harvard through the use of graded exit exams, reportedly as early as 1646 (Crawford, 1936). As an alternative to exit exams, some schools handed out medals to those who won competitions or awarded seating positions in a class (Cureton, 1971).

Surprisingly, letter grades did not gain popularity until the 1940s. Only 67% of K-12 schools used letter grades in the United States in 1971 (National Education Association, 1971). Although modern letter grades are used to support student motivation (Chamberlin et al., 2018), this was not always the case. Letter grades were used solely as a communication tool between higher education institutions as a streamlined evaluation tool that each instructor can use to express students' performance (Grant & Green, 2013).

Many believe contemporary grading reform started in the United States after a federal committee released the report, *A Nation at Risk* (National Commission on Excellence in Education, 1983). The report detailed ways American standardized testing was decreasing and promoted that the U.S.A. education foundations "are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and as a people" (National Commission on

Excellence in Education, 1983, p. 9). Many governors joined President H.W. Bush to establish academic goals targeting the year 2000. These academic goals were adopted by Congress in 1994 through legislation titled Goals 2000: Educate American Act (McLaughlin & Shepard, 1995). The agreed-upon standards identified the knowledge and skills students should have (Guskey et al., 2011b). Standards continued to change and adapt to the individual states' social, academic, and political needs of the individual states, leading to all 50 states adopting standards and assessments by 2004 (Reeves, 2004). Through changes in standards, 41 states have adopted the Common Core ("Common Core Standards Initiative," 2020).

The standards movement caused many education policymakers to critique grading practices that reflected students' achievement of the adopted standards. Due to these critiques, there has been much discussion surrounding the implementation of grading policies that differ from traditional grading (Hooper & Cowell, 2014).

Impact of Grades

The impacts that grades have in students' lives are limitless and entirely individual for each student. Personal factors for each student, including ". . . past experiences with grades, parental upbringing and career aspirations" (Lynch & Hennessey, 2015) can alter the perceptions and impacts of grades, both positive and negative (Ryan & Deci, 2017). Keeping in mind that grades are an individual journey for each student, research has shown that there are alarming trends with the impacts of grades. Grades are impacting students dropping out of school (Nield et al., 2008), can impact students' mental health (Chamberlin et al., 2018), and stand to have an impact on students' future employment opportunities.

Students who earn poor grades are at risk of dropping out of school; research has shown that poor grades as early as middle school increase the likelihood of dropping out. Eighth-grade

students with any percentage of Ds or Fs on their report cards are more likely to drop out of high school. In fact, an increase of 20% of courses failed, which is just one class on a five-subject schedule, leads to a 40% increase in the chance that 8th-grade students will eventually drop out and not graduate from high school. Ninth-grade students who failed at least one course significantly increased their chances of dropping out by at least 33%, according to one study. (Nield et al., 2008). In 2018, there were 2.1 million students who dropped out of high school. In a typical 180-day school year that is approximately 11,600 students dropping out every school day (U.S. Department of Education, NCES, 2020).

One in ten students who dropped out of school is in prison before their 24th birthday and 80% of those in prison dropped out of high school. Many of the 2.1 million students who dropped out of high school in 2018 were flagged as a high risk of dropping out due to the grades they received as early as middle school (Nield et al., 2008). This track record for this country is in dire need of change.

For those less concerned with supporting the benefits of positive student outcomes, there is the reality that taxpayers are paying for juvenile detentions and prisons for these individuals who dropped out of high school (Choudhry, 2018). In addition to the cost to taxpayers, it is a costly decision to drop out of high school for the individual. The median weekly pay for an individual without a high school degree is \$603, whereas the median weekly pay for high school graduates without college is \$749, and the median weekly pay for those with a four-year degree is \$1,281 (U.S. Bureau of Labor Statistics, 2019). Students who are dropping out of high school are creating a multi-tiered financial catastrophe for themselves and their local governments. Ultimately, individuals who dropout of high school add many complexities to society and

contribute to the recurring poverty cycle (Adams, 2013). What are local and national politicians and school leaders doing to fix this dropout epidemic?

There is sufficient documentation that shows that grades impact how youths perceive and feel about themselves (Harter & Jackson, 1993; Hoge et al., 1990; Rosenberg et al., 1989; Zimmermann et al., 2013). A culture of importance on grading adds unique complexities for students, including pressure to attain academic excellence from faculty, peers, parents, advisors, and future employers (Lynch & Hennessey, 2015; Molesworth et al., 2009; Pulfrey & Butera, 2013; Taylor et al., 2014). Students measure their perceptions of themselves when compared to others, and often compare themselves with others using school grades due to the rather public nature of grades (Dijkstra et al., 2008). Those students who have poor grades (Black & Deci, 2000) or extremely high grades (Mouratisis et al., 2011) seem to be more impacted by the negative effects of grades.

Research (Harter, 2003; Ross & Broh, 2000; Schmidt & Padilla, 2003) has shown that good grades lead to positive self-esteem. What does this say about students who are not earning good grades? Do students with poor grades have low self-esteem?

At least one study showed that bad grades lead to poor self-esteem, especially among girls (Crocker et al., 2003). The negative impacts with the correlation of bad grades and poor self-esteem are limitless. Poor self-esteem can be:

. . .significantly related to depression (e.g., Pelkonen, 2003), suicide ideation (e.g., Palmer, 2004; Wild et al., 2004), victimization (e.g., Slee & Rigby, 1993), delinquency (e.g., Heaven, 1996, but see Jang & Thornberry, 1998), eating disorders (Gual et al., 2002), and low happiness (Furnham & Cheng, 2000). (Cirrarochi et al., 2007)

Poor self-esteem can also increase the likeliness that depression and a poor mood will arise (Maughan et al., 2003) due to the internal feedback students receive from peers, teachers, and parents about their academic performance (Cole, 1990, 1991). Youth who have high self-esteem often have future plans after high school and cognitive resources that protect them from going down a path of crime and substance abuse (Voisin et al., 2018). What does this say about youth who have low self-esteem? Are they more vulnerable to crime and substance abuse?

A culture of importance on grading adds unique complexities for students, including pressure to attain academic excellence from faculty, peers, parents, advisors, and future employers (Lynch & Hennessey, 2015; Molesworth et al., 2009; Pulfrey & Butera, 2013; Taylor et al., 2014). Despite the surrounding secondary effects just discussed, there is little evidence to substantiate that grades offer meaningful primary feedback to students about their academic performance. Alternatively, grades foster anxiety, hopelessness, peer comparisons, and fears of failure. When interviewed, students shared that the relationship between themselves and their parents deteriorated when they earned poor grades, leading to stress and anxiety (Chamberlin et al., 2018).

Educators observed the importance self-esteem has on students' academic performance and their overall school experience. One study of 12-year-old students showed poor self-esteem foretold future educator-reported emotional problems (social anxiety and depression) over the course of one academic year (Cirarrochi et al., 2007). Teachers often observed those students with low self-esteem being at risk of isolation, failing to be accepted by their peers, having negative beliefs about themselves, having poor expectations for their academic futures, and being bullied (Bishop & Inderbitzen, 1995; Tsaousis, 2016). If teachers noticed the harmful effects of

poor self-esteem, were they also aware that there was a correlation between poor grades and poor self-esteem? Do teachers truly understand the impact of grades as they assign them?

Grade Validity

With the impact of grades having such high stakes ranging from dropping out of high school (Nield et al., 2008) and impacting their salary (U.S. Bureau of Labor Statistics, 2019) to harming their self-esteem (Crocker et al., 2003) and being at risk for depression and suicide ideation (Pelkonen, 2003; Palmer, 2004; Wild et al., 2004), grades should be valid and accurately measure students' overall achievement in a subject area.

Grade validity has been called into question for years. A well-known study divided eighth-grade students into two groups: one group was from a high-poverty school and one group was from a low-poverty school. The group of students from the high-poverty school that received mostly A's on their report cards had similar standardized scores in the area of English as those students who received C's and D's on their report cards in the low-poverty school. (U.S. Office of Research, 1994). This research highlighted the difference in grades in different schools, specifically schools with different populations (Anderson, 2018). Grade inflation has been a recent threat to validity, as well. A recent phenomenon has shown that there is a greater concentration of students with A's, which devalued the communicative indicator of a student's abilities, according to Slavov (2013), who argues that "A's" don't measure outstanding academic success in these modern times.

Teachers' implicit bias of students, both positive and negative, has an impact on the validity of grades. There have been many findings of teachers linking favorable personality traits to grades. Those with "conformity to the social order of the school" and "personal motivation to succeed" were rewarded with higher grades than those who did not exhibit those two traits

(Bowles & Gintis, 2016, p. 62). Implicit bias can be limitless among teachers and the link between bias and grades interfered with communicating students' achievement. Students are vulnerable to teachers' perceptions as these perceptions can impact students' educational and life trajectories. Studies have indicated that teachers changed their instructional routines to meet the expectations they have for their students in the classroom, which negatively impacted female, Black, and Hispanic students in math classrooms (Copur-Gencturk et al., 2020).

Teachers bias not only affected students along with the origins of gender, race, and socioeconomics (Rubie-Davies, 2007; Sadker & Sadker, 2012), but it also affected overweight students (Finn et al., 2019). A 1961 study regarding bias of obese students was replicated and found that there has been an increase in the stigmatization of obese students in the past 40 years (Latner & Stunkard, 2003). Overweight students are especially vulnerable to poor perceptions from teachers when physical activities are required as is common in physical education classes (Ehlert et al., 2015; Pickett & Cunningham, 2016). Stigmatization of obese students started as early as prekindergarten and continued through postsecondary institutions. Overweight students were assumed to be “. . . lazy, less productive, less intelligent, and less socially desirable” (Puhl, Heuer, & Brownell, 2010, p. x). One study showed that 33% of overweight women experienced negative teacher perceptions of them due to their weight (Puhl & Brownell, 2006). A teacher's perception of students has many impacts, including grades, due to holding lower expectations for obese students and praising inferior work (Finn et al., 2019). Can grades be valid when teachers' expectations influenced the quality of work teachers deem as satisfactory?

Teachers' Perceptions of Grades

Grades have been used since the 1790s to measure and communicate how effective teachers have been in boosting students' learning and achievement (DeLuca et al., 2017). Since

the 1790s, teachers' perceptions have changed from being in full support of how grades are delivered to also having criticism about the way grades are delivered and complaints of the workload that has led to teachers leaving the profession (Gaudiano, 2022).

Zoeckler (2007) demonstrated that teachers' grading practices were largely influenced by their ideas of appropriate classroom behavior. Vatterott (2015) added to this idea that teachers' grades were influenced by their own morals while grading, suggesting that, "We've used academic grades for more than academic because we believe our job is more than academics—our goals have always included shaping children into better people" (p. 12). Chen and Bonner (2017) studied teachers' beliefs about their grading practices and learned that teachers did experience conflicts between their own beliefs about grading and the recommendations of experts in the field. Widiastudi (2018) studied the grading practices of 10 English teachers and found that both their beliefs and philosophies and high-stakes testing, district grading policies, and parents influenced the way in which these 10 teachers graded their students.

Teachers have expressed mixed perceptions on standards-based grading. In Haney et al.'s (2016) study on teachers implementing standards-based grading, Haney found that teachers were not fully implementing this grading even when the district policy compelled them to do so. In a different study, McMillan's (2019) review found that teachers do believe that standards-based grading has "somewhat higher-quality and clearer information about student achievement" (p. 101). Other studies also highlighted teachers' perceptions that grading criteria are subject to change after thoughtfully participating in professional development that focused on equitable grading practices and standards-based grading (Link, 2017; McMunn et al., 2003).

Standards-Based Grading

School districts across the country have started to implement standards-based grading in attempts to eliminate the inclusion of non-academic behaviors in grade reports (Dueck, 2014; Erickson, 2011; Guskey, 2000; Muñoz & Guskey, 2015; O'Connor & Wormeli, 2011). Standards-based grading may take on different appearances from school district to school district, but the main feature that everyone can agree on is the importance of removing behavior-related factors from grade reports and allowing multiple attempts on assessments. Using a traditional grading system, students earn points from each test, project, and assignment, with their final grade being a culmination of all the grade averages.

Scriffiny (2008) added that using standards-based grading, student grades are based on a students' proficiency toward a set of skills or standards. Some school districts are redesigning the report card to allow for multiple sections in each subject area that indicate students' proficiency of the standards (Guskey et al., 2011a; Marzano & Heflebower, 2011; O'Connor & Wormeli, 2011). Standards-based grading also allows for more transparent communication about the students' strengths and areas of concern with parents, educators, and the student. There have been reports from parents and universities that these redesigned report cards are confusing (Spencer, 2012; Swan et al., 2014; Peters et al., 2016). Schools are responding to these concerns by still using standards-based grading rubrics and determining a score for each standard, but then "convert the scores into a traditional letter grade or percentage" (Marzano & Heflebower, 2011; Reeves, 2011; Scriffiny, 2008).

Standards-based grading set out to only base grades on academic factors and allow efforts like character education to address behaviors. Teachers were encouraged to stop giving or taking away grade points due to "nonacademic behaviors such as effort, homework completion, attendance, punctuality, class participation, academic integrity, or extra credit" (Fleenor, 2011;

O'Connor & Wormeli, 2011; Vatterott, 2015). Dueck (2014), Gusky (2000), Gusky & Jung, (2013), O'Connor (2011), and Schimmer (2014) added that instead of grading on non-academic factors, it's important to find alternative ways to promote desirable work habits. By separating academic and behavior factors and not allowing academic grades to be influenced by student behavior, grades are more valid and improve the reliability of the grade that is being communicated to the parents, other educators, and the student (Brookhart et al., 2016; Gusky, 2013; Gusky & Jung, 2013; Gusky et al., 2011; O'Connor, 2011; Schimmer, 2016; Vatterott, 2015).

Cox (2011), Gusky (2009), and Stiggin et al., (1989) illustrated that the complete removal of behaviors from academic grades has been met by some resistance from parents, teachers, and students. Schools implementing standards-based grading have started providing a separate report for behaviors that is not connected to the academic grade report (Gusky et al., 2011; Reeves, Jung, & O'Connor, 2017).

Schools implementing standards-based grading have allowed students to have multiple attempts when showing proficiency toward a skill or standard (O'Connor, 2011; Vatterott, 2015; Wormeli, 2011). Students can usually have multiple opportunities within a select time period or academic unit (Beatty, 2013; Schimmer, 2014; Vatterott, 2015; Wormeli, 2011), but some schools allow students to continue working on proficiency throughout the school year (Marzano & Heflebower, 2011). Allowing multiple attempts at demonstrating proficiency lets struggling students understand that there's always another opportunity (Cox, 2011), fosters a growth mindset (Vatterott, 2015), and improves responsibility and future learning (Wormeli, 2011).

Standards-based grading is intended to increase the validity, reliability, and equity of grades. Many parents, teachers, and students have belief systems about grades that clash with the

philosophy of standards-based grading. The needs of individual communities must continue to be met (Knight & Cooper, 2019), while school leaders continue to build systems of equity for each student.

Minimum Grading Policies

Minimum grading policies reference those requiring that students receive no lower than 50%, and are intended to support low-performing students and provide equity due to the unfair 100-point grading scale (Carifio & Carey, 2015). Minimum grading policies were seen as a quick, easy, inexpensive, and efficient way to address failure and retention (Carifio & Carey, 2010). Proponents of minimum grading policies expressed that such policies provided students with hope while also motivating struggling students. Critics argued that these policies were unfair, caused grade inflation, and did not allow students to have a realistic view of their academic abilities (Carifio & Carey, 2013).

There are two different ways that schools tend to implement minimum grading policies: micro and macro. Micro minimum grading does not allow for less than 50% on any individual assignment, whereas macro minimum grading does not allow for less than 50% on the overall quarter or semester grade (Carifio & Carey, 2015).

Schools are using minimum grading policies to help reduce high failure and dropout rates (Carey & Carifio, 2012). These policies have been designed to reduce the damage that a zero can do to a student's overall grade (Paul et al., 2019). Students earning a zero can significantly damage their grade, and this practice does not accurately measure a student's academic achievement (Lehman et al., 2018; Paul et al., 2019). Advocates for minimum grading policies believe it can help prevent students from becoming discouraged and disengaged when they face temporary challenges. By ensuring that students receive at least half of the points for an

assignment, it provides a safety net that encourages students to endure and continue trying to improve their grade. Ultimately, minimum grading policies attempt to foster a growth mindset and instill the belief that effort and improvement are valuable and rewarded even if there are challenges along the way.

Some teachers do not agree with minimum grading policies, and they may experience personal ethical conflicts due to the school's grading policies (Isnawati & Saukah, 2017). Long (2017) investigated how administrators, teachers, and students viewed minimum grading policies their schools and found that administrators generally had positive perceptions, whereas teachers generally had negative perceptions about the policies. Teachers believed minimum grading led to grade inflation and gave students an inaccurate view of their own academic abilities (Long, 2017). Grade increases can be harmful if they do not correlate with increased student achievement (Kostal et al., 2016). Teachers understand that there are some benefits to a minimum grading policy, such as increased graduation rates and more students passing their courses, but teachers believe those benefits come at a cost of lowering standards, expectations, and the quality of students' work (Long, 2017). Teachers are experiencing cognitive dissonance due to the disconnect between personal ethics and educational policies (Trinidad, 2018).

Portfolio Assessment System

Portfolio assessments have been an alternative to standardized testing for years. Portfolio assessments included either hard copy or digital collections of a student's produced work and correlating artifacts. Students regularly visited their self-created portfolios to evaluate the trajectories of their learning. Muin et. al (2021) claimed that portfolio assessments were intended to prepare students with reflective skills so they are able to monitor, review, and improve their academic performances independent of the teacher's guidance. Portfolios served as an effective

instructional practice as well as an assessment tool. Furthermore, authentic information about students' progress was gathered and supported both the student and teacher with communicating learning patterns (Brown, 2004; Hyland, 2003; Nazari Terizi & Mohammadi, 2021; Siregar et al., 2020; Soifah & Pratolo, 2020).

One study (Biglari et al., 2021) showed that portfolio assessments improved students' overall writing. The study showed that the students' writing improved in five areas: content, organization, vocabulary, grammar, and mechanics. Another study (Roohani & Taheri, 2015) showed that portfolios only improved students' writing in the areas of content, organization, and grammar. A third study (Ucar & Yazici, 2016) found that portfolio assessments improved students' writing in content, organization, vocabulary, and grammar. Portfolio assessments supported teachers in understanding the learning patterns of the students (Brown, 2004; Hyland, 2003; Nazari Terizi & Mohammadi, 2021; Siregar et al., 2020; Soifah & Pratolo, 2020), that improved the students' writing (Biglari Soifah, 2021; Roohani & Taheri, 2015; Ucar & Yazici, 2016), which can be considered as a strategy to further motivate students.

Students created their own portfolios in one study (Steen-Utheim & Hopfenbeck, 2018) and handed the portfolios in often and received feedback that allowed the students to revise and improve their work before the final portfolio was due. Many students expressed that they learned best from the feedback they received with the portfolio assessment, as indicated by Steen-Utheim and Hopfenbeck (2018). Previous research has shown that teachers' feedback can positively impact learning (Black & Wiliam, 1998, 2009, 2018; Hattie & Timperly, 2007; Evans, 2013). Some research even indicated that high-quality feedback can be one of the most impactful factors that influenced student learning (Black & Wiliam, 1998; Hattie and Timperley, 2007; Hattie,

2008). The use of feedback embedded into portfolio assessments made them powerful tools to positively impact student learning.

Portfolio assessments have many benefits, as previously mentioned, but there are some drawbacks. In Biglari et al.'s study (2021), many learners reported they were confused during the construction of their individual portfolio and had difficulties recalling their learning during later reflections. Students who had poor vocabulary knowledge struggled with the writing-intensive activities that portfolio assessments called for (Biglari et al., 2021). Research indicated that portfolio assessments needed support structures built in to support struggling learners and ensure clear directions on the construction of the portfolio.

Traditional Grading Systems

Traditional grading systems (e.g., A, B, C, D, F) have been used for almost all students, educators, and administrators for hundreds of years (Erbes, et al., 2021). Report cards using a traditional grading system look the same today as they did in most schools in 1892, after the Committee of Ten met to reform high schools (Cox, 2011). Traditional grading was recognized universally and was easy to utilize (Erbes et al., 2021). However, this grading system focused on producing a letter grade, instead of learning, led to competition and stress.

A study found, “Students in 9th grade science classes believed learning to be recall of facts that the teacher’s job is to simply tell students right answers, that learning is linear and straightforward, and that only ‘right’ answers have value” (Peters et al., 2017, pp. 21–22). Using the century-old traditional grading system, students focused on finding the right answer, and the focus on learning was secondary, if at all (Marzano, 2000). Additionally, at a school that used traditional grading, a study found that high school students were more focused on earning a high grade than on writing better (Iamarino, 2014). The production of letter grades was the priority for

students and parents when subjected to a traditional grading policy. Evidence showed that traditional grading policies did not accurately measure student knowledge, motivate students, or provide adequate feedback (Iamarino, 2014).

Mastery-Based Grading

Mastery-based grading strives to provide endless opportunities for students to excel at a concept, while still getting feedback on any needed improvements. Behavior-related tasks, such as earning grade points for turning in an assignment, are removed from mastery-based grading. Dueck (2014b) advocated for eliminating allowing homework to be included in student grades. Dueck continuously expressed that grades should focus on mastery of the standards. Advocates of mastery-based grading believed in removing all grades that did not directly apply to the standards, including attendance, behavior, and homework (Cox, 2011; Dueck, 2014b; Erickson, 2011b; Tierney et al., 2011). Mastery-based grading should reflect what students know at any point in time (Dueck, 2014b). With this philosophy in mind, students who did not show mastery during the first assessment should be given other opportunities to show that they have mastered the content.

Policymakers have expressed excitement about mastery-based grading as the flexibility MBG provides allows students to develop a growth mindset (Gallegos, 2019). The unlimited attempts that MBG allows shows students that learning is a process that can be achieved through hard work and persistence. Gallegos (2019) expressed positive sentiments about MBG due to the focus on deeper learning as high letter grades are not the purpose and instead there is a focus on mastery of the content or standards. The impacts of MBG are continuing to be researched, but initial findings indicate that student motivation has increased under this grading policy as students feel a sense of control over their grade (Hahn, 2021).

Mastery-based grading continues to gain the attention of many school leaders and policymakers for its ability to promote a growth mindset and deeper learning, and initial research suggested that it can increase student motivation as MBG allows students to have a sense of control over their grade (Gallegos, 2019; Hahn, 2021).

Changing Grading Practices

Educators use grades to measure learning, group students, motivate learning, and to provide feedback. Grades are an important aspect of education, and many educators are beginning to question the validity of traditional grading practices and their effects on students (Supiano, 2019). With the impact of grades having such high stakes ranging from dropping out of high school (Nield, Stoner-Eby & Furstenberg, 2008) to impacting future salaries (U.S. Bureau of Labor Statistics, 2019), to negatively impacting student self-esteem (Crocker et al., 2003), and to being at risk for depression and suicide ideation (Pelkonen, 2003; Palmer, 2004; Wild et al., 2004), grades should be valid and accurately measure students' overall achievement in a subject area. Improved grading practices can improve students' learning experiences. Improved grading practices have the potential to significantly increase the access a student has to opportunities. And improved grading practices may positively change the way students perceive themselves as learners (O'Connor et al., 2018).

Barriers to Change

A large challenge to changes within grading policies is the resources, time, and expertise needed to develop and implement new grading practices (Cain et al., 2021). Educators need to be adequately trained in order to adopt a complex new grading policy that forgoes the use of traditional grades while still measuring student learning, providing useful feedback, and motivating students (Cain et al., 2021).

Critics of grading reform expressed that the elimination of the traditional grading scale did not allow for a difference to be made between successful students and those who are not strong students (Spring et al., 2011). A 2015 study of graduating students with an alpha-numeric grading scale was 5.9% more likely to find a residency match than their peers from a pass-fail grading system (Caballero et al., 2017). Public education must fully adopt the grading policy changes to prevent negatively impacting student opportunities.

Time and expertise are the biggest barriers to grading reform, due to creating new systems of providing learner feedback other than a simple grade (Cain et al., 2021). Requiring competency demonstrations through projects and other assessments can be time-extensive. Even creating new assessments that are true measures of learning requires construction, sampling, and test development. Designing a new grading system that adequately measures learning and still motivates students is exhausting for educators (Cain et al., 2021).

Theoretical Foundation

The theoretical foundation used for this study is Festinger's theory of cognitive dissonance (TCD). This theory was first displayed in Festinger's book, *A Theory of Cognitive Dissonance*, published in 1957 and later republished in 1962. TCD theorizes that when there is a lack of consistency, or dissonance, between the beliefs and actions of someone, they will experience psychological discomfort (Festinger, 1962). Considering TCD, educators may follow grading practices they may not believe in, leading to dissonance (Festinger, 1962). In addition, new grading policies being implemented to capture the changes in student learning may lead to some teachers experiencing dissonance (Wall, 2018; Widinstuti, 2018). Festinger (1962) exclaims that people who experience dissonance are more likely to modify their beliefs and change their actions to restore unity and cease psychological discomfort. Because this study aims

to investigate how secondary teachers in a charter school network in the Southwestern United States perceive grading policies and practices, using Festinger's theory as a foundation will be helpful.

Educators' diverse personal beliefs and values may conflict with a district's grading policies (Chen & Bonner, 2017). These conflicts lead to a phenomenon that TCD can help to understand better. The existing phenomenon is the potential for conflict between a district-adopted, mastery-based grading policy and teachers' beliefs and perceptions about the policy and how their grading practices are impacted. Analyzing this phenomenon through Festinger's theory, opportunities are present for teachers to change their thinking or actions. All of this helps to develop the research questions:

RQ 1: How do secondary teachers understand grading student work within the context of the district's mastery-based grading policy?

RQ 2: How do secondary teachers practice grading student work within the context of the district's mastery-based grading policy?

RQ 3: How do secondary teachers personal beliefs about grading student work factor into the successful implementation of the district's mastery-based grading policy?

Through a qualitative methodology and research design, the primary investigator will be able to understand better if grading policies are causing cognitive dissonance and, if so, what can be done to minimize the impacts of the psychological discomfort.

Summary

Chapter Two provided information on grading policies and practices and ethical considerations concerning grading. Master-based grading was detailed further as a new grading policy that's being adopted in many school districts across the country.

Chapter Two continued to detail the background of the study. Grades have large impacts on students' lives (Adu-Mensah, 2018; Bailet et al., 2016; DeLuca et al., 2017; DeLuca et al., 2019; Frankin et al., 2016; Isnawati & Saukah, 2017; Shepard et al., 2018). With grades carrying such a large impact, grading practices and policies are areas that are under-researched (Anderson, 2018; DeLuca et al., 2017).

Grades have reportedly been used since the 17th century to communicate how students are doing in school and to measure student learning as well as teacher effectiveness (DeLuca et al., 2017; Crawford, 1936). Traditional grading systems (e.g., A, B, C, D, F) have been used for almost all students, educators, and administrators for hundreds of years (Erbes et al. 2021). Report cards using a traditional grading system look the same today as they did in most schools in 1892, after the Committee of Ten met to reform high schools (Cox, 2011). Traditional grading systems focused on the production of a letter grade instead of learning, which leads to competition and stress, are quickly changing often due to the research that was covered in this literature review. Traditional grading systems also have ethical concerns due to documented teacher bias in awarding poor, obese, and diverse students with less challenging work and lower grade values (U.S. Office of Research, 1994; Anderson, 2018; Copur-Gencturk et al., 2020; Rubie-Davies, 2007; Sadker & Sadker, 2012; Finn et al., 2019; Latner & Stunkard, 2003; Ehlert et al., 2015; Pickett & Cunningham, 2016; Puhl et al., 2010; and Puhl & Brownell, 2006). Due to many concerns with the traditional grading system, many schools are changing their grading policies and one of the more common grading policies being implemented across the country is mastery-based grading.

Mastery-based grading (MBG) attempts to eliminate the use of traditional grading and provide students with endless opportunities for them to excel at a concept, while still receiving

feedback on areas that need improvement or praise. MBG attempts to remove behavior-related tasks from grades, such as earning grade points for turning in an assignment. MBG should reflect what students know at any point in time (Dueck, 2014b), and should not use grades as punitive in nature. This new grading policy has the opportunity to create differentiated learning pathways for each student to address their current academic needs.

Currently, there is a lack of research regarding teacher perceptions of grading policies, specifically mastery-based grading, and how teachers are implementing their own grading practices. Grades will continue to represent student achievement and continue to have a large impact on students' lives, which raises the necessity for continued research in this area to ensure that grades are fair and authentic for all students. Developing a qualitative study will help to provide detailed information regarding teacher perceptions of grading policies and how they implement their own grading practices in the classroom.

CHAPTER THREE: RESEARCH METHOD

Introduction

Grading practices have been used to communicate students' academic performance since the 15th century (Crawford, 1936). The impact as well as competing viewpoints on grading have only grown since that time. Grades not only communicate student performance in the classroom but also help determine opportunities for students' futures, both academically and occupationally, which make inconsistent grading policies problematic (DeLuca et al., 2017; DeLuca et al., 2019; Guskey & Link, 2019; Isnawati & Saukah, 2017). Further research is needed to examine teacher perceptions of grading policies, explicitly examining the consistency of grading practices within the same network of schools that share a common grading policy (Anderson, 2018; DeLuca et al., 2017).

Chapter Three details this study's research design and methodology by examining teacher perceptions of grading policies and practices and any resulting feelings of accomplishment or dissonance. Chapter Three includes the following sections: restatement of the problem, research questions, research design, population and sample, sources of information, instrumentation, data collection procedures, validity and reliability, data storage and analysis procedures, and a chapter summary.

Restatement of the Problem

Continuing questions surround how secondary teachers understand, perceive, and practice district grading policies within public college-preparatory schools. Grading practices and policies are under-researched in general, resulting in a need for further research in those fields (Anderson, 2018). Charter schools, being even more specific, certainly fall within this category. Exploring teachers' views and grading practices and the possible conflicts between

perceptions of grading and school district grading policies is essential (Chen & Bonner, 2017; Widiastuti, 2018). In addition, there is a need to understand better the relationship between educators' perceptions of grading and their adherence to district grading policies (Chen & Bonner, 2017). Researching secondary teachers' perceptions of grading policies will assist in improving the depth of understanding relative to this research.

The decisions educators make regarding grading are heavily influenced by grading policies, which can have significant variations across districts and even within schools in the same district, as discussed by DeLuca et al. (2017). Considering the role grades play amidst future opportunities in academics and careers, inconsistencies in grading policies and practices are a significant concern (DeLuca et al., 2017; Isnawati & Saukah, 2017). Furthermore, the differences between teacher perceptions and district grading policies may lead to cognitive dissonance (Wall, 2018), which can result in serious and unforeseen repercussions.

Further investigating the impact of grading policies and grading practices of secondary teachers stands to contribute significant findings for improving grading policies and procedures. In addition, a better understanding of teachers' perceptions and attitudes toward grades will help determine needed recommendations when creating and implementing new grading policies (Unal & Unal, 2019). Therefore, this study will directly explore secondary teachers' perceptions of the grading policies of their district using a phenomenological approach and data will be collected through teacher interviews.

Research Questions

The literature summarized in Chapter Two provided an overview for this study. This research has a specific focus on addressing a unique blending of external factors, including a subject district's mastery-based grading policies and internal factors. It also addresses teacher

perceptions of grading policies and how these external and internal factors potentially impact grading practices. According to DeLuca et al. (2017), grading policies, perhaps more than any other factor, play a pivotal role in educators' decision-making processes when it comes to grading, and these policies may show observable differences between districts and even among schools within the same district. In addition, the fact that grades are being used to determine future academic and career opportunities leads to a greater need to eradicate inconsistencies in grading practices and policies (DeLuca et al., 2017; Isnawati & Saukah, 2017).

Evidence may highlight teachers experiencing dissonance between their perceptions about grading and the grading policies adopted by the school district they work for (Trinidad, 2018). Teachers may need to confront their perceptions of grading when made responsible for following district grading policies, which leads to feelings of dissonance (Wall, 2018). When this occurs, teachers may attempt to reestablish consistency by changing their beliefs or actions by deviating from the policy to match their beliefs (Festinger, 1996). Thus, a continuing examination is needed to investigate teacher perceptions of a mastery-based grading policy. Inasmuch as secondary teacher perceptions on mastery-based grading policies have not yet been thoroughly explored. The following research questions will frame this study:

RQ 1: How do secondary teachers understand grading student work within the context of the district's mastery-based grading policy?

RQ 2: How do secondary teachers practice grading student work within the context of the district's mastery-based grading policy?

RQ3: How do secondary teachers' personal beliefs about grading student work factor into successfully implementing the district's mastery-based grading policy?

Research Design

With a phenomenological focus, this qualitative study explored secondary educators' lived experiences and perceptions of grading. Qualitative research is frequently referred to as human science research (Giorgi, 2012). However, phenomenology is descriptive and not interpretive (Giorgi, 2012). Yin (2015) expressed that "qualitative research most of all involves studying the meaning of people's lives, as experiences under real-world conditions" (p. 9). Moreover, Moustakas (1994) offered how phenomenology is "concerned with wholeness, with examining entities from many sides, angles, and perspectives until a unified vision of the essences of a phenomenon or experiences is achieved" (p. 58). This phenomenological study explored the teacher perceptions of grading policy changes and attempted to chart their actions and reactions to these steps.

Phenomenology was applied to explore the lived experiences of individuals and understand the world through descriptive means (Giorgi, 2012). Thevanaz (1962, p. 19) stated that phenomenological research attempted to "reach that which is primary or most fundamental in experience." Thevanaz (1962) considered phenomenological research by saying:

There is not, in principle, any phenomenon (in the phenomenological sense of this term), or any human experience—from the universally valid categorical judgments of reflexive consciousness to the hidden pre-logical and pre-conceptual structures of the individual and collective subconscious—that falls outside the competence of phenomenological analysis. (p. 28)

Given this information, exploring teachers' views on grading policy modifications represents a compelling subject for in-depth investigation using the phenomenological method.

Quantitative research was not chosen for this study. Quantitative data can be limiting. This study needed rich data with thick descriptions, whereas Martin (2012, p. 3) wrote, "At the

core of quantitative research is studying and measuring how variables change.” Martin (2012) elaborated that qualitative data can also explore variables that have yet to be defined. However, a significant difference between the two methodologies is that quantitative research focuses on the variables and analyzes whether the hypothesis can be proven. This study did not intend to use numerical variables or data to help build the conclusion. The conclusion of this study could only be reached if teacher perceptions of grading policy changed teacher grading practices, and any feelings of dissonance were captured. Creswell (2013) stated:

We conduct qualitative research because a problem or issue needs to be explored. This exploration is needed, in turn, because of a need to study a group or population, identify variables that cannot be easily measured, or hear silenced voices. (p. 48)

This study strives to help develop a detailed understanding of teacher perceptions of grading policies and their practices, which was best achieved using a qualitative methodology.

This study compiled the voices of educators who have experienced grading policy changes. Exploring a “group of individuals” who all share the same phenomenon is phenomenology (Creswell, 2013, p. 78). Allowing these voices to be heard and analyzed provided a more vital understanding of teacher perceptions of grading policy changes.

Population and Sample

The investigation of “a group of individuals” that all experienced the same phenomenon is phenomenology (Creswell, 2013, p. 78). All study participants had experienced the same phenomenon, a grading policy change to mastery-based grading. This qualitative study, which is also a phenomenological study, used criterion sampling. Criterion sampling required all study participants to have experienced the same unique phenomenon (Creswell, 2013). This study

explored perceptions of grading policy changes, according to teachers who have experienced working through a grading policy change.

Teachers were selected from a K-12 charter school network in the Southwestern part of the United States. While each participant has been subject to the same implementation experiences, multiple content teachers (social studies, math, etc.) were chosen to allow diverse perspectives to be heard across the secondary education continuum. Finding teachers from the same school network ensured that Guest et al.'s (2006, p. 60) criteria have been met, in that all study participants "share common experiences and these experiences comprise truths," which allowed for code saturation.

For interviews, Creswell (2013) suggested a sample size range between five and 15. The number of study participants being interviewed must provide enough substance to build detailed descriptions of the experience (Guest et al., 2006). Guest et al. (2006) claimed that 12 interviews are the best to reach data saturation. Saturation is the point at which no further patterns or themes emerge from the data analysis (Hennink et al., 2017). Guest et al. (2006) claimed that 92% of codes are built within the first 12 interviews and that in further interviews, the new codes are variations of already existing codes, assuming that all study participants were asked the same questions. This study aimed to interview 12 secondary teachers. It was believed that a sample this size provided data saturation while also representing diverse content areas (social studies, math, etc.). The teachers were all employed in the same charter school network in the Southwestern United States.

Sources of Information

In order to obtain the desired information and level of saturation, this study's design call for two sources of data collection from each participant: a questionnaire and an interview.

Questionnaires were sent to study participants electronically. Following this, open-ended one-on-one interviews were used as the sources of information in this qualitative study. The purpose of this dual source of information collection was to ensure data saturation was met. Questionnaires could be easily used to collect data from a larger group of people (Marshall, 2005), while interviews are needed to collect data on something that cannot be observed, such as a research participant's feelings or perspectives (Merriam & Tisdell, 2016). Guest's (2006) recommendation of seeking 12 interviews was the primary investigator's goal; however, the final number of interviews depended on whether sufficient data saturation was reached. Interviews were conducted virtually via Zoom and recorded via Zoom. The primary investigator developed the interview questions, which are semi-structured and open-ended and in Appendix E. Semi-structured interviews allowed study participants to express their viewpoints, feelings, and perspectives more freely than would be possible in a standardized interview (Flick, 2018).

Instrumentation

Because the perceptual elements of this topic have not previously been explored, this study intended to answer these three research questions: How do secondary teachers understand grading student work within the context of the district's mastery-based grading policy? How do secondary teachers practice grading student work within the context of the district's mastery-based grading policy? How do secondary teachers' personal beliefs about grading student work factor into successfully implementing the district's mastery-based grading policy?

Exploring teacher perceptions and grading practices and the possible conflicts between grading practice perception and school district grading policies is important (Chen & Bonner, 2017; Widiastuti, 2018). There is a need to better understand the relationship between teachers' perceptions of grading and their adherence to district grading policies (Chen & Bonner, 2017).

Researching secondary teachers' perceptions of grading policies will help answer the three research questions in this study. Anderson (2018) claimed that research surrounding grading practices and policies was void, and more studies about this topic were needed to create meaningful conversations that lead to authentic changes. Due to this, the researcher collected data on teachers' perceptions of grading policy changes using questionnaires and semi-structured open-ended interviews.

A questionnaire was included in this methodology to support data saturation. Fortunately, there was an established and verified instrument to draw from. Dr. Xing Liu (2007) created the questionnaire for the purpose of understanding teacher perceptions of grading. This instrument appeared to meet the needs of investigating teacher perceptions of grading and it was modified with permission (Appendix F) to cover relevant topics related to grading policies and practices. The questionnaire had 40 statements where study participants answered with their level of agreement, indicating if they strongly disagree, disagree, are neutral, agree, or strongly agree. In addition, the questionnaire communicated if the study participants had a personal conflict with the district's grading policies by providing a snapshot of their level of agreement.

The researcher also created an interview instrument to gather information regarding the three research questions. The interview instrument consisted of 10 questions, and interviews took place with 13 study participants. As indicated, more interviews would have been completed if saturation was not obtained from the original 13 study participants. Each question in the interview instrument was open-ended and allowed for a "textual and structural description of the experience" (Creswell, 2013, p. 81). While being interviewed, each study participant was asked semi-structured open-ended questions such as, "What is the purpose of assigning student grades?" The interviews were recorded via Zoom, and the primary investigator took field notes

during this process. All interviews were transcribed by third-party software and listened to by the primary investigator. Bertrand et al. (1992, p. 203) suggested that using field notes, transcription, and recordings when conducting interviews “keeps the data fresh for analysis.” Upon the interview being heard and transcribed, each study participant received a copy to check for transcription accuracy.

Field testing of the interview protocol was completed for several reasons. First, it was employed to identify any changes needed to the interview instrument. Field testing also supported avoiding persuading the study participant’s responses by swaying them in a desired direction (May 1991). Additionally, excluding field testing could lead to “inadequate concept clarity” (Locke, 2012, p. 146). A secondary teacher in the primary investigator’s school was interviewed for a field test. The field test assisted in finalizing the interview questions to allow for more comprehensive data.

Data Collection Procedures

The interviews were recorded via Zoom.us, and the primary investigator took field notes during this process. All interviews were transcribed by a third-party software, Otter.ai, and were audited by the investigator. Bertrand, Brown, & Ward (1992) suggest using field notes, transcription, and recordings when conducting interviews in attempts to “keep the data fresh for analysis.” Upon the interview being heard and transcribed, each study participant will receive a copy to check for transcription accuracy.

Upon receiving Northern Arizona University Institutional Review Board (IRB) approval (Appendix A) and informed consent (Appendix B), research participants were sent a questionnaire electronically and were interviewed by the primary investigator via Zoom. The

school district employing the research participants also consented before questionnaires and interviews took place (Appendix C).

While being interviewed, each study participant was asked semi-structured open-ended questions such as, “What is the purpose of assigning student grades?”. The interviews will be recorded via Zoom, and the primary investigator will take field notes during this process. All interviews will be transcribed by third-party software and listened to by the primary investigator. Bertrand, Brown, & Ward (1992, p.) suggest that using field notes, transcription, and recordings when conducting interviews “keeps the data fresh for analysis.” Upon the interview being heard and transcribed, each study participant will receive a copy check for transcription accuracy.

Upon providing their individual inputs each study participant was assigned a code (such as “South Participant 1: SP1” or “Polytechnic Participant 2: PP2”). The researcher ensured that copies of informed consent were stored and locked in a separate location from the information containing study participants’ names with their corresponding codes. The questionnaire is provided in Appendix D, and the semi-structured interview questions are provided in Appendix E.

Validity and Reliability

According to Creswell, (2013), phenomenological analysis relies on a series of steps to describe a phenomenon’s essence. Creswell (2013) expressed that the first step was for the researcher to describe personal experiences within the study context. This first step described the phenomenon and encouraged the disclosing of personal bias, called reflexivity (Creswell & Miller, 2000). For an authentic phenomenological study, reflexivity was needed. “It is the preparation of deriving new knowledge” (Moustakas, 1994, p. 85). Reflexivity involves separating one’s own experiences and biases and looking at the phenomenon with a new and

fresh perspective as much as possible (Creswell, 2013). For example, the researcher, a former secondary teacher and an administrator at a secondary school, separated themselves from their opinions on how grading practices should be handled.

Qualitative research needs to reflect the authentic experiences of the study participants lived experiences. Upon capturing these authentic experiences, the primary investigator allowed the study participants to review the research analysis as a “second lens” to increase the validity (Creswell & Miller, 2000, p. 124). Returning the research analysis to the study participants was called member checking, which allowed the participants to read and comment on the analysis (Creswell & Miller, 2000). Qualitative research must have systems in place for validity and reliability.

In qualitative research, validity tells us whether or not researching findings seem accurate or reasonable to the people who were studied. It also refers to whether or not results obtained in one study can be applied to other studies with similar or identical people or situations. (LeCompte, 2000, p. 152)

Additionally, the primary investigator used thick and rich descriptions to capture the authentic lived experiences of the study participants. A thick and rich description builds credibility by allowing the reader to experience what the study participants also experienced (Creswell & Miller, 2000). Using thick and rich descriptions, reflexivity, and member checking assisted in maintaining the reliability and validity of the study.

Data Storage and Analysis Procedures

All recorded interviews, along with the transcription of the interviews, were saved and uploaded onto a USB flash drive. The USB flash drive was encrypted and password protected

and then stored in a locked drawer. The original files were deleted once the coded copy of the transcription was verified.

In preparation for starting the data analysis phase, the researcher adopted a stance of objectivity by distancing themselves from their personal perspectives, emotions, and convictions, thereby examining the data with impartiality (Finlay, 2014). This approach aligns with Giorgi's assertion (2012) that researchers should center their attention on the unique facets of the phenomenon under investigation, distinct from other closely related subjects. It was only after the researcher directed their focus towards this specific phenomenon and shed any personal biases or beliefs that the authentic process of data analysis began.

Thematic analysis is a method used for identifying, reporting, and analyzing patterns or themes within data. The thematic analysis describes the data in rich detail (Braun & Clarke, 2006). It differs from other analytical methods that describe patterns across qualitative data, such as discourse analysis (DA), thematic decomposition analysis, interpretive phenomenological analysis (IPA), and grounded theory. IPA and grounded theory look for patterns in the data but are bounded by theory. IPA is connected to a phenomenological epistemology (Smith et al. 1999; Smith & Osborn, 2003).

Braun and Clarke (2006) detailed the process of thematic analysis in six phases: familiarizing yourself with your data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. The researcher will use Braun and Clarke's (2006) phases of thematic analysis to guide the data analysis.

Table 1*Phases of thematic analysis*

Phase	Description of the Process
1. Familiarizing yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systemic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic “map” of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Note: Table 1 Adapted from Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology* 3, 77–101.

After reading the transcribed interviews, the researcher considered the process Moustakas (1994) titled as horizontalization, which is “when we horizontalize each phenomenon has equal value as we seek to disclose its nature and essence” (p. 95). Working through horizontalization, each significant statement in the data needs to be identified. During this step, all significant statements carry equal weight. Therefore, each significant statement was listed, and a list was created to ensure that no considerable statements overlapped (Creswell, 2013).

Summary

Although teacher perceptions of grading practices are essential for better understanding, there is a dearth of research on this topic (Anderson, 2018; DeLuca et al., 2017). Chen and Bonner (2017) claimed that qualitative studies were needed to understand experienced teachers' perceptions regarding grading practices. Widiastuti (2018) expressed a need to research if there was a conflict between grading policies and teachers' personal beliefs. A descriptive phenomenological approach was used for this study to capture the perceptions of teachers on grading policy changes within their district.

The statement of the problem and the three research questions were built due to the paucity of literature on the topic. Further research on how secondary teachers understand and practice grading students after a district changed to a mastery-based grading policy that teachers are required to adhere to will positively contribute to the field of education and help educational leaders better implement grading practices with fidelity in the future. Three research questions were developed from the problem statement, which are: How do secondary teachers understand grading student work within the context of the district's mastery-based grading policy? And, how do secondary teachers practice grading student work within the context of the district's mastery-based grading policy? How do secondary teachers' personal beliefs about grading student work factor into successfully implementing the district's mastery-based grading policy? The primary investigator gathered data to answer these three research questions through a questionnaire and by interviewing 13 secondary educators, pending data saturation, using a semi-structured interview instrument that consisted of 10 questions.

Chapter Four includes thick and rich descriptions of the collected data for this study. In addition, information gathered from the study participants concerning their perceptions of

grading policy changes and their grading practices is discussed. Finally, a thematic analysis occurs after data collection, and common themes are identified.

Chapter Five includes the summary of findings for this study and a discussion about the interpreted findings that also addresses any limitations to the study. Practical implications for the research are discussed as well as recommendations and applications for real-world settings. Finally, a conclusion summarizes the main points of the research by highlighting the contributions of the study to the field of education.

CHAPTER FOUR: RESULTS

Introduction

This phenomenological study set out to explore secondary teachers' perceptions of, and attitudes toward, grading policies in a charter school located in the Southwestern United States. Data for this project were collected through interviews and a questionnaire. This qualitative descriptive study highlighted the experiences of the study participants. This chapter will document the backgrounds of the study participants and detail the findings, and describe the analysis of the data. Chapter Four will conclude with a summary of the chapter and include an overview of information to be addressed in Chapter Five.

Participants

The study participants are all employed in the same K-12 charter school network as the primary investigator. The charter school network has 15 unique schools spread throughout digital, rural, suburban, and urban environments. Study participants were selected using criterion sampling and were recruited through email and text messages. Each environment (digital, rural, suburban, and urban) was represented through the study participants' school location.

All study participants were secondary (7–12) teachers working in a charter school in Arizona, having completed at least one full year of teaching, and teach at least one core content class (Social Studies, Science, Math, or English). The primary investigator scheduled Zoom interviews with each participant upon being granted verbal informed consent. In addition to the interview, each study participant completed an online 40-question questionnaire using Google Forms (Appendix D) after the Zoom interview. Table 2 outlines key information including years teaching, gender, grades teaching, and the school environment setting.

Table 2

<i>Participant Demographics</i>				
Participants	Years Teaching	Gender	Grades Teaching	School Environment
MA1	3	Male	7th-8th	Urban
MA2	3	Male	7th-8th	Urban
SC1	10+	Female	9th-12th	Digital
SC2	10+	Female	7th-8th	Urban
SS1	5	Male	7th-8th	Urban
SS2	10+	Male	9th-12th	Urban
SP1	2	Female	9th-12th	Digital
SP2	6	Female	7th-12th	Urban
EL1	3	Male	7th-12th	Urban
EN1	10+	Female	9th-12th	Suburban
EN2	8	Male	7th-8th	Urban
EN3	10+	Female	9th-12th	Rural
EN4	2	Male	9th-12th	Urban

Interviews

Prior to the interviews taking place, the primary investigator employed field testing to create the questions that would be used during the interview to best answer the three research questions. Ten interview questions were developed and given to an instructional coach and teacher who was not one of the study participants. The field testing helped refine the probing questions for the interview protocol (Appendix E).

All interviews were scheduled and took place through Zoom, a web-conferencing program. The participants were diverse in their gender, years teaching, subjects taught, and environments where their schools were located. During each interview, the primary investigator took notes that recorded study participants' responses to questions and assumed level of comfort. This allowed the researcher to adjust the probing questions during the interview. Each study participant was given the opportunity to read through their interview transcripts to confirm

accuracy. After all interviews took place, the primary investigator began the analysis by reading through all of the transcribed interviews and grouping the text in themes through labeling the transcripts and using colored highlighters. This information is shared both in tables and narratives.

Descriptive Findings

The focus of the study was to explore secondary teachers' perceptions of grading policies as grading policies are an important factor in educators' decisions when assigning student grades (DeLuca et al., 2017). For this study, the 13 study participants completed an online questionnaire using GoogleForms. The questionnaire, which can be found represented as Table 3, was made up of 40 statements that each participant answered with their level of agreement to each statement.

Table 3

Questionnaire Results

	SD	D	N	A	SA
1. Grading is an important criterion for judging student progress.	0%	0%	7.70%	77%	15.30%
2. Grading has an important role in classroom assessment.	0%	7.70%	0%	77%	15.30%
3. Grading has a positive effect on students' academic learning.	0%	7.70%	46.20%	38.50%	15.30%
4. Grading practices are important measures of student achievement.	0%	15.30%	23.10%	53.80%	7.70%
Table 3 (continued)					
5. Grading practices are	0%	15.30%	38.50%	38.50%	7.70%

important measures of student learning.

6. Grading has a strong impact on students' learning.	0%	15.30%	30.80%	38.50%	15.30%
7. Grading helps me categorize students as above average, average, and below average.	0%	30.80%	46.20%	23.10%	7.70%
8. Grading can help me improve my instruction.	0%	7.70%	7.70%	69.20%	15.30%
9. Grading can encourage good work by students.	0%	15.30%	7.70%	61.50%	15.30%
10. Grading helps me in deciding what curriculum to cover.	7.70%	23.10%	38.50%	23.10%	7.70%
11. Grading is a good method for helping students identify their weaknesses in a content area.	0%	0%	15.30%	69.20%	15.30%
12. Grading can keep students informed about their progress.	0%	0%	15.30%	61.50%	23.10%
13. Grading provides information about student achievement.	0%	15.30%	0%	69.20%	23.10%
14. Grading documents my instructional effectiveness.	0%	15.30%	46.20%	23.10%	15.30%
15. Grading provides feedback to my students.	0%	15.30%	7.70%	53.80%	23.10%
16. High grades can motivate students to learn.	0%	0%	23.10%	53.80%	23.10%

Table 3 (continued)

17. I consider student effort when I grade.	0%	15.30%	0%	38.50%	46.20%
18. I give higher report card grades for students who show greater effort.	7.70%	30.80%	23.10%	30.80%	7.70%
19. I will pass a failing student if he or she puts forth effort	7.70%	7.70%	23.10%	53.80%	7.70%
20. Grades are based on students' completion of homework.	38.50%	23.10%	7.70%	30.80%	0%
21. Grades are based on the degree to which students participate in class.	15.30%	15.30%	30.80%	38.50%	0%
22. Grades are based on a student's improvement.	7.70%	0%	23.10%	46.20%	23.10%
23. I consider student ability when grading.	7.70%	0%	15.30%	46.20%	30.80%
24. Grades are based on students' problem-solving ability.	0%	7.70%	46.20%	30.80%	15.30%
25. Grades are based on students' critical thinking skills.	0%	7.70%	53.80%	30.80%	7.70%
26. Grades are based on students' independent thinking ability.	0%	7.70%	38.50%	46.20%	7.70%
27. Grades are based on students' collaborative learning ability.	0%	7.70%	46.20%	38.50%	7.70%
28. Grades are based on students' writing ability.	0%	15.30%	0%	77%	7.70%

Table 3 (continued)

29. I tend to use letters (e.g., A, B, C) rather than numbers (e.g., 95%).	53.80%	23.10%	7.70%	15.30%	0%
30. If a student fails a test, I will offer him/her a second chance to take the test.	0%	0%	7.70%	38.50%	53.80%
31. I often give students opportunities to earn extra credit.	15.30%	15.30%	15.30%	15.30%	38.50%
32. I often look at the distribution of grades for the whole class after I finish grading.	0%	15.30%	7.70%	38.50%	38.50%
33. I have my own grading procedure.	7.70%	0%	15.30%	69.20%	15.30%
34. I often confer with my colleagues on grading criteria.	7.70%	46.20%	15.30%	23.10%	7.70%
35. Grading is the easiest part of my role as a teacher.	15.30%	23.10%	38.50%	15.30%	7.70%
36. It is easy for me to recognize a strong effort by a student.	0%	0%	7.70%	38.50%	53.80%
37. It is easy for me to assess student achievement with a single grade or score.	15.30%	30.80%	15.30%	23.10%	15.30%
38. It is easy for me to rank order students in terms of achievement when I am grading.	0%	15.30%	38.50%	23.10%	23.10%
39. It is difficult to measure student effort.	15.30%	46.20%	23.10%	15.30%	0%

Table 3 (continued)

40. Factors other than a student's actual achievement on a test or quiz make it difficult for me to grade.	30.80%	30.80%	15.30%	15.30%	7.70%
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By organizing this information into a table, it is easy to quickly identify where there is strong agreement and strong disagreement to each statement. For example, it's easy to see that 92.3% of study participants responded that they either agree or strongly agree to the 36th statement: "It is easy for me to recognize strong effort by a student." And, on the opposite end of the spectrum, it's easy to see where 76.9% of the study participants responded that they either disagree or strongly disagree to the 29th statement: "I tend to use letter grades (e.g., A, B, C) rather than numbers (e.g., 95%)." These data can also be analyzed in unison with the interview responses, showcasing the prevalent idea that grades carry much importance. Also, there is a clear lack of consistency among the study participants on grading practices, as seen in both data sets.

Table 4

Questionnaire Results Sorted by Themed Sections

	Average SD	Average D	Average N	Average A	Average SA
Importance (1-6)	0%	10.10%	24.40%	53.90%	12.80%
Usefulness (7-16)	>1%	12.30%	20.80%	50.80%	16.90%
Student effort (17-22)	12.80%	15.40%	18%	39.80%	14.10%
Student ability (23-28)	1.30%	7.70%	33.30%	45%	12.90%
Teachers' grading habits (29-34)	14.10%	16.70%	11.50%	33.30%	25.60%
Perceived self-efficacy of the grading process (35-40)	12.80%	24.40%	23.10%	21.80%	17.90%

Organizing the questionnaire results in Table 4, helps to quickly identify where there are large areas of agreement, such as Importance, Usefulness, and Student ability and where there are more diverse views such as Student effort, Teachers' grading habits, and Perceived self-efficacy of the grading process. Results are organized by illustrating the average answer in each themed section ranging from strongly disagree to strongly agree. Notably, in the themed section "Perceived self-efficacy of the grading process," there were almost equal number of participants that agree/strongly agree (39.7%) as there were with disagree/strongly disagree (37.2%). The even distribution in the last themed section highlights the diversity in thought that secondary teachers have.

Results

Through thematic analysis, study participants' perspectives on grading policies and their practices began to become clearer. In attempts to maximize the meaning of the data, common themes were identified that help to explore and explain the phenomenon taking place, which is secondary teachers all employed by the same network of schools who experienced a grading policy change to mastery-based grading.

Certain themes were identified as being the foremost in occurrence. The themes that materialized as the strongest were: 1) Diverse views exist among teachers regarding mastery-based grading, 2) Teachers have concerns with minimum grading policies, 3) Grades are used as a communication tool for parents, 4) Teachers will deviate from the district's grading policy without much hesitation, 5) Behavior is often a consideration when awarding grades, 6) Teachers have concerns with grade inflation, 7) Teachers personal views do not always align with mastery-based grading, 8) Teachers experience psychological discomfort when assigning student grades, 9) Teachers consider a student's status as a student with an Individualized Education

Plan (IEP) or a student receiving English Language Learning (ELL) services when awarding grades. The data gathered and examined from the study participants in this study indicated a broad range of perspectives, beliefs, and approaches among teachers regarding grading and the mastery-based grading policy.

Interview questions 1-3 were built to address the first research question. The following themes emerged directly from the study participant's responses.

RQ 1: How do secondary teachers understand grading student work within the context of the district's mastery-based grading policy?

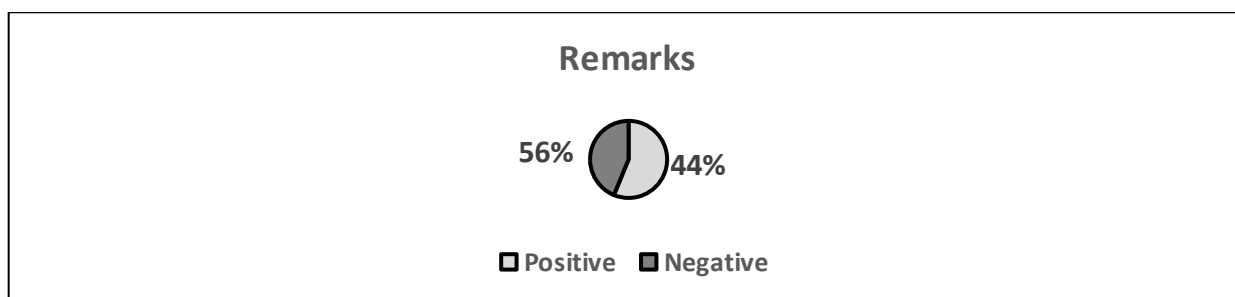
Theme 1.1: Diverse views exist among teachers regarding mastery-based grading.

Diverse views were illustrated during the interviews. Participants expressed diverse concerns, unique areas with MBG that they believed were positive, and had contrasting knowledge of what MBG is. Five study participants conveyed a solid understanding of what MBG is, whereas eight study participants' responses suggested that they do not have a strong understanding of what MBG is.

Figure 1 provides information on the amount of positive and negative responses in relation to mastery-based grading there were during the interviews, further highlighting the diversity in viewpoints that educators have on the topic.

Figure 1

Educators' diverse viewpoints represented through remarks



The interviews highlighted that there were diverse views in many areas around understanding grades. When asked if the network of schools provides teachers with the support needed to accurately implement mastery-based grading, SC1 responded with:

I do. I think the district does a very good job of making sure teachers understand it. I think what sometimes happens, though, and this happens for anybody who gets new information, is there's a certain amount of inference that happens after the fact. Like, I don't really understand this. I'm going to make my own connection and I heard you say I'm supposed to give them chance after chance after chance. You are, but you have to provide intervention. (SC1)

On the other hand, EN2 responded with:

I don't think there's enough training that goes into it, it's just communicated that this is the way. Continued research needs to be conducted. I think we should have continued conversations, dialogue, about grading, you know, at the school level and at the district level we should just, you know, see what research has been conducted already. What other schools are having great success? But also maybe some Title I schools with similar demographics. (EN2)

Diverse viewpoints were represented in thinking about what mastery actually is. Some educators stated that mastery is when a student has answers 100% of the questions clearly:

Mastery is 100%. And I think that the real key in this is asking questions that matter. Being very selective about what you're asking. That's going to show that they understand the standard. I think what teachers end up doing is they put in what I call fluffy questions, to kind of boost scores and that's so unnecessary. (SC1)

Whereas other educators did not think 100% on an assignment or task is needed to achieve mastery as EN1 expressed “So if a student successfully, nine out of 10 times can let’s say it’s multiplication, then they showed mastery, that would be an ‘A’. Or even eight out of 10 times, that would be a ‘B”, that’s mastery.”

Study participant responses to the questionnaire showcased that diverse views exist among teachers regarding mastery-based grading with the fact that eight of the 40 questions had at least 25% of respondents stating that they strongly agree or agree while at least 25% of the respondents stated they strongly disagree or disagree. This highlights teachers’ diverse views in their grading practices and perceptions of mastery-based grading.

The eight questions that showcased the largest amount of diversity in thought were: 7) Grading helps me categorize students as above average, average, and below average; 10) Grading helps me in deciding what curriculum to cover; 18) I give higher report card grades for students who show greater effort; 20) Grades are based on students’ completion of homework; 21) Grades are based on the degree to which students participate in class; 31) I often give students opportunities to earn extra credit; 34) I often confer with my colleagues on grading criteria; and 37) It is easy for me to assess student achievement with a single grade or score.

Theme 1.2: Teachers have concerns with minimum grading policies.

Many of the participants had concerns with minimum grading policies, in fact only one study participant, SS1, did not address minimum grading policies as an area of concern. Table 5 shows the number of codes generated in this theme, by participant, throughout all of the interviews.

Table 5

Code frequency by participant for theme 1.2

Participants	# of Codes	% of Total
MA1	3	8%
MA2	2	5%
SC1	2	5%
SC2	2	5%
SS1	0	0%
SS2	5	13%
SP1	2	5%
SP2	3	8%
EL1	3	8%
EN1	3	8%
EN2	6	15%
EN3	3	8%
EN4	5	13%

When asked what the purpose of a minimum grading policy, many participants understood that it was to support student grades, and encourage students to not give up on their classroom grade. However, one participant did not fall into this group.

My understanding is it's an attempt to address equity concerns with our students, perhaps even our demographics of students. It's not too clear to me what our reasons are, possibly public perception of our school's performance is a factor or maintaining a certain level of achievement by our students says that does affect sometimes funding. Public perceptions as I said prior and also for factors of individual students' perception of themselves, which many of our students struggle with, especially when maybe their first attempt was constituted as a failure. (EN2)

There was also a fairly consistent response from teachers expressing their concerns with the policy. EN3 believed this policy leads to miscommunicating with families:

I entered temporary zeros in the gradebook. I have done some research into you know don't put a zero, put a 50% because I understand that and I get it, but I think it miscommunicates with families. So, it is easy at a glance, for me to know that if there's a zero, that it's a temporary zero and I need to follow up with that student. So, I might pull a small group with everyone who has zeros for their outline. (EN3)

EN1 is not sure it is a policy associated with MBG but does not believe a minimum grading policy is appropriate:

I don't know if it's a policy, but there's some talk about not allowing students to have less than 50%, I know the gradebook is set up funky like that. I do not adhere to that policy because I don't think that's appropriate. (EN1)

SP1 believes that it may communicate the wrong message to students: "Some kids might think 50% is an okay grade because it's halfway there for not doing half of the work." MA5 echoes the same sentiment:

If I was a student who was given 50%, that kind of shows me that like, okay, like that's already done. Like, I don't really need to make that up like it's already 50%. So why would I need to, but at the same time, I kind of see the opposite side of the argument of why it's only 50%. So, all I have to do is like at least attempt it and maybe it could be a 70 or an 80 if I do attempt it and like get 100 percent so but I know what the students that I work with I think for them 50% is already good enough for them. (MA5)

Consideration for society was on the mind of EN4:

It doesn't make sense to me that someone can do roughly 10% of the work and get a deal. Whether there's someone who is trying consistently and getting like 60s and 70s and then they're doing everything but they're getting like the same grade, that doesn't seem fair. I

think it is also for a select set of students. I'm not saying I don't, I just have a general idea that students are lazy and don't want to work, but I know that there are students who are lazy and don't want to work. I tested that perfectly so that was one if they literally only care about graduating, they have no future goals beyond graduation because that's all their family expects of them or what they expect for themselves. For whatever reason, I don't think it's helpful for them to be able to just skate by, I don't think it's great for society to simply graduate people who don't know how to complete the things that are assigned to them because once you get to a job you don't get to do nothing and get half-well performance reviews. (EN4)

Other teacher concerns with minimum grading policy were about the fairness factor. Views were expressed about a minimum grading policy not being fair for students who put a good amount of work and effort into their schoolwork and grades. EL1 was concerned that scholarships could be taken away from students who put forth the effort:

If we put 50% in (the gradebook) for doing nothing, it's going to inflate grades.

Realistically, at that point, a student could only do like, three major assignments and pass with a D because everything else was a 50%. How is that fair to kids that actually worked and did all of those assignments? And I guess if it was a nationwide policy that nobody ever got a zero, but I don't think that's the nationwide policy. You don't get paid for not showing up to work. I just want to make sure that the students who have put forth the effort get rewarded for their efforts, and the students who have not put forth the effort are not taking from the kids that have, especially when it comes to scholarships. (EL1)

Theme 1.3: Grades are used as a communication tool.

While exploring the overarching understanding that teachers have when grading student work through the lens of mastery-based grading, many teachers expressed that one of the most important uses of grading is communicating accurate student data to the parents. Table 6 includes the number of codes generated from the interviews, represented by each participant.

Table 6

Code frequency by participant for theme 1.3

Participants	# of Codes	% of Total
MA1	2	8%
MA2	1	4%
SC1	7	27%
SC2	2	8%
SS1	1	4%
SS2	2	8%
SP1	1	4%
SP2	4	15%
EL1	3	12%
EN1	1	4%
EN2	0	0%
EN3	2	8%
EN4	0	0%

EN1 states very clearly: “Grades are a way to communicate with parents and students their progress in my class.” And SS1 expressed that grades are a strong way to help students measure their own success:

I also know it’s important to give kids a measuring stick so they can see where they’re at, it’s just tracking data in one way and it’s great for students to look and see what they’re good at or might like and what they’re not good at. (SS1)

There was also some discussion and consideration into not only communicating

something important to the parents but also a communication tool for the teacher about their own class and teaching, as SC1 says:

So, I put the zero in the gradebook because it's a communication tool between me and the student to talk about and the home adults to talk about and date for me to understand who's struggling because I felt like my whole class is behind, clearly, the material must be too difficult. I need to scaffold more, or need to slow it down. I need to change the pacing of it, something else needs to happen so it does provide me with some information into adjusting my teaching. (SC1)

EL1 echoes this sentiment by stating: "If many students are failing, then the teacher is not doing something right. They need to look at their own teaching." Teachers are in agreement that grades serve as an important communication tool for a variety of stakeholders, including students, parents, and even themselves.

Study participant responses to the questionnaire added that secondary teachers used grades as a communication tool. Of the study participants, 53.8% responded that they agree or strongly agree to the following questions that address grades being used as a communication tool for teachers: 7) Grading helps me categorize students as above average, average, and below average; 8) Grading can help me improve my instruction; 10) Grading helps me in deciding what curriculum to cover; 13) Grading provides information about student achievement; and 14) Grading documents my instructional effectiveness. Notably, 84.5% of respondents stated that they agree or strongly agree with the eighth question "Grading can help me improve my instruction," indicating that grades are a strong communication tool for teachers.

On the questionnaire, 84.6% of study participants responded that they agree or strongly agree to the following questions that presume grades serve as a communication tool for students

and families: 12) Grading can keep students informed about their progress; 13) Grading provides information about student achievement; and 15) Grading provides feedback to my students.

Interview questions 4-6 were built to address the second research question. The following theme emerged directly from the study participants' responses.

RQ 2: How do secondary teachers practice grading student work within the context of the district's mastery-based grading policy?

Theme 2.1: Teachers will deviate from the district's grading policy without much hesitation.

Teachers were very open about their willingness to deviate from the district's mastery-based grading policy with little hesitation during the interviews. Table 7 lists out the number of codes by participant in this theme.

Table 7

Code frequency by participant for theme 2.1

Participants	# of Codes	% of Total
MA1	2	6%
MA2	3	9%
SC1	2	6%
SC2	5	16%
SS1	0	0%
SS2	2	6%
SP1	1	3%
SP2	2	6%
EL1	2	6%
EN1	3	9%
EN2	5	16%
EN3	0	0%
EN4	5	16%

Many of the teachers interviewed showed little to no hesitation on deviating from the

district's mastery-based grading policy. Technical issues, sympathy for students, the time it takes to enter grades, and other issues came up from the participants. EN4 states that they are not following it due to technical issues, not necessarily because of other reasons: "I deviate from [mastery-based grading] policy most because of the technical issues and I also have other concerns but I don't know if I would identify those other concerns as a reason why I do not always follow it." Whereas EN2 does not believe mastery-based grading allows for grading rigorous tasks after students have already mastered concepts and/or standards:

No, I do not [always use mastery-based grading]. You know, there are exceptions. Sometimes I'll assign extra credit for certain assignments. And it's maybe a student has already demonstrated mastery at a certain level of rigor but you know, they finished early and I might extend the rigor. So maybe it's not necessarily mastery based because they've already demonstrated mastery, but now they still can increase the level of rigor in that regard. (EN2)

And MA5 chooses to deviate because they factor behavior into the gradebook: "I decide to deviate from mastery-based grading when I'm either doing interventions or trying to track maybe like behavior like if the student is doing the assignments or not then I include that in the gradebook." Other concerns, such as the time it takes to enter grades was expressed by EL1:

. . . sometimes it could just honestly take too long and you might just want to throw in the grades that are like quick and easy to like the standards, right? Like as a teacher, and again, I don't want it to sound like I'm just being lazy. But yeah, teachers are very busy. Teachers have a lot on their plate. And sometimes it might be easier to just throw in the standard grades because that's what air quotes you can kind of say are like, what's more important, right? Is like, can these students have these standards? What does above and

beyond isn't necessarily like documented or charted. Those are being kind of some of the reasons I guess that you might not put in would just be like time, effort. (EL1)

And, EL1 is the only participant to state a concern with the accountability aspect of entering grades as they mention they need to follow the rules by those higher up:

At the end of the day, I have a job to do. I have to follow the rules given to me by those higher up. Like I said, do we always put in those grades? Not necessarily. What's asked of me at the bare minimum is to put in the standard grades. Does that I mean I do the bare minimum on my job all the time? No. I'd make sure I try to excel where I can. (EL1)

Although SP1 states they do not always follow the mastery-based grading policy, they did indicate that it's because they have sympathy for the students:

I grade a little bit differently. I probably shouldn't be, but I think a lot has to do with how I am as an individual. Like, feeling bad and having a lot of sympathy for them. Or doing whatever I can to help them. So no, I don't always follow the policy. (SP1)

Many teachers provided reasons or justifications for their deviations away from the adopted mastery-based grading policy; however, some teachers were more defiant and expressed that they will do as they wish such as EN1: "I will interpret the policy the way I want to." And SC2 stating that they are willing to embrace mastery-based grading on the surface because it is easy to manipulate:

I'm okay with any of the policies because you can manipulate it. So even though you are mastery-based grading, I can grade how I want and then plug it into where the standards fall. So, it can be manipulated. Just because it's standards-based, or percentage-based, grades are kind of like robbing Paul to pay Peter, it can be manipulated. (SC2)

Notably, on the questionnaire 84.5% of respondents indicated that they agree or strongly agree to the 33rd question, “I have my own grading procedure.” The high number of participants indicating that they have their own grading procedure highlights that they may not be using mastery-based grading on a consistent basis as they have their own grading procedure they use instead.

Theme 2.2: Behavior is often a consideration when awarding grades.

By design, behavior is not a consideration when using mastery-based grading. Although behavior should not be a consideration for grades when using MBG, it was a common topic in many of the interviews. Table 8 shows the number of codes by participant in this theme.

Table 8

Code frequency by participant for theme 2.2

Participants	# of Codes	% of Total
MA1	7	18%
MA2	1	3%
SC1	1	3%
SC2	10	26%
SS1	1	3%
SS2	3	8%
SP1	5	13%
SP2	0	0%
EL1	4	10%
EN1	3	8%
EN2	3	8%
EN3	1	3%
EN4	0	0%

A few of the teachers interviewed expressed that they often consider behavior when assigning student grades. MA5 understands that it is not aligned with mastery-based grading, but chooses to factor behavior into the grades regardless: “I decide to deviate from mastery-based

grading when I'm either doing interventions or trying to track maybe like behavior like if the student is doing the assignments or not then I include that in the gradebook." EN2 states that behavior factors into their gradebook in attempts to change behavior: "I had thought that, you know grading based off their effort and their behavior and performance would be conducive to increased targeted behavior." And SP1 states that behavior has been a consideration for grades because they, as a teacher, have felt helpless with the behavior in the classroom and needed an incentive for the students:

I've felt really helpless at times, so I said I'm giving you grades on your behavior. I gave the students a rubric and I said how many times did you feel like you interrupted the classroom? They were pretty honest, but I asked them to rate themselves on the rubric. Some of them were honest and said 'Oh well' that it was negatively impacting their grade. After they actually saw the grade, though, that's when they took it more seriously and some behaviors changed. (SP1)

One teacher, SC2, acknowledges that they have tried to distance their gradebook from behaviors but that behaviors usually factor in to student grades in their classroom:

I think behavior plays a part in grades because some teachers say they don't grade on behavior, but it's very subjective. And I have done that, unfortunately. Behavior plays a role in poor academics; I believe as well. But yeah, over my years, I've tried to get away from that, but it always comes back. So, I like the idea of having like an effort grade that measures behavior and also a separate academic grade. (SC2)

On the questionnaire that study participants completed, there was an average of 58.2% of respondents who indicated either agree or strongly agree on the following questions that had statements that were aligned with behaviors playing a role in grades, not mastery: 9) Grading can

encourage good work by students; 16) High grades can motivate students to learn; 17) I consider student effort when I grade; 18) I give higher report card grades for students who show greater effort; 19) I will pass a failing student if he or she puts forth effort; 20) Grades are based on students' completion of homework; and 21) Grades are based on the degree to which students participate in class. Notably, 84.7% of respondents indicated that they strongly agree or agree to the 17th question, "I consider student effort when I grade."

Theme 2.3: Teachers have concerns with grade inflation.

Many teachers discussed concerns with grade inflation. Oftentimes the concerns with grade inflation were coupled with concerns regarding a minimum grading policy of 50% as the lowest grade for any assignment or assessment, which was seen in the responses detailed in Theme 1.2. Table 9 details the number of codes by participant for this theme.

Table 9

Code frequency by participant for theme 2.3

Participants	# of Codes	% of Total
MA1	0	0%
MA2	1	7%
SC1	2	13%
SC2	2	13%
SS1	1	7%
SS2	1	7%
SP1	2	13%
SP2	0	0%
EL1	1	7%
EN1	1	7%
EN2	2	13%
EN3	0	0%
EN4	2	13%

Another teacher, SP2 had concerns with grade inflation because certain students may not be able to excel with a mastery-based grading policy and then they would use the students' accommodations to support with a better assignment grade:

The expectation might not necessarily be that they (students that have an IEP) are able to complete a grade-level writing assignment at mastery but the level they can complete it.

So, I would give a student an A or B within the parameters of their accommodations and/or level. (SP2)

Interview questions 7-10 were built to address the third and final research question. The following theme emerged directly from the study participant's responses.

RQ 3: How do secondary teachers' personal beliefs about grading student work factor into successfully implementing the district's mastery-based grading policy?

Theme 3.1: Teachers' personal views do not always align with mastery-based grading.

The teachers interviewed in this study had personal views that varied, but the common theme was that their views did not necessarily align with mastery-based grading. Table 10 shows the number of codes represented by participant for this theme.

Table 10

Code frequency by participant for theme 3.1

Participants	# of Codes	% of Total
MA1	7	17%
MA2	2	5%
SC1	1	2%
SC2	3	7%
SS1	0	0%
SS2	2	5%
SP1	2	5%
SP2	2	5%
EL1	3	7%
EN1	4	10%
EN2	5	12%
EN3	4	10%
EN4	7	17%

MA1 expressed that grades should focus on behavior and life skills:

Grades should be based on their behavior and life skills and stuff like that, because I do think that, you know, there's a lot of factors that go into play for students' grades, you know, a student if I guess for me, it just doesn't make sense that a student can come to school or not come to school, do whatever they want, act however they want, they can be, you know, suspended here and there, can be in ISS, do inappropriate things at school, they can break school protocols, guidelines, all that kind of stuff, but then yet still pass a class and still have the right to move on to further education when they have not demonstrated any other area other than they understand the content. (MA1)

And SS2 believes in focusing on something other than mastery as well and shared that effort should be a priority in grading: "I think that grades should reflect a student's

effort not necessarily their mastery and it can be differentiated between individual students.”

Two teachers spoke not about their own feelings, but about some of the views their colleagues have. MA2 stated “It’s hard for some teachers to justify a student having an A in the class but maybe they’re never there for whatever reason or have an A in the class but their behavior is not very good, right?” and SC1 acknowledging that some colleagues believe mastery-based grading paves the way for cheating:

And the biggest obstacle they see is cheating. They see that mastery-based grading gives kids permission to not work hard, to mess around and play on their phones and to cheat off their friends and I will say that if they are left unchecked, they will cheat. (SC1)

Other teachers interviewed stated concerns surrounding the lack of autonomy in mastery-based grading. EN4 shared that mastery-based grading takes autonomy away and because of that they are concerned about teacher retention:

I believe that teacher retention is a very big problem we have, and I from personal experience and some of what I have read know that teachers’ sense of autonomy is a great determining factor of whether or not they will return. If they feel more autonomous, they’re more likely to return, and I feel like having these strict controls over the gradebook and how I can evaluate my students is taking some autonomy away from me. Not only do I have to evaluate my students based on standards that are made by people that don’t know my students, I also don’t have any flexibility to create a grading and evaluating system that makes sense to me in my mind. (EN4)

Similarly, SP2 shared concerns with the lack of autonomy:

I think that demographics everywhere are different, right? So many things per each school can be so different that I just think that saying one thing is the way that everyone is supposed to do it. Nothing in education is like that. Everything's supposed to be individualized, right. So not individualizing one aspect where everything else is doesn't really make sense. (SP2)

And lastly, a group of teachers shared that their personal views do not align with mastery-based grading because they do not believe in the power of grading and believe there are better ways to communicate student academic achievement. EN3 shared with the primary investigator what they envision for grades:

At my little school that I have created in my mind, we don't do grades like that [mastery-based grading]. We learn and we get feedback, kind of like at our job, I was gonna use that as an example. We do kind of get a grade in the end, but I don't get a daily grade, I might get feedback along the way and then I make adjustments. And I learned and I grew from that. I don't think we need to give a grade for everything students do. (EN3)

And, SC2 stated clearly that grades are useless: "I think grades honestly are useless. However, students have been trained to want good grades." Teachers have varied personal views when it comes to awarding student grades, but the shared theme in the responses is that teachers' personal views about grades do not align with mastery-based grading.

Theme 3.2: Teachers experience psychological discomfort when assigning student grades.

Throughout the interviews, the primary investigator noticed some psychological discomfort, hesitation on answering some of the questions, and even educators verbalizing their

lack of comfort in the fact that they, as a teacher, do not follow the district’s mastery-based grading policy. Table 11 addresses the number of codes by participant in this theme.

Table 11

Code frequency by participant for theme 3.2

Participants	# of Codes	% of Total
MA1	2	11%
MA2	1	6%
SC1	0	0%
SC2	2	11%
SS1	0	0%
SS2	2	11%
SP1	0	0%
SP2	3	17%
EL1	2	11%
EN1	1	6%
EN2	1	6%
EN3	2	11%
EN4	2	11%

Minimum grading policies were brought up by teachers again. Psychologically discomfort and ethical considerations weighed on teacher’s minds, EN3 said:

If I had to give a 50% if a kid turns in a blank paper, I would have a problem with that. I like my temporary zero and then I support them to get something better. I mean, what you can do the same thing with a 50, but I think it’s miscommunication. (EN3)

And MA1 echoed those sentiments by saying:

And for me, it was hard because I’m watching somebody do the bare minimum and maybe even below the bare minimum but still passing the class. And so, there were at times where I found myself maybe giving zeros to the student in assignments that they didn’t complete, but they were not even in class for the assignments, so it’s not really fair

for me to give them a zero when other students who were there got a good grade even if they were just there and did not complete the assignment. So, I will say, it's a constant wrestling process and back and forth that I try to do, but at the end of the day, I think that your obligation as a teacher is one that puts students first and I think a lot of teachers struggle putting the school's grading policy and the students grades before their ego.

(MA1)

Although minimum grading was not the area of discomfort for SS2, this teacher did express their reservations with the grading policy because they are struggling to see the meaning of grades, as they do not believe they are an accurate measure of intelligence or mastery:

I don't always know that grades are a reflection of intelligence or how likely the student is going to college. I think they're more of a reflection of effort and relationship with the teachers. And then just, it can be how well you work with other people. It's not a reflection of mastery. (SS2)

Other teachers' psychological discomfort with mastery-based grading lies in the area that mastery-based grading takes up more of their time, as a professional, leading to burnout:

It frustrates me that even though I understand our school is like a progressive school and we're trying things out I do think that there are things that are conventional because they work because they can make the lives of the teacher easier, which I think especially in student centered learning, I think it's sometimes a teacher as a human being with limits and capacities is forgotten, and they are expected to be able to do anything and everything that is demanded by new grading policies. (EN4)

And SP2 has discomfort with the fact that they feel as if they are losing control of their own classroom: "I feel like I should be given the ability to manage my own classroom the way I

feel like my own classroom should be best managed based on the students I have which can even change each year.” While also acknowledging “And if you don’t do it, then you’re not aligning with where you work, which can cause problems, because then the other teachers are [following the MBG] and you’re not and that difference can cause confusion with students.”

And lastly, EN2 has always tried their best to follow policy but does not feel like they can always follow policy when they see areas for improvement, so they appropriately challenge the grading system in attempts to fix the inadequacies:

I definitely try to adhere to all policies as much as I can. But whenever there’s something I think that could be done better, I typically feel comfortable with challenging it through the appropriate channels. I definitely consider myself a critical thinker. And I think that my ideas are a value for growth within the school or the organization. And sometimes maybe rules can be improved and so I definitely challenged them. (EN2)

Theme 3.3: Teachers consider a student’s personal challenges (oftentimes considering the student’s status as a student with an IEP or a student receiving ELL services) when awarding grades.

When grading students’ work, the teachers interviewed expressed much care and consideration for some of their students in special populations. Table 12 shows how many codes occurred during this theme by participant.

Table 12

Code frequency by participant for theme 3.3

Participants	# of Codes	% of Total
MA1	2	10%
MA2	0	0%
SC1	0	0%
SC2	1	5%
SS1	2	10%
SS2	3	15%
SP1	3	15%
SP2	4	20%
EL1	2	10%
EN1	2	10%
EN2	0	0%
EN3	1	5%
EN4	0	0%

SS1 stated concerns around those students who have experienced trauma, and consideration for the negative mental health aspects that grades can have on students:

I work in an area where many students experience trauma. Not all of our kids come from backgrounds where the importance of education is stressed. Just considering the circumstances and how they're different and how they might need extra time for any number of reasons whether it's by grade level in math or getting their assignments done on time because they were working jobs after school. I never had to worry about having a job when I was in middle school, but our kids do. It's hard for them to get their homework done, because they are providing daycare to younger siblings and it's difficult to tell our students to study more and work on homework more when they have many responsibilities with families depending on them. And I've just become more aware of the potential negative health effects or mental health effects. I try to make sure I'm

always finding something to give kids because more often than not, they have done something. I'm not giving a C or A or B for no reason, but I'd rather especially be in the position where I'm being considered for what I do know, not graded for what I don't know. I look for the opportunities to see what they've accomplished, even if it's a little and then work with them to give more and give better. (SS1)

Similarly, SP1 has sympathy for the students they teach which comes across in the way they award grades:

I grade a little bit differently. I probably shouldn't be, but I think a lot has to do with how I am as an individual. Like, feeling bad and having a lot of sympathy for them. Or doing whatever I can to help them. So no, I don't always follow the policy. (SP1)

Students that received specialized services in the area of special education and English language learning were on the mind of SS2:

I would say that in terms of mastery, it is definitely differentiated. And it can depend on the student and if they're an ELL student, or if they're SPED, or if they're a high achiever. I don't always give the 50%, as sometimes they go quite a bit lower if they do not turn something in. But I do give students multiple chances to do assignments to make it up or to do something to replace that zero but don't always follow that with fidelity. (SS2)

SS2 continued to share that they have a bias for those students who may not be the most academically gifted in the class, but they work really hard to get quality work turned in:

So I've had a few students where there will be an assignment and they ask me a lot of questions about it, they try to think through it with me. And I could tell that their brains are working and then sometimes I have bias toward them. Because I feel like they're

really immersing themselves and the content they are trying to understand; it's not superficial and there's just some students that really pull at your heartstrings to see someone here after school tutoring and trying really hard. And so, for those students, I really have a bias where there's other students who just get their work done in 20 minutes, then they go on their computer playing a game and they're not really trying to really understand the breadth and the depth of the subject. They're just here to get a grade and they just want to move on. So, there's definitely some sort of bias and stuff if I have a better relationship with the student. (SS2)

Summary

Chapter Four provided a summary of the research findings derived from both the questionnaire responses and the interviews. Several themes emerged in consideration to RQ1: How do secondary teachers understand grading student work with the context of the district's mastery-based grading policy? The three most prevalent themes in thinking about RQ1 were theme 1.1, diverse views exist among teachers regarding mastery-based grading; theme 1.2, teachers have concerns with minimum grading policies; and theme 1.3, grades are used as a communication tool.

Considering RQ2: How do secondary teachers practice grading student work within the district's mastery-based grading policy? several themes emerged. The most prevalent themes that emerged in relation to RQ2 were theme 2.1, teacher will deviate from the district's grading policy without much hesitation; theme 2.2, behavior is often a consideration when awarding grades; and theme 2.3, teachers have concerns with grade inflation.

And with consideration to RQ3: How do secondary teachers' personal beliefs about grading student work factor into successfully implementing the district's mastery-based grading

policy? several themes emerged. The most prevalent themes that emerged in relation to RQ3 were theme 3.1, teachers' personal views do not always align with mastery-based grading; theme 3.2, teachers experience psychological discomfort when assigning student grades; and theme 3.3, teachers consider a student's personal challenges (oftentimes considering the student's status as a student with an IEP or a student receiving ELL services) when awarding grades.

In Chapter Five, the primary investigator will thoroughly examine the study, illustrating its contribution to the existing body of literature regarding grading practices in general and mastery-based grading in particular. And finally, practical implications and study limitations will be offered in the form of recommendations for future research.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

Three years prior to the study, a medium-sized Arizona charter school network serving approximately 8,000 full-time students and another 20,000 part-time digital students decided to change its grading policy to be more aligned with mastery-based grading. The change was gradual, first educating the teachers about the changes and investing in the development of a mindset for why these changes were important. This was followed by training on how to handle the logistics of the digital gradebook tool that was used. A purpose of the change that was shared was linked to the need to standardize grading practices and to help mitigate the negative effects that COVID-19 had on grades while students were working on their schooling from home.

The primary investigator had a unique insight into these grading changes having been a classroom teacher at the time of the grading policy change. The researcher decided to measure teacher perceptions of grading policy changes and grading practices. Thirteen teachers took part in the study by completing a questionnaire (Appendix D) about their perceptions of grading practices. This was followed by taking part in a semi-structured interview (Appendix E) with the primary investigator.

Summary of Findings and Conclusion

The primary investigator found several themes when exploring teacher perceptions of grading policies and practices. The themes found came from the data received from the semi-structured interview and the questionnaire participants completed. Each research question had three fully developed themes.

Research Question 1 (RQ1) Summary and Discussion

Both of the interviews and questionnaires helped to develop the themes for RQ1. The themes that emerged in answering RQ1: How do secondary teachers understand grading student work in the context of the district's mastery-based grading policy? were as follows:

1. Theme 1.1: Diverse views exist among teachers regarding mastery-based grading
2. Theme 1.2: Teachers have concerns with minimum grading policies
3. Theme 1.3: Grades are used as a communication tool.

Diverse views exist among teachers regarding mastery-based grading. Interviews with study participants reveal a wide range of concerns, positive features, and levels of understanding related to mastery-based grading. Some participants demonstrate a solid understanding, while others acknowledge a lack of comprehension. The interviews highlight varying views on the support provided by school and network leadership for MBG implementation with fidelity, with some participants feeling that more training and research efforts are needed. Additionally, the questionnaire responses indicate that teachers hold diverse opinions on grading, with eight specific questions highlighting diversity in thought.

Teachers have concerns with minimum grading policies. While many study participants understood the policy's purpose as supporting student grades and motivation, there was some ambiguity about its underlying reasons. Some teachers expressed concerns about miscommunication with families and students, suggesting that using temporary zeros or 50% grades might not effectively convey the reality of the situation. Concerns also were raised about fairness, with some teachers feeling that students who put significant effort into their work might be disadvantaged by such policies, especially in regards to scholarships. Furthermore, there was a broader societal consideration, as some participants questioned the policy's impact on students' work ethic and readiness for life beyond graduation.

Grades are used as a communication tool. Many teachers emphasized the importance of grading in accurately conveying student data to both students and parents. Teachers see grades as a tool to track progress and identify areas where students may need additional support. The questionnaire responses support this perspective, with a majority of teachers agreeing that grades are a crucial communication tool for students, parents, and teachers. Overall, educators believe that grades have a crucial function in promoting effective communication to students, parents, and teachers. Notably, a significant percentage of respondents to the questionnaires believe that grades communicate areas that instruction can improve, underscoring its role in informing teaching practices.

In Chapter Two, Grant and Green (2013) stated that historically letter grades were exclusively used as a means of communication between higher education institutions, serving as a simplified assessment tool that institutions could use to convey students' academic achievements. Educators in this study expressed that letter grades are still being used as a communication tool today, to convey a message to the instructor themselves, parents, students, and higher education institutions. A simple letter grade clearly communicates academic achievement to many diverse stakeholders, but do any of those stakeholders check into the validity of such grade?

Research Question 2 (RQ2) Summary and Discussion

Both interviews and questionnaires helped to develop the themes for RQ2. The themes that emerged in answering RQ2: How do secondary teachers practice grading student work within the context of the district's mastery-based grading policy? were as follows:

1. Theme 2.1: Teachers will deviate from the district's grading policy without much hesitation.

2. Theme 2.2: Behavior is often a consideration when awarding grades.
3. Theme 2.3: Teachers have concerns about grade inflation.

Teachers will deviate from the district's grading policy without much hesitation. In interviews, many teachers provided reasons for why they deviate from a mastery-based grading policy, including technical issues, sympathy for students, time constraints, and the inclusion of behavior in grading. Some teachers, like EN4, cited technical issues as their primary reason for not following the policy, while others like EN2 believed that mastery-based grading did not accommodate grading rigorous tasks after students had already mastered concepts. EL1 highlighted the time constraints teachers face and expressed concerns about accountability. SP1, on the other hand, deviated due to sympathy for students.

Despite these reasons, some teachers, like EN1 and SC2, showed a more defiant attitude toward the grading policy, indicating that they interpret or manipulate the policy according to their wishes. A significant percentage of respondents expressed that they have their own grading procedures, suggesting that they may not consistently follow the mastery-based grading, further emphasizing the widespread presence of deviations from the policy.

Behavior is often a consideration when awarding grades. Several teachers admitted to including behavior into student grades despite the misalignment with mastery-based grading. For example, MA5 included behavior when doing interventions, SP1 used behavior as an incentive for students, and SC2 acknowledged that behavior often influenced grades in their classroom.

The questionnaire responses further substantiated this theme, with a majority of respondents agreeing or strongly agreeing with statements indicating that behavior plays a role in grades, such as encouraging good work, motivating students, considering effort, and basing grades on homework completing and class participation.

Teachers have concerns with grade inflation. Some teachers expressed worries that this policy, coupled with grade inflation, may undermine the integrity and accuracy of student grades. Additionally, concerns arise when accommodating students with IEPs, as some teachers may feel a sense of sympathy that leads to a sense of pressure to provide higher grades to align with their accommodations, potentially leading to grade inflation.

Going back to Chapter Two, Slavov (2013) argues that recently ‘As’ fail to accurately communicate exceptional academic achievement due to grade inflation. It’s rather ironic that educators have concerns with grade inflation in the context of mastery-based grading, as some of the biggest advocates for MBG believe that grade inflation is a non-issue if the policy is followed with fidelity. Gallegos (2019) conveys enthusiasm for mastery-based grading, highlighting the emphasis on deeper learning over the pursuit of high letter grades, with the primary focus being on mastering the content or standards. Furthermore, advocates express that MBG should remove any influence on grades that do not directly pertain to the standards, including behavior, attendance, and practice homework and they place a large emphasis that MBG should only reflect what students know or content they have mastered (Cox, 2011; Dueck, 2014b; Erickson, 2011b; Tierney et al, 2011).

Research Question 3 (RQ3) Summary and Discussion

Both interviews and questionnaires helped to develop the themes for RQ3. The themes that emerged in answering RQ3: How do secondary teachers’ personal beliefs about grading student work factor into successfully implementing the district’s mastery-based grading policy? were theme 3.1, teachers’ personal views do not always align with mastery-based grading; theme 3.2, teachers experience psychological discomfort when assigning student grades; and theme 3.3,

teachers consider a student's personal challenges (oftentimes considering the student's status as a student with an IEP or a student receiving ELL services) when awarding grades.

Teachers' personal views do not always align with mastery-based grading. Some teachers believe that grades should reflect factors, such as behavior, life skills, and individual effort, rather than just mastery of academic standards. Others express concerns about the lack of autonomy that comes with MBG, feeling that it takes away their ability to individualize grading systems to their students' needs. Some teachers even question the value of grades altogether, suggesting that alternative methods of providing feedback and assessing student achievement may be more meaningful. In essence, teachers' personal beliefs often diverge from the principles of mastery-based grading.

Teachers experience psychological discomfort when assigning student grades. Many teachers expressed unease, hesitancy, or discomfort with certain aspects of mastery-based grading. Some teachers struggled with minimum grading policies, feeling that assigning a 50% grade for incomplete work did not align with their personal beliefs or effectively communicate student performance. Others found discomfort in the time-consuming nature of mastery-based grading, which participants felt could lead to burnout. Additionally, some teachers felt a loss of control in their classrooms due to the rigid policies associated with MBG, leading to discomfort and frustration. Overall, this theme highlights the various psychological challenges teachers face when implementing grading systems they are asked to adhere to.

Teachers consider a student's personal challenges (oftentimes considering the student's status as a student with an IEP or a student receiving ELL services) when awarding grades. Many teachers displayed empathy and consideration for students who face various difficulties, such as trauma, family responsibilities, or language barriers. Teachers

acknowledged the potential negative mental health effects of earning poor grades and expressed a desire to support students' unique needs. Some teachers differentiated grading for students with IEPs or those students receiving ELL services, allowing for flexibility and multiple ways to succeed. Additionally, teachers admitted to having biases in favor of students who exhibit a strong work ethic and a genuine effort to understand the material without considering the level of mastery demonstrated.

Keeping Chapter Two in mind, research has shown that educators do adapt their teaching methods in accordance with their expectations of a student which these adapted expectations lead to adverse effects on female, Black, and Hispanic students (Copur-Gencturk et al., 2020). Sufficient documentation exists to prove that grades do impact how students perceive and feel about themselves (Harter & Jackson, 1993; Hoge et al., 1990; Rosenberg et al., 1989; Zimmermann et al., 2013). The teachers that participated in this study were well aware of the negative impacts that grades can have on a student, and were frankly sympathetic to that notion. Additionally, teachers admitted that they had bias for students that worked hard yet still did not show mastery. What would the research say about a student's academic performance that consistently had teachers that were sympathetic to their personal challenges and therefore had lower expectations for that student?

Implications

Theoretical implications. This research employed Festinger's (1962) theory of cognitive dissonance (TCD) as a framework to gain deeper insights into the complexities of teacher perceptions of grading policies, specifically mastery-based grading policies and grading practices. It aimed to investigate how these perceptions influence the grading practices of teachers. TCD was used as a conceptual framework that guided the researcher's perspective

throughout the study. The rationale for choosing this theory stems from its capacity to offer a framework for comprehending the potential psychological unease a teacher may encounter when required to act in a manner conflicting with personal views, especially in the context of implementing a mastery-based grading policy. Trinidad (2018) highlighted the potential dissonance teachers may face between their individual ethical values and the pressure of adhering to school districts' grading requirements, with school policies often being identified as a prominent source of such conflicts. The responses by study participants showcased a feeling of psychological discomfort, so much so that it is represented in theme 3.2: teachers experience psychological discomfort when assigning student grades. This psychological discomfort that teachers are experiencing could lead to negative outcomes for the entire education system, including teacher burnout aiding in an already depleted labor force, reduced job satisfaction (Agyapong et al., 2022), decrease in performance, resistance to innovation (AL-Takhayneh et al., 2022), and many other negative outcomes.

Festinger (1962) claimed that when people experience cognitive dissonance, they often modify what they believe and how they act to reduce psychological unease and regain balance. This study clearly identified that teachers have expressed feelings of psychological discomfort in theme 3.2 and have also displayed a willingness to diverge from the school district's grading policies without much hesitation, as observed in theme 2.1. Taking into account Festinger's theory of cognitive dissonance, it is probable that teachers are straying from the district's grading policies because they are experiencing psychological discomfort and aiming to reestablish harmony.

Practical implications. The practical implications of this study are highlighted in the themes, which every educational leader operating in a secondary setting should have a familiarity

with as these are the perceptions secondary educators have regarding grading policies and practices.

Building a mastery-based grading policy that secondary teachers follow with fidelity requires thoughtful planning and intentional professional development. The following areas need to be further developed in order to have a successful mastery-based grading policy in the network of schools where 13 secondary teachers were study participants:

1. Understanding of mastery learning. Secondary teachers need a strong knowledge of the fundamental concepts and underlying philosophy of mastery learning, which embodies the idea that every student can attain proficiency in fundamental learning goals or standards. The idea that every student can attain proficiency allows for instruction to be tailored and adaptable in order to meet the diverse needs of each student. This study highlighted that more understanding of mastery learning and mastery-based grading is needed with the fact that four study participants explicitly demonstrated through their interview answers that they did have a solid understanding, whereas six study participants stated they did not have a strong understanding of what mastery-based grading is. Themes 1.1, 2.2, 2.3, and 3.3 are all strong indicators that a in depth understanding of mastery learning would support the successful implementation of mastery-based grading.
2. Assessment literacy. Teachers should have the expertise to build formative and summative assessments that accurately gauge a student's level of mastery of particular learning objectives, including grading criteria, test items, rubrics, etc. More professional development in assessment literacy would better prepare secondary teachers on building assessments quickly and effectively, alleviating some of the concerns from study participants such as EL1 who expressed concerns about mastery-based grading because

of the time constraints: “. . . sometimes it could just honestly take too long and you might just want to throw in the grades that are like quick and easy to like the standards, right? Like as a teacher, and again, I don’t want it to sound like I’m just being lazy. But our, teachers are very busy. Teachers have a lot on their plate.” Stronger assessment literacy is directly related to themes 2.1, 2.2, and 3.3.

3. Feedback and communication. Secondary teachers should have adequate training in providing effective feedback to students and parents about progress toward mastery. Theme 1.3 is directly related to the need for additional professional development in the areas of feedback and communication to successfully implement a mastery-based grading policy.
4. Technology integration. More familiarity is needed with educational technology tools that can assist with mastery-based learning as well as familiarity with learning management systems, data analysis tools, and student information systems, such as Infinite Campus, where grades are entered and stored. Successful technology integration can be directly tied to theme 2.1 as EN4 stated: “I deviate from [mastery-based grading] policy most because of the technical issues and I also have other concerns but I don’t know if I would identify those other concerns as a reason why I do not always follow it.” Further professional development and a focus on technology integration can provide needed supports for secondary teachers.

Policy implications. Theme 2.1: Teachers will deviate from the district’s grading policy without much hesitation could lead to policy implications that relate to monitoring the implementation of grading policies, updated teacher evaluation tools to increase accountability, and further alignment with the school or network mission.

1. Monitoring the implementation of grading policies. The results of this study may lead to an increased focus on monitoring the implementation of grading policies to provide support to secondary teachers, accountability, and assistance in the successful implementation of a mastery-based grading policy. School administrators may have a heightened responsibility to oversee and evaluate the implementation of grading policies within the school. This could include classroom observations, evaluating assessment data, and verifying the successful adherence to grading policies.
2. Updated teacher evaluation tools. School leaders, including district and site-based leadership, may have a heightened responsibility to adapt teacher evaluation tools to include accountability measures related to adhering to following the district-approved grading policy.
3. Intentional alignment with the school mission. This study shows the many barriers that exist to a successful implementation of a district-wide grading policy. These barriers may lead to school leaders trying to implement a district-wide mastery-based grading policy to intentionally align all messaging, professional developments, and student initiatives to better support the successful implementation.

Recommendations for future research

Upon completing this study, the researcher contemplated various topics that could contribute to ongoing research targeting teacher perceptions of grading policies and practices.

The researcher proposes the following foci as future research recommendations:

1. Structural: This study largely focused on a mastery-based grading system. It would be of interest to have teacher perceptions documented about new and emerging grading

systems and policies being implemented around the country, such as a portfolio-based grading system.

2. Positional: This study's results revealed that teachers feel psychological discomfort due to grading policies and practices. For further research, a deeper exploration of all aspects of the teaching profession that contribute to psychological discomfort and the effects this has on teacher retention.
3. Situational: This study's results revealed that bias plays a role when awarding student grades, to some extent. Further research on the effects and impacts that teacher bias can have on students' educational journey should be explored, as well as how to limit the impact of teachers' bias.

Conclusion

This study aimed to identify secondary teachers' viewpoints concerning grading policies and practices within a charter school district in the Southwestern region of the United States. This study centered around the distinctive blend of external factors, surrounding a charter organization's mastery-based grading policies. It also included internal factors, such as teacher perceptions on these grading policies and their combined influence on grading practices and procedures. Gaining deeper insights into teachers' engagement with grading policies is crucial, as this information can provide valuable context for school leaders. It not only has implications for how teachers might respond to other educational policies but also plays a pivotal role in facilitating strategic implementation of any project, and thus enhancing teacher support as discussed by Trinidad (2018).

During a time in our society when more educators are regularly being asked to do more with less; providing mental health resources with inadequate social worker staffing as reported

by the School Social Work Association of America (2013), providing academic interventions to students without adequate funding to hire reading and math interventionists, providing basic healthcare due to schools not having a nurse or health aide, and teaching more students than ever due to the historic teacher shortages in the state of Arizona; educational leaders need to be cautious about asking teachers to do more without adequate support. Reimagining a grading policy is important work, Isnawati & Saukah (2017) expressed that providing accurate grades is one of the most important responsibilities that a teacher has, as grades impact many aspects of a student's life including future employment opportunities, student's mental health (Chamberlin et al., 2018), and can prevent or encourage a student from dropping out of school (Nield, et al., 2008). Due to the importance that grades have and understanding that educators are juggling many tasks, school leaders need to invest in systems that support teachers and include more diverse voices at the decision-making table.

Investing in systems that support teachers needs to include having teacher voices at the decision-making table both as a measure of support and as a strategic measure. Educators are experiencing cognitive dissonance when it comes to grading policies because they have been told to follow mastery-based grading policies without having their voices heard and without appropriate investments in educators' mindsets. What positive stories have been shared about students in the context of mastery-based grading?

The interviews conveyed uncertainty about the grading policy, with eight study participants expressing they were not confident in their knowledge on MBG and 44% of the remarks during the interviews were negative. Including more diverse voices at the decision-making table allows for educational leaders to understand the barriers to implementation from

the teacher perspective, and allows for educators to have their voice heard and have a say in building the policy.

Notably, this study had 11 of 13 study participants that expressed they deviate from the mastery-based grading policy. What is being done at the district level to support better implementation of this policy? Does the district level leadership team know that successful implementation of this policy is a concern? Arguably, there are many policies that are not being followed with fidelity throughout this school district and districts across the country, but not many policies impact student lives as much as grading policies. Without an adequate investment into teachers' mindsets surrounding grading, teachers' personal views are not likely to change as their grading practices have already been documented through their traditional grading practices, riddled with behavior-based grades, biased grading practices, and many zeros or deducted points for late work and missing assignments that do not represent mastery. Grading policies that educators do not believe in will experience barriers in the form of cognitive dissonance which Festinger (1962) clearly states that individuals will likely modify their beliefs and change their actions in order to cease psychological discomfort. Changing actions, related to mastery-based grading, results in traditional grading practices. Frequently, professional development opportunities tend to be rich in information but lack practical guidance, leaving educators to interpret and apply the new knowledge on their own. This can result in various issues including the potential that the new information may never influence teachers' professional practices. How do educational leaders and policy makers address cognitive dissonance and address the successful implementation of new and changing policies?

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APPENDIX A: IRB APPROVAL



Office of Research Compliance

Institutional Review Board for the
Human Research Protection Program

525 S Beaver St
PO Box: 4062
Flagstaff AZ 86011
928-523-9551
<https://www.nau.edu/IRB>

To: Patrick Gibbs
From: NAU IRB Office
Approval Date: June 9, 2023

Project: SECONDARY TEACHERS' PERCEPTIONS OF GRADING POLICIES
AND PRACTICES: A PHENOMENOLOGICAL APPROACH
Project Number: 2055707-1
Submission: New Project
Action: APPROVED
Project Risk Level: MINIMAL RISK
Approval Expiration Date: June 9, 2028

Review Category/ies: **The project is not federally funded or supported and
has been deemed to be no more than minimal risk.**

This project has been reviewed and approved by an IRB Chair or designee.

- Northern Arizona University maintains a Federalwide Assurance with the Office for Human Research Protections (FWA #00000357).
- All research procedures should be conducted in full accordance with all applicable sections of the guidance.
- The Principal Investigator should notify the IRB immediately of any proposed changes that affect the protocol and report any unanticipated problems involving risks to participants or others. Please refer to Guidance Investigators Responsibility after IRB Approval, Reporting Local Information and Minimal Risk or Exempt Research.
- All documents referenced in this submission have been reviewed and approved. Documents are filed with the HRPP Office within IRBNet. If subjects will be consented, the approved consent(s) are available within IRBNet upon approval notification from the HRPP Office.

Important

The principal investigator for this study is responsible for obtaining all necessary approvals before commencing research. Please be sure that you have satisfied applicable external and University requirements, for example (but not limited to) data repositories, listserv permission, records request, data use agreement, [conducting University surveys](#), [data security](#), [international](#), [conflicts of interest](#), [biological safety](#), [radiation safety](#), [HIPAA](#), [FERPA](#), [FDA](#), [sponsor approval](#), [clinicaltrials.gov](#), [tribal consultation](#), or [school approval](#). IRB approval does not convey approval to commence research in the event that other requirements have not been satisfied.

APPENDIX B: STUDY PARTICIPANT INFORMED CONSENT



Office of Research Compliance

Project Number: 2055707-1
Approval Date: June 9, 2023
This stamp must be on all
consenting documents



Consent to Participate in Research

Study Title: Secondary Teachers' Perceptions of Grading Policies and Practices: A Phenomenological Approach

Principal Investigator: Patrick Gibbs

You are being asked to participate in a research study. Your participation in this research study is voluntary and you do not have to participate. This document contains important information about this study and what to expect if you decide to participate. Please consider the information carefully. Feel free to ask questions before making your decision whether or not to participate.

The goal of this qualitative research study is to gather information on how secondary teachers, who work in charter schools, in Arizona, perceive grading policies and practices. This research will help to inform school leaders and policymakers on the perspectives of teachers when making decisions related to grading policies.

There is a 40-question questionnaire that will be completed independently and an online interview with approximately 10 questions that will take 60 minutes. Due to the nature of the survey being online, the location can be comfortable for you as long as there's reliable internet. All information is confidential and only the researcher will have access to the data. There are no expected risks to you as a result of participating in this study. Your name will not be used in any report and any identifiable research data will be encrypted and password protected. You will not benefit directly from participating in this study and any information collected about you will not be used or shared for future research studies. Although there is not a direct benefit personally, this research has the potential to inform educational leaders and policymakers of teacher perceptions related to grading policies which may benefit all stakeholders involved when grading policy decisions are made.

Your responses will be assigned a code number for reasons related to confidentiality. The list connecting your name to this code will be kept in an encrypted and password protected file. Only the researcher will have access to the file. When the study is completed and the data has been analyzed, the list will be destroyed.

Each participant will be required to possess the following:

1. Study participants must be a secondary (7-12) teacher working in a charter school in Arizona
2. Study participants must have completed a minimum of one year of teaching

NAU Adult Consent Non-Federally Funded

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Consent Version: 05/14/2023

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Office of Research Compliance

3. Study participants must teach a core class (social studies, science, math, or English)

With your permission, I would like to video, and audio record the interview via Zoom so that I can make an accurate transcript. Once I have made the transcript, I will discard the recordings. Your name will not be in the transcript or my notes.

Because of the nature of the data, it may be possible to deduce your identity; however, there will be no attempt to do so, and your data will be reported in a way that will not identify you.

The information that you provide in the study will be handled confidentially. However, there may be circumstances where this information must be released or shared as required by law. Northern Arizona University Institution Review Board may review the research records for monitoring purposes.

For questions, concerns, or complaints about the study, you may contact Patrick Gibbs at (480)270-2492.

For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact the Human Research Protection Program at 928-523-9551 or online at <http://nau.edu/Research/Compliance/Human-Research/Welcome/>.

AGREEMENT TO PARTICIPATE

I have read (or someone has read to me) this form, and I am aware that I am being asked to participate in a research study. I have had the opportunity to ask questions and have had them answered to my satisfaction. I affirm that I am at least 18 years of age and voluntarily agree to participate in this study.

I am not giving up any legal rights by verbally agreeing to this form. I will be given a copy of this form.

Printed name of subject

Verbal Consent Given

Date

AGREEMENT TO BE AUDIORECORDED

Verbal Consent Given: _____

AGREEMENT TO BE VIDEORECORDED

Verbal Consent Given: _____

APPENDIX C: SCHOOL DISTRICT CONSENT

12/1/2022

Mr. Gibbs:

This letter is notification that your proposal to conduct research at ASU Preparatory Academy District has been accepted. ASU Prep values the topic presented in your research request. Please continue to keep your district contact informed regarding your research project and continue to follow guidelines outlined in the permission to request form.

Sincerely,

A handwritten signature in black ink, appearing to read "Carrie Larson", with a stylized, cursive script.

Carrie Larson
Head of Immersion Schools

APPENDIX D: STUDY PARTICIPANT QUESTIONNAIRE

Survey of Teachers' Perceptions of Grading Practices

This survey should take approximately 15-20 minutes to complete.

Directions: Please indicate your level of agreement with each of the following statements by selecting one of the following responses. Please select only one response choice per question.

Use the following key:

- 1) Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

	SD	D	N	A	SA
1. Grading is an important criterion for judging student progress.					
2. Grading has an important role in classroom assessment.					
3. Grading has a positive effect on students' academic learning.					
4. Grading practices are important measures of student achievement.					
5. Grading practices are important measures of student learning.					
6. Grading has a strong impact on 'students' learning.					
7. Grading helps me categorize students as above average, average, and below average.					
8. Grading can help me improve my instruction.					

9. Grading can encourage good work by students.					
10. Grading helps me in deciding what curriculum to cover.					
11. Grading is a good method for helping students identify their weaknesses in a content area.					
12. Grading can keep students informed about their progress.					
13. Grading provides information about student achievement.					
14. Grading documents my instructional effectiveness.					
15. Grading provides feedback to my students.					
16. High grades can motivate students to learn.					
17. I consider students' efforts when I grade.					
18. I give higher report card grades for students who show greater effort.					
19. I will pass a failing student if he or she puts forth effort.					
20. Grades are based on students' completion of homework.					
21. Grades are based on the degree to which students participate in class.					

22. Grades are based on a student's improvement.					
23. I consider student ability when grading.					
24. Grades are based on students' problem-solving ability.					
25. Grades are based on students' critical-thinking skills.					
26. Grades are based on students' independent thinking ability.					
27. Grades are based on students' collaborative learning ability.					
28. Grades are based on students' writing ability.					
29. I tend to use letters (e.g., A, B, C) rather than numbers (e.g., 95%).					
30. If a student fails a test, I will offer him/her a second change to take the test.					
31. I often give students opportunities to earn extra credit.					
32. I often look at the distribution of grades for the whole class after I finish grading.					
33. I have my own grading procedure.					
34. I often confer with my colleagues on grading criteria.					

35. Grading is the easiest part of my role as a teacher.					
36. It is easy for me to recognize strong effort by a student.					
37. It is easy for me to assess student achievement with a single grade or score.					
38. It is easy for me to rank order students in terms of achievement when I am grading.					
39. It is difficult to measure student effort.					
40. Factors other than a student's actual achievement on a test or quiz make it difficult for me to grade.					

Lin, X. (2007). *Measuring teachers' perceptions of grading practices: A cross-cultural perspective*. Retrieved from ProQuest Digital Dissertations. (UMI 3276631).
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APPENDIX E: SEMI-STRUCTURED QUESTIONS

Research Questions:	Interview Questions:	Probing Questions:
RQ1: How do secondary teachers understanding grading student work within the context of the district's mastery-based grading policy?	IQ1: What is the purpose of assigning student grades?	You said...can you explain your thinking on that?
	IQ2: What is your school or district's grading policy?	What is...?
	IQ3: What is your understanding of mastery-grading policy?	Please provide more detail about...?
RQ2: How do secondary teachers practice grading student work within the context of the district's mastery-based grading policy?	IQ4: Do you always follow the district's mastery-based grading policy when assigning student grades?	If no, when do you deviate...?
	IQ5: Have you always allowed for students to turn in missing work past the deadline?	If no, when do you deviate...?
	IQ6: Have you ever entered a "0" for a missing assignment?	If yes, please explain why...?
RQ3: How do secondary teachers personal beliefs about grading student work factor into successful implementation of the district's mastery-based grading policy?	IQ7: What are your personal views on providing grades to students?	Have your views changed throughout your teaching career?
	IQ8: What factors contributed to your perspective change?	You mentioned... as a factor, can you expand upon that?
	IQ9: How do you feel about being required to follow the mastery-based grading policy?	You just said... can you expand on that?
	IQ10: Have your views changed because you are required to follow the mastery-based grading policy?	If yes, how? If no, why not? Has this policy changed your personal beliefs at all?

APPENDIX F: PERMISSION LETTER TO USE QUESTIONNAIRE



Liu, Xing (Education)
to me ▾

Sun, Nov 13, 7:23 PM (23 hours ago) ☆ ↶ ⋮

Dear Patrick,

You have my permission to use and revise the TPGP instrument.

Good luck with your dissertation.

Xing

Xing Liu, Ph.D.
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