Teacher perceptions of an urban school's transition to standards-based grading

by

Makenzie Ryan Milner Gurss

B.S., Emporia State University, 2012 M.S., University of Central Missouri, 2014 M.S., Baker University, 2017

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF EDUCATION

Department of Curriculum & Instruction College of Education

KANSAS STATE UNIVERSITY Manhattan, Kansas

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Abstract

Standards-Based Grading is being implemented in every corner of education. Schools that take on this type of implementation progress through an extensive change in mindset. With any extensive change, it is preferable that the outcomes match the effort put in. This qualitative research examined the perceptions of four elementary classroom teachers who have implemented Standards-Based Grading and the effect it has on academic performance with the use of metacognition and goal setting strategies. Participants were two third grade teachers and two fifth grade teachers who participated in every aspect of the implementation of Standards-Based Grading. Data was collected through three interviews per participant using the Zoom Video Conferencing platform and analyzed utilizing NVivo Qualitative Data Analysis software (2020). Results indicated that the implementation of Standards-Based Grading increased clarity of the standards and grades themselves, the presence of critical thinking, and improved student autonomy.

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Chapter 1 - Introduction

Society as a whole, believes in grades. Grades are all around us, whether it be for a restaurant, hotel, movie, car, etc. Products and experiences are all rated on a grading scale. These grades are important to both the consumers and the producers. Consumers want the highest-grade product that can be afforded. When planning a vacation and picking which hotel to stay at, consumers will check to see what grade the hotel has received. The higher the grade, the better the hotel as well as a higher price tag. Consumers will choose the highest graded hotel in their price range. These grades not only tell the consumers the quality of the product, but it also tells the producers how their work aligns with the consumers' expectations. The higher the grade, the more closely the product meets the consumers' expectations and the more frequently their product will be purchased. When a product is purchased frequently, the higher the monetary value of the product. Producers make changes to enhance the frequency of their product being purchased. Some of these changes are small tweaks to make their product more appealing to consumers, this is what is called First Order Change (Bartunek & Moch, 1987). Other changes are more sizable, where producers will phase-out products to make room for new products, this is called Second Order Change (Bartunek & Moch, 1987). Second Order Change enables producers to focus on the "what" behind their products and reframe their thinking to match (Watzlawick et al., 2011).

Grading systems in most schools are structured much like the grading scale used for consumer products; teachers assign letter grades based on student performance. Students receive one grade per class or subject. That one grade is made up of test scores, quiz scores, project scores, homework completion, etc. that are melded together to provide a generalized score of how that student performs in that subject (Munoz & Guskey, 2015; Hooper & Cowell,

2014). Much like how a rating illustrates how well a hotel meets consumers' expectations, student grades illustrate a student's performance and ability to meet the standard's for that class or subject.

The idea of student performance varies greatly from one district to another: or in reality, one building to another. Grades are meant to show parents how their child is performing in each subject. Often grades become diluted with behavior, attendance, and extra credit which makes their grade in terms of academic performance, meaningless (Marzano, 2000). When grading in a traditional grading system, scores are organized by assessment number or type rather than by standard (Hooper & Cowell, 2014). These scores are then averaged together to produce one score to reflect the knowledge learned in that content area. Some students were able to display their ability to apply their new knowledge within class but would receive low grades due to missing assignments. Alternatively, "some students actually learned very little but were good at 'playing school.' Despite dismal test scores, these students earned decent grades by turning in homework and doing extra credit" (Scriffiny, 2008, p.71). These types of grades do not illustrate a meaningful picture of the students' current level of knowledge and what the students are able to do. With more and more emphasis being placed on student achievement, grades are only helpful if the grade can tell stakeholders what a student knows and is able to do.

Twenty-first century teachers do not simply teach. Particularly in low income communities, teachers wear many hats including: counselors, social workers, nurses, friends, confidants, promoters, etc. So, when teachers dialogue around grading, there are a variety of viewpoints present. Some discuss the importance of documenting student effort. Others focus on the importance of keeping students motivated and getting them to school, while a few discuss the idea of what grades actually mean (Brookhart, 2011). Teachers want all of their students to

succeed but not all students learn the same way nor do students have the same obstacles to overcome; thus, making the teacher's job even harder. As the state and national expectations steepen, schools are drowning trying to keep up. Teachers are doing everything possible to stay afloat and meet state and national academic expectations. Growth takes time and cannot be expected to be seen overnight. Often emphasis is placed on standardized test scores, yet these are simply one data point taken at one point in time and do not take into account the other facets of students' lives.

Statement of the Problem

Research on grading indicates the inclusion of other factors outside of student achievement in grades reported by teachers (Erickson, 2011; Marzano & Heflebower, 2011; Marzano, Pickering & Pollock, 2001; Scriffiny, 2008). Taking a closer look at two types of grading systems - standards-based/referenced and traditional - might provide insight into whether or not grading policies have an impact on student achievement. Although Standards-Based Grading and standards-referenced grading are not the same thing, many use the term interchangeably. Therefore, throughout the remainder of this dissertation, Standards-Based Grading will be used, further explanation can be found in Chapter 2. In terms of student achievement, it is imperative to dialogue around the effectiveness of Standards-Based Grading versus the traditional grading system due to the cumbersome process to implement Standards-Based Grading in efforts to meet the state and national academic expectations.

Research Purpose

The purpose of this study is to explore the perceptions of four classroom teachers who have implemented Standards-Based Grading and the impact it has on academic performance with

the use of metacognition and goal setting strategies in an urban elementary school serving economically disadvantaged students.

Research Questions

Primary Question

1. In what ways do the participants describe the role that Standards-Based Grading has on the academic performance of economically disadvantaged students?

Subsidiary Questions

- 1. How do the participants describe their navigation of a second-order change in grading measures?
- 2. In what ways do the participants describe the role that Standards-Based Grading plays in the economically disadvantaged students' use of metacognition?
- 3. In what ways do the participants describe the role that Standards-Based Grading plays in the economically disadvantaged students' use of goal setting?

Significance of the Study

Standards-Based Grading is a significant topic in education today. There is discussion about what grades mean and the fact that there is little to no consistency among teachers. Grades should reflect a student's current level of knowledge and performance on the targeted learning outcome (Munoz & Guskey, 2015; Brookhart, 2011). Standards-Based Grading provides students with a true picture of individual performance as well as consistency among teachers' grading practices (Munoz & Guskey, 2015). Standards-Based Grading is a substantial mind shift for many teachers and one that does not come easily.

It is anticipated that Standards-Based Grading will have a positive impact on student achievement (Buttrey, 2014; Fink, 2015; Kirk, 2019; Norton, 2014; Sieling, 2013; Weinhold, 2015). Kevin Kirk (2019), Christopher Sieling (2013), and Steven Weinhold's (2015) studies found that Standards-Based Grading had positive impacts on student state assessment scores at the middle school level, 6th through 8th grades. While Sieling (2013), Kirk (2019), and Weinhold (2015) focused on the middle school ages, Angela Fink (2015) focused on 9th grade special education students. Although high school is different from elementary school, her students' cognitive abilities mirrored those of elementary level peers. She found that "students in the standards-based classroom achieved better academically, they [students] had a better understanding of what was expected of them [students] by their teachers, and they [students] were more intrinsically motivated to learn" (Fink, 2015, p.141). The most notable studies that found Standards-Based Grading to have a positive impact on student achievement were the studies performed by Kristina Buttrey (2014) and J. Brian Norton (2014). Both studies focused on students in the fourth and fifth grades and found that Standards-Based Grading provides clarity for teachers, students, and parents, improved mastery of standards, and makes assessments and grades more meaningful. This study will analyze the reasonableness of the above anticipation within one urban elementary school by analyzing teacher perceptions following the full-implementation of Standards-Based Grading.

Theoretical Framework

There are five theories related to low socio-economic status students' achievement in Standards-Based Grading that were examined for this study. Low socio-economic status is determined based on the number of people in a household compared to the amount of income earned (Bush, 2020). Maslow's Hierarchy of Needs functions around the idea "that lower needs"

occupy our attention when they [needs] are unmet and make it more difficult to fulfil [sic] the higher ones" (Fradera, 2018, p. 14), making it difficult for students to fully participate in the classroom when basic needs are unmet. Jean Piaget's Theory of Cognitive Development emphasizes "the importance of the child's own activity and the crucial role of experiences slightly above the child's current level of functioning for fostering development" (Day, 1981, p. 47). Stemming from Piaget's Theory of Cognitive Development is John Flavell's (2004) Theory-of-Mind and the metacognitive development. Developing children's ability to think about their thinking. One can make a strong argument that there is a difference between development and learning. Not only does learning set the course for development but that 'learning creates [...] the zone of proximal development' (Vygotsky, 1978, p. 90). In many instances, there are changes that have to occur in order to foster an appropriate learning environment. Typically, problem-solvers look at the problem and without discussion come to a conclusion on how to solve the problem without any theoretical reasoning for their choices (Watzlawick et al., 2011, p. 76). When problem solvers focus on the why and not the what, firstorder change is being implemented. To implement second-order change, the focus is on the effects and not the causes; "the crucial question is what? and not why?" (Watzlawick et al., 2011, p. 81). Each of the aforementioned theories will be discussed in terms of their pertinence to Standards-Based Grading.

Hierarchy of Needs

Abraham Maslow's "most penetrating idea is that we have a hierarchy of needs, proceeding from physiological needs like water or warmth, through safety, love, esteem, and then self-actualisation" (Fradera, 2018, p. 14). Maslow's Hierarchy of Needs is considered a propensity concept, where a person cannot recognize the next higher need in the hierarchy until a

number of his/her current needs are appeased (Gawel, 1997; Fradera, 2018). Alex Fradera (2018) shares that cross-cultural research illustrates that when a greater number of individuals in a community have individual basic needs met, that community will have more individuals reaching the higher levels in the hierarchy, as compared to communities that are focused on getting basic needs met.

One can look around and know that

life is unpredictable and whether through personal mistakes or circumstances beyond anyone's control, we [people] can find ourselves unable to meet our basic needs for food, shelter, clothing or health. Under these circumstances we are deprived not only of material resources but of mental and emotional resources as well. (Bell, 2017, p. 18)

Jensen (2009) places the most significant risk factors in four categories: emotional and social challenges, acute and chronic stressors, cognitive lags, and health and safety issues (p. 14).

Research shows that the ability to meet basic human needs affects the brains' functions. Students who meet the identifiers for low socio-economic status are impacted in the classroom as well as at home. These identifiers present themselves in variety of ways; including but not limited to: impatience, impulsivity, 'acting-out' behaviors, impoliteness, lack of social graces, limited range of behavioral responses, inappropriate emotional responses, and less empathy for others' misfortunes (Jensen, 2009; Bell, 2017). Students' home lives can be all-consuming as the worry about food, shelter, parental safety, familial responsibilities, etc. are ever present. These representations create barriers within the classroom that teachers must work to overcome. Teachers can overcome the challenges of poverty in the classroom by: telling students to ask for help; provide visual organization for assignments; consider obstacles and

identify students' strengths; truly listen to what the student is saying; do not tolerate teasing of any king; foster connections between students' interests and the curriculum; and making time for extras (Landsman, 2014). The extras are all-encompassing as it depends on what the student needs. One student may need a quiet place to work before or after school, another may need another copy of the assignment, while a third may simply need a few minutes with an adult who will listen to them. Bell (2017) believes that once basic human needs are met, students will be able to focus on the ability to reason cognitively and emotionally, which leads us to Jean Piaget's Theory of Cognitive Development.

Theory of Cognitive Development

Jean Piaget believed that infants are born with reflexes that help the adaptation to the environment. These reflexes are replaced by schemes (mental organizations) that help the child represent the world. As the child grows and adapts to their environment, it is typical to go through two different processes: assimilation and accommodation. Assimilation is the external process of manipulating the environment to match cognitive structures (Huitt & Hummel, 2003, p. 1). Accommodation is the internal process of altering cognitive structures to match the environment. An example would be when the child acquires a new binder and realizes that it does not fit in their current backpack. The child then modifies their schema to find a backpack that would successfully hold their new binder.

As schemes become liable for more complex behaviors schemes transition into structures. As the structures gain complexity, organization from general to more specific is possible (Huitt & Hummel, 2003). Structures go through four major stages of development, these stages are known as: sensory-motor, pre-operational, concrete operational, and formal operations (Day, 1981). As Ojose (2008) explained,

During the sensorimotor stage, young children develop eye-hand coordination schemes and object permanence. The preoperational stage includes growth of symbolic thought, as evidenced by the increased use of language. During the concrete operational stage, children can perform basic operations such as classification and serial ordering of concrete objects. In the final stage, formal operations, students develop the ability to think abstractly and metacognitively, as well as reason hypothetically. (p. 29)

The ability to metacognitively and abstractly reason prepares students for the implementation of Standards-Based Grading and the use of goal setting. It is important to note that not all students will be functioning at the same level/stage. Students who live in low SES areas grow up in environments that are not always conducive to assimilation. Leaving students to accommodate their cognitive structures to their environments. This type of accommodation can leave low SES students to struggle with "low cognitive development, language, memory, socioemotional processing, and ultimately income and health in adulthood" (Kolb & Gibb, 2015, p. 215). Kolb & Gibb (2015) reference a longitudinal study from 2013 [Hanson, Hair, Shen, Shi, Gilmore, Wolfe, & Pollak] that looked at the brain's gray matter. The study showed that the gray matter of infants from different socio-economic environments had similar amounts of gray matter. By the time the children were four years old, children from low SES environments areas had lower gray matter in the frontal and parietal cortex than children from higher SES environments. According to Kolb & Gibb (2015), a lower amount of gray matter is "associated with behavioral problems such as rule breaking, excessive aggression, and hyperactivity by age 4 years" (p. 215). Due to the opportunity for behavioral problems to exist within the classroom, it would be beneficial for teachers to understand the different cognitive levels their students are functioning

at, in order to plan stage-appropriate activities for their students heeding the use of metacognitive thinking as described below in John Flavell's Theory of Mind.

Theory of Mind

According to John Flavell (2004, p. 2), metacognition is one's "knowledge about variable affecting memory performance and, especially, their knowledge and use of memory strategies." The essence of metacognition in education is for children to think about their thinking. There are two types of metacognitive knowledge students "must possess: (a) the awareness of whether or not comprehension is occurring and (b) the conscious application of one or more strategies to correct comprehension difficulties" (Baumann et al., 1993, p.185).

Throughout most of a student's childhood, the most prevalent form of input and output is through oral language. Students are capable of comprehending and responding to more complex topics than the students are able to read or write about. Students can be taught how to become aware of, and monitor, individual comprehension through think-alouds. The act of thinking aloud while working and/or reading can seem awkward and unnecessary to most students. This comprehension technique asks students to stop periodically, evaluate the level of understanding, and state what is being thought and/or what strategy being used. Baumann et al. (1993, p. 184) state that "the intent behind the think-aloud lessons was to help students develop the ability to monitor their reading comprehension and employ strategies to guide and facilitate understanding." The ability to have metacognitive conversations prepares students for the implementation of Standards-Based Grading and the use of goal setting.

Many tend to associate think-alouds with literacy instruction, never even considering utilizing the strategy in mathematics. Mathematics problems are mostly made up of numbers

and symbols that require their own language in order to solve the problem. Utilizing think-alouds in math helps "engage students and help them make their way step-by-step through a solution process, reasoning right along with you" (Silbey, 2002, p.26). Word problems are the exception, due to the fact that word problems not only require knowledge of the numbers and symbols language but the knowledge of literacy language as well. Robyn Silbey (2002, p. 26) believes that "students can understand a more complex and difficult solution process than they [students] can execute independently." Based on that belief, teachers who solve complex mathematics word problems aloud with the students will provide the students the knowledge to be able to replicate the process independently.

Metacognitive strategies can be utilized within any content area; these strategies enable students to think about their thinking, becoming more aware of what is known, what is not known, what assistance is needed as well as where to get that assistance. Metacognitive strategy instruction has been found to have "sustained effects on student academic performance; the gain in student performance as a result of a strategy instruction intervention is maintained after the trajectory has ended, and even slightly increased at long-term" (de Boer et al., 2018, p. 112). There is also evidence that the implementation and usage of metacognitive strategies with/by students mediates some of the effects of low socio-economic status (Callan et al., 2017, p. 1119). This evidence provides the basis for metacognitive strategy instruction within the classroom.

There are a multitude of metacognitive strategies that can be utilized to get students thinking. By implementing think-alouds in the classroom, teachers enable students to not only process through what is being done but teaches students how to process individual thinking aloud with peers. When teachers ask a variety of leveled questions, it provides the knowledge of where students are at. Many teachers neglect to allow students the opportunity to discuss and explain

their thinking. This is a missed opportunity for the teacher and the student to become aware of current levels of comprehension compared to the level of the standard. Identifying a student's current level of comprehension, helps identify the student's current functioning on Lev Vygotsky's Zone of Proximal Development and set goals for growth.

Zone of Proximal Development

The Zone of Proximal Development (ZPD) was developed by Lev Vygotsky as one piece of his sociocultural theory of learning, which explains how social and cultural influences impact the development of intellectual activity (Wass & Golding, 2014). The ZPD concept was introduced as a counterbalance to concrete cognitive development. The central idea of ZPD is that students are able to operate at a higher level with assistance compared to what students can do independently (Wass & Golding, 2014, p. 672). What children cannot do independently but can do with the help of an adult or peer creates the zone of proximal development (Vygotsky, 1978, p. 86). According to Kravtsova (2009), Vygotsky concluded "what children do today with the help of an adult they [children] will be able to do tomorrow independently" (p. 11). The ZPD offers an alternative to concrete cognitive development that many teachers focus on but requires a change of thinking and shift in mindset for teachers. The change in thinking that children fall into specific categories based on what is able to be produced independently, the idea that children can produce more if assistance is given, is a change in mindset. This type of change is described through the dialogue surrounding Change Theory.

Change Theory

Change is constant in the field of education. From the small changes of what resources are used to the large systemic changes of instructional practices. Jean Bartunek and Michael

Moch (1987) describe three different types of change: first-order change, second-order change, and third-order change. In terms of this study, the focus will be on first and second-order change. Understanding the differences in the type of change allows change agents to design their intervention accordingly (Bartunek & Moch, 1987). Change is defined as First or Second order change based on the way people react to the intervention (Marzano et al., 2005). First-order changes are changes that are consistent with already present schemes (Bartunek & Moch, 1987). These changes are perceived as an extension of already implemented strategies and processes; things that fit within the already existing paradigm (Marzano et al., 2005). First-order change requires no new knowledge or skills and usually requires resources and materials that are presently readily available (Marzano et al., 2005). An example of a first-order change is when schools implement a new benchmark assessment program. The program assesses the same information in a very similar fashion, allowing the program to be consistent with the current norms and expectations of the school as is typical of a first-order change.

Second-order change focuses on changing the scheme itself. These changes are seen as a shift from already implemented strategies and processes; things that are outside of the existing paradigm (Marzano et al., 2005). Second-order change requires new knowledge and skills to be learned as well as resources and materials that have not been used before (Marzano et al., 2005). An example of second-order change is the implementation of active and collaborative learning with students. Making the transition from a sit-and-get lecture style teaching to active instruction that promotes students problem-solving and collaboration can be a difficult transition for some to endure, which makes the implementation a second-order change.

Educational systems tend to phase processes in and out on a regular basis. These endeavors are meant to solve problems so that processes function more effectively (Bartunek &

Moch, 1987). Systems that run through multiple internal changes without enacting a systemic change, are stuck in a never-ending broken cycle (Watzlawick et al, 2011, p. 23). Michael Fullan (2001) refers to this cycle as the Implementation Dip, which is "literally a dip in performance or confidence as one encounters an innovation that requires new skills and new understandings" (p. 41). The Implementation Dip consists of five phases that are experienced when changes are being made: "(a) uninformed optimism, (b) informed pessimism, (c) the valley of despair, (d) informed optimism, and (e) success and fulfillment" (Knight, 2017, p. 107); these stages bring about a variety of emotions including: fear, confusion, inability, being overwhelmed, etc. (Fullan, 2001; Knight, 2018). Bartunek & Moch (1987) suggest that enacting a second-order change requires administration to determine what is 'best' for the system as well as how to successfully implement it and instill perseverance. By investing time, energy, and the effort to persevere through the dip; individuals are able to embrace the challenge and make it through to the next level (Godin, 2007). In education, it is not uncommon to get stuck in the valley of despair and move on to an alternative change breaking the cycle. When enacting a second-order change such as Standards-Based Grading, it requires a thoroughly thought out plan for implementation.

The five theories that are related to low socio-economic status students' achievement in Standards-Based Grading create a theoretical framework for this study, as seen in figure 1.

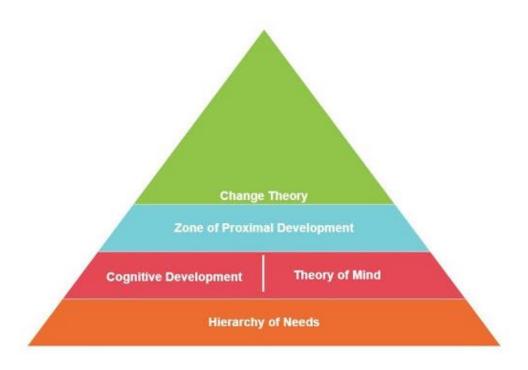


Figure 1.1. Theoretical Framework

Some teachers focus only on the goal for a student. In reality, most of the time there are steps that have to happen prior to focusing on that goal. In terms of student achievement of low socio-economic students, it is essential to start with the students' hierarchy of needs to ensure needs are met and that the students are prepared to focus on new learning. Once their needs are fulfilled, teachers must determine the students' attainable level of cognitive development as well as their ability to utilize metacognition, the ability to think about their thinking. A students' level of cognitive development will vary from student to student due to the experiences and exposures afforded to them. Lower socio-economic students will be at a lower cognitive level than students from a higher socio-economic status (Kolb & Gibb, 2015). Knowledge of a student's level of cognitive development and the ability to utilize metacognition, will help teachers determine a student's zone of proximal development. A student's zone of proximal development will be greatly impacted by the experiences and exposures that were afforded to them, as it hinders their ability to make connections to new content and skills. By knowing students' level of cognitive

development, utilization of metacognition, and individual zone of proximal development aid the implementation of second-order change, allowing the focus to be on the effects (what) and not the causes (why) (Watzlawick, 2011).

Organization of the Study

This qualitative research study utilized a constructivist interpretivist case study framework. The researcher focused on the hermeneutic phenomenological approach that was greatly influenced by Merriam (1998), Hamel, Dufour, & Fortin (1993), and Bromley (1986). Open-ended semi-structured interviews and researcher memos were utilized to collect data, (deMarrais, 2004). The interviews and evidence were then transcribed and coded to find the essence, as described by Bogard (2011). More details about the specific design are provided in Chapter 3.

Limitations of this Study

While this study adds breadth to the limited research pool to help determine the impact Standards-Based Grading has on student achievement, there are some limitations. The first limitation is the sample size utilized in the study. The sample size was limited to classroom teachers who participated in the entire Standards-Based Grading implementation cycle at one urban elementary school, as well as openness to voluntary participation. Given a larger sample spanning across multiple buildings or districts, the impact of the teacher perspectives could have been increased. The second limitation is the presence of researcher bias due to the researcher being a colleague during the entirety of the Standards-Based Grading implementation cycle. While researcher positionality was identified in Chapter 3, the researcher did not interfere with the collection or analysis of data nor did it influence the presentation of the findings. The third

limitation is the make-up of the student body at the site. The research site has 96.4% of students who qualify for low socio-economic status, therefore there is little to no dialogue around the impact of Standards-Based Grading specifically on students of low socio-economic status. Given that this study is qualitative, the significance of instructional strategies could not be determined quantitatively. Due to the nature of an interview methodology, data that was collected was taken at face value and cannot measure for generalizations but can measure impact.

Definition of Terms

- Academic Achievement/Performance "Academic achievement can be defined as learned proficiency in basic skills and content knowledge" (McCoy et al., 2005, p. 9).
- Accountability The National Council on Measurement in Education (2017), defines
 accountability as "a program, often legislated, that attributes the responsibility for student
 learning to teachers, school administrators, and/or students."
- Economically disadvantaged "Economically disadvantaged means a pupil who has been determined eligible for free or reduced-price meals as determined under the Richard B.

 Russell national school lunch act, 42 USC 1750 to 1769; who is in a household receiving supplemental nutrition assistance program or temporary assistance for needy families assistance; or who is homeless, migrant, or in foster care, as reported to the center" (Law Insider Inc, 2020).
- Goal setting "The process of deciding what you want to achieve or what you want someone else to achieve over a particular period" (Cambridge English Dictionary, 2020).
- Metacognition/Metacognitive Processes "Metacognition is considered as [an] ability of a
 person to know and regulate the cognitive processes. It can also help an individual to

monitor his performance and developing plans to work based on ones learning and also to estimate performance of an individual" (Kaur et al., 2018, p. 735).

- Standards-Based Grading (SBG) "Standards-based grading is based on the principle, that grades should convey how well students have achieved standards. In other words, grades are not about what students earn; they [grades] are about what students learn" (Brookhart, 2011, p. 10).
- Standards-referenced grading (SRG) "In standards-referenced reporting a student may or may not be proficient in all the priority standards when they [students] progress to the next grade level or course" (Heflebower et. al, 2019, p. 128).

Summary

Teachers are continuously searching for ways to increase student achievement. The five theories presented create the framework for this study. The focal point of these five theories is to build a solid foundation for student learning, that takes into account students' current level of socio-economic status and creates an avenue to overcome factors of low socio-economic status. Once that solid foundation is built, students are ready to focus on new learning in a way that is conducive to the student's current level of knowledge and proximal development. It is predicted that one way to positively impact student achievement is through the implementation of Standards-Based Grading. Standards-Based Grading enables students to know their current level of knowledge as well as what is needed to be learned to move to the next level in a process that is structured in a fashion that all socio-economic factors are accounted for. This process enables students to take control of the learning; through feedback and support from the teacher, the students' highest potential will be reached no matter what socio-economic status is present.

The following chapters will review the relevant literature, research design and methodology, along with a detailed discussion of the study findings, recommendations, and implications.

Chapter 2 - Literature Review

Standards-Based Grading is anticipated to positively impact student achievement (Buttrey, 2014; Fink, 2015; Kirk, 2019; Norton, 2014; Sieling, 2013; Weinhold, 2015). The literature review aims to extend the theoretical framework in Chapter 1. When tying literature to the theoretical framework, the hierarchy of needs is the first theory to be addressed. This theory reverberated with the dialogue centered around low socio-economic status and/or economically disadvantaged. The theories of cognitive development and mind made an appearance when discussing the utilization of metacognition and the various strategies identified to address thinking about thinking. The zone of proximal development resonated with the conversation surrounding the representation of grades and utilization of goal setting. Change theory is present in the review of accountability in education, the standards movement, grading practices and teacher perceptions. Relevant research will be reviewed around accountability, traditional and Standards-Based Grading practices, as well as how specific instructional practices impact student learning.

Historical Background

Although there are standards-based references that go back to a book written by Benjamin Bloom in 1956 called *Taxonomy of Educational Objectives*, the outcome or standards-based reform did not have any power until much later (Stanford University, 2000). Several educational improvements or reforms were implemented along the way. In 1957 the Soviet Union launched Sputnik, the first artificial satellite to orbit the Earth. At the time, the United States was considered the nation to be at the top in terms of science and education. The launch of Sputnik represented a potential threat to the United States as the satellite had the capacity to drop a bomb on U.S. soil. Not only did the launch impact the nation's pride, as the U.S. was not able

to launch a satellite, it also launched an increased awareness and support for technical and scientific educational programs across the nation (Launius, 1994). These endeavors were efforts to protect the nation from nuclear possibilities put in action through the National Defense Education Act signed by Republican President Dwight Eisenhower and to regain the United States' position as the top nation in terms of science and education. Subsequently, there were gains in student achievement made (Bell, 1983).

In 1963 Democratic President John F. Kennedy proposed a comprehensive, balanced education for all students PreK through 12th grade. This comprehensive education would include effective implementation of current educational laws, Federal aid to strengthen existing school districts, and an appraisal of a wide variety of educational problems in efforts to extend educational opportunities to every American citizen (On The Issues, 2018). The financial aid never came to fruition until Democratic President Lyndon Johnson signed the Elementary and Secondary Education Act (ESEA) of 1965. At this period of time in history, civil rights were at the forefront on daily life. President Johnson had signed the Civil Rights Act into law the year prior (1964) and Dr. Martin Luther King Jr. launched a number of marches to generate changes to the voting rights of African Americans. The ESEA is a civil rights law that provided schools serving students who qualify as low socio-economic status with additional resources such as grants for: textbooks, library books, construction of special education centers, as well as improvement of the quality of elementary and secondary education (Brenchley, 2015). The ESEA has been reauthorized every five years since it was enacted, each reauthorization came along with revisions and amendments to the act. Today, 2021, the ESEA is called the Every Student Succeeds Act (ESSA) and is still in effect (Paul, 2016). Along with the ESEA, Lyndon

Johnson also called for universal standards of excellence in every school in the United States (On The Issues, 2018).

Current educational practices were further scrutinized when Herbert R. Kohl (1969) released his book *The Open Classroom* which brought about the idea of Open Education. The idea of Open Education was focused on student participation and allowing students to pursue their interests within the classroom opposed to every decision being controlled by the teacher. Cuban (2004) suggests that this period of time was the epitome of the "youth-oriented counterculture and various political and social movements—the civil-rights movement, antiwar protests, feminist and environmental activism—that questioned traditional seats of authority, including the way classrooms and schools were organized and students were taught" (p. 68). There were no whole group lessons or standardized tests, instruction was based solely on the student's exploration and choice (Cuban, 2004). Like many other educational practices, the idea of open education was soon no longer existent, leaving behind large open learning spaces with make-shift walls and a nation split between uniform standards and individual exploration.

In 1983, Terrell H. Bell released "A Nation at Risk", a report surrounding the nation's educational system that took into account the educational reforms of the previous decade and spawned the Standards-Based reform and gave it momentum. Within the report, Bell called for Americans to "dedicate ourselves to the reform of our educational system for the benefit of all-old and young alike, affluent and poor, majority and minority. Learning is the indispensable investment required for success in the 'information age' we are entering" (1983, para. 7), to develop, the talents of students and to help them work to their greatest potential. Bell (1983) claimed that "the essential raw materials needed to reform our educational system are waiting to be mobilized through effective leadership" (para. 27).

Building on the call for universal standards of excellence made by Lyndon Johnson,
Republican President George H. W. Bush challenged schools across the nation to become
America 2000 in 1992. America 2000 ensures six education needs: improved graduation rates;
improved literacy rates; student achievement; school readiness; elimination of drugs and
violence in schools (Alexander, 2018). Along with America 2000, President Bush's agenda
included: national standards in common core subjects, a testing system aligned to the national
standards, creation of public charter schools, and more autonomy and flexibility within their
classrooms (Alexander, 2018). President Bush also pushed for public funding to go private
schools if that is where low socio-economic students' parents want to go. Although the purpose
was to give parents a broader range of choices, Democrats feared that the process would
undermine public education and have a negative effect on the remaining disadvantaged students.
In the end, it was the testing system requirement that brought America 2000 to death via
Republican filibuster (Rudalevige, 2006).

Goals 2000: Educate America Act

In 1994, President Clinton initiated the first steps to implementing a standards-based world by signing the Goals 2000: Educate America Act (Clinton Digital Library, 2021).

President Clinton initiated Goals 2000 as a voluntary initiative when, in reality, a state's lack of participation would incite a decrease in federal dollars. Goals 2000 was met with mixed feelings in the Republican Congress and thus was altered to establish national "standards of excellence for all children, implemented steps to meet these standards, and raised educational achievement" (Clinton Digital Library, 2021) to be implemented in states on a truly voluntary basis. Equity of federal dollars was not the only issue standing in the way of Goals 2000. Education in the United States had previously been an entity governed by the states, with the inception of a

national set of standards the future of that reality was unclear. Republicans were pushing for educational control to remain in the states' hands and after numerous uproars surrounding the objectivity and bias that were present in the writing of subject standards, both Republican and Democratic parties insisted the standards to remain in the states' control.

Alongside Goals 2000, President Clinton reinstated and rebranded the Elementary and Secondary Education Act (ESEA) into the Improving America's Schools Act (IASA). The IASA focused on students who fall under the low socio-economic status or economically disadvantaged. The IASA provided funding for further teacher training, raised the expectations for schools serving these students, and increased educational opportunities available to economically disadvantaged students (Clinton Digital Library, 2021). By the Time George W. Bush took the Presidential Office, the Republican Congress was ready to stand up for national standards of excellence that would be implemented nation-wide through President George W. Bush's No Child Left Behind Act in 2002.

No Child Left Behind Act

In 2002, then-President George W. Bush signed The No Child Left Behind Act, which "ushered in a new, criterion-referenced era of education in the United States" (Heflebower et al., 2019, p. 122). The introduction of criterion-referenced grading has made it crystal clear that what grades were thought to be, was a misconception. Standards outline the criteria that teachers' want students to know and be able to do as a result of instruction. The Republican Congress previously denied a set of national standards in favor of keeping the educational control at the state level. With Bush's rendition of Goals 2002, a set of national standards were present, but educational control remained at the state level, including proficiency recommendations. With the national standards of excellence implementation, the standards ensured that students in

different states or cities would be taught the same standards. The hope is for students to learn through experiences and interactions with teachers and peers in the learning environment, rather than learning exclusively through direct instructional practices. One way to drive those experiences and interactions is through the use of standards that "identify the specific knowledge, skills, abilities, and dispositions" that teachers want students to learn (Guskey, 2009, p. 1). Although standards provide equity for students across the nation, the No Child Left Behind act also exposes students to frequent standardized testing and a lack of funding to meet the expectations of the bill.

In 2009 Republican President Barack Obama fast-tracked the implementation of the Common Core State Standards through the grant Race to the Top (Sanchez & Turner, 2017).

Race to the Top encouraged states to embrace educational policies of college and career ready standards, teacher evaluations, and charter schools in return for stimulus money (Sanchez & Turner, 2017). Race to the Top took the emphasis on standards up a notch by altering the focus to be data-driven instruction. The use of data systems to track student growth paired with teacher evaluation systems embraces the title of Race to the Top as teachers and students are being compared to the national standard of excellence. By 2015, President Obama began making revisions to the No Child Left Behind Act of 2002. The revisions included three major edits: (a) breaking student test scores down by key identifiers is important and should continue; (b) the federal government is no longer in charge of determining if a school has had success; and (c) the job of measuring success, common standards, and teacher evaluations is the state's responsibility (Sanchez & Turner, 2017). These revisions were repackaged as the Every Student Succeeds Act of 2015, initially called the Elementary and Secondary Education Act of 1965.

Once standards are clearly defined, teachers can use formal and observational assessments to determine where students are performing academically. Utilizing a student's current level of knowledge, the teacher can then identify strategies and interventions to help move students to mastery (Shippy et al., 2013). Many have begun to align their grading practices with their instructional standards in a process called Standards-Based Grading. Not only does this provide teachers with the academic rigor that a student is supposed to produce in order to meet the standard, it also provides students with a goal of where to be performing academically. Fullan (2001) describes Standards-Based Grading as a way to provide everyone with a sense of morale and purpose. Delineation between traditional grading and Standards-Based Grading practices is imperative to truly embrace the transition.

Grading Practices

The field of education has looked vastly different from one year to the next. The idea of student grading is no exclusion. Traditional grading has come to place more value on student compliance and working rather than what the student has actually learned (Vatterott, 2015). Unfortunately, traditional grading practices are no longer the academic accountability measures that tend to be envisioned (Wormeli, 2006). The National Council on Measurement in Education (NCME, 2017), defines accountability as "a program, often legislated, that attributes the responsibility for student learning to teachers, school administrators, and/or students" (p. 1). Considering that end of the year test results are typically used to judge academic accountability (NCME, 2017), our current grading measures do not equate in the same way. Current grading means are seen as a reflection of a student's learning, what is not seen is the evolution of grades rouged with consequences for late work, work ethic, and the ability to purchase classroom materials. Current grading measures are a great disservice to students. It is

important to understand the journey the utilization of standards in education has taken over the years.

Traditional Grading

The idea of grades has evolved over the last couple of centuries. What began as a holistic process transitioned into a uniform system by the 1940s. The transition to a uniform grading system was based solely on the ease communicated between academic institutions not on the improvement of student learning (Lee, 2020). The uniform grading system underwent tweaks and revisions until it became the traditional grading system that is known today. Traditional grading practices consist of the utilization of an A, B, C, D, and F scale. These letter grades are quantifiable in a percent of 100; A - 90-100%, B - 80-89%, C - 70-79%, D - 60-69%, and F is anything lower than a 60%. Cathy Vatterott (2015) shares that the learning in traditional grading could be described as "stuff." Classroom teachers have the ability to include a lot of "stuff" in grades including scores for effort, participation, demeanor, homework completion, etc. (Link & Guskey, 2019). Grades can look different from one teacher to another and from one student to another, there is little consistency between grades.

Standards-Based Grading

Standards-Based Grading is based on standards, emphasizing the importance of what students can do with what is already known (Vatterott, 2015). Standards-Based Grading utilizes a 0-4 scale as outlined in Table 2.1, adapted from Marzano, Yanoski, Hoegh, Simms, Heflebower & Warrick (2013).

Table 2.1 Standards-Based Grading Scale

Score	Connotation
4	Higher Order Thinking Skills – Take Target to Next Level
3	Met the Target
2	Success on Some/All Foundational Skills
1	Success with Help
0	No Success with Help

A grade in Standards-Based Grading is not made up of one score, "a grade sums up achievement on standards - there are often several grades per subject - with effort and behavior reported separately" (Brookhart, 2011, p. 12). Grades are considered how well a student has achieved the standard; therefore, grades are focused on what the students have learned and are able to do with what they've learned (Brookhart, 2011). Paired with the inclusion of teacher feedback and comments, a clear picture of student performance in regard to the standard that is given (Brookhart, 2011). Not only does traditional grading and Standards-Based Grading look different visually, the grading practices are implemented differently and have distinct connotations.

Differences in Traditional and Standards-Based Grading

Today's standards movement holds schools responsible for the learning of all students. Brookhart (2011) identifies Standards-Based Grading as the counterpart to the standards movement. This type of grading focuses on the philosophy that grades should portray how well students have mastered the standards. Honing in on what students have learned, not what the students have earned (Brookhart, 2011, p. 10). The idea of how well students achieve standards is starkly different than the traditional grading system: traditional grading practices fail to illustrate what students truly know (Hooper & Cowell, 2014). Fink (2015) shares a comparison of the two grading styles:

students in the standards-based classroom better understand that changing their own behavior would increase their understanding of the content and material (i.e., studying more and utilizing the opportunity for extra practice) and would increase their grade in the classroom, as compared to the students in the traditional classroom who likened their understanding of increasing compliance behaviors (i.e., increased effort, completing extra credit, and paying attention in class) to an increase in a grade in the class. (p. 113)

Grounded by Fink's comparison, Standards-Based Grading has been found to have a positive impact on student learning (Norton, 2014). Students who have experienced Standards-Based Grading can accurately predict the consequences to their actions as a result of knowing their current level of knowledge. By teaching students how to employ their behavior in a structured way to aid in reaching a goal, teachers are setting them up to succeed in the future. Due to the detailed expectations outlined prior to teaching and referenced throughout the learning, Standards-Based Grading ensures accuracy in grades that are reported, something that cannot be said about traditional grading. Not only do students know current performance levels, the process of Standards-Based Grading enables them to know exactly what evidence goes into that performance level and grade. In comparison, with the traditional grading format, there is no way for students to know what evidence was used to determine the grade assigned. Standards-Based Grading tends to be an overarching theme and implemented in various ways. There are two forms of implementation relevant to this study: Standards-Based Grading and standards-referenced grading.

Standards-Based Grading vs Standards-Referenced Grading

The Great Schools Partnership (2017) describes "the general goal of standards-based learning is to ensure that students are acquiring the knowledge and skills that are deemed to be

essential to success in school, higher education, careers, and adult life" (para. 2). Standardsreferenced grading is the practice of utilizing standards to identify the content that will be taught
to students. In a Standards-Referenced Grading environment, students may or may not be
proficient on grade level standards before progressing to the next grade level (Heflebower et al.,
2019). Although the subtleties are nuanced, Standards-Based Grading and Standards-Referenced
Grading are not the same. Keeping in mind the fact that many use the terms interchangeably,
there is no way to truly know which form of grading research is referring to. Therefore, referring
back to the discussion around the significance of this study in chapter 1, this gray area will be
referred to Standards-Based Grading (SBG) for the remainder of this dissertation. The
implementation of Standards-Based Grading is anticipated to have a positive impact on the
academic achievement of low socio-economic status.

Intersection of Standards-Based Grading and Low Socio-Economic Status

As noted in chapter 1, low socio-economic status or economically disadvantaged are considered students who are "in a household receiving supplemental nutrition assistance program or temporary assistance for needy families assistance; or who is homeless, migrant, or in foster care, as reported to the center" (Law Insider Inc., 2020). Low socio-economic students often need a variety of assistance including academic interventions, as discussed in Chapter 1. It is essential for educators to identify strategies and approaches that assist our students in achieving academic mastery. By utilizing grading practices that are clear and accurate, it enables conversations around mastery to happen as well as the realization that all students have the potential to grow. The premise that SBG is built on, focuses on the fact that all children have the opportunity to learn (Andrews et al., 2016, p. 118). After surveying the research, a few studies referenced low socio-economic status or economically disadvantaged in their analysis. Some of

the studies showed an increase in student scores after standards-based implementation (Weinhold, 2015; Rainey, 2016), while others showed that standards-based implementation had little effect on student scores (Buttrey, 2014). The difference in findings could be due to the implementation process, demographics, stakeholder buy-in, etc. Since the research pool analyzing Standards-Based Grading and low socio-economic status or economically disadvantaged isn't very deep, it is not established as to whether or not Standards-Based Grading has an impact on the academic achievement of students that are considered low socio-economic status or economically disadvantaged. The lack of breadth of the research pool surrounding Standards-Based Grading and low socio-economic status or economically disadvantaged suggests the need for further research into the juncture of the two.

Along with low socio-economic status, there are instructional practices that are theorized to have an impact on student achievement through Standards-Based Instruction. Standards-Based Instruction is "based on students demonstrating understanding or mastery of the knowledge and skills they are expected to learn as they progress through their education" (Great Schools Partnership, 2017). Teachers who are strategic in planning are able to implement strategies, maintain a high level of engagement, as well as pursue feedback surrounding the effectiveness of their teaching (Hattie, 2009). Teachers utilize formative and summative data, personal and colleague reflections, as well as student autonomy and buy-in as indicators of having a positive impact on student learning through the effectiveness of their teaching.

Impact on Student Learning

Teachers are continuously looking for strategies and resources that will have a positive impact on student learning. Many times, teachers are working collaboratively to identify the best strategies and resources to implement across the grade level. The research site in this study has

found success working with various ways of learning. The collaboration around ways of learning has helped identify specific metacognitive strategies, goal setting, and the representation of grades as key indicators to have an impact on student learning.

Metacognition

Kaur, Saini, and Vig (2018) suggests that a student's level of academic achievement changes significantly when the student utilizes metacognition while learning. Bursali and Öz (2018), Dunning, Johnson, Ehrlinger and Kruger (2003) and Öz (2014) share the same findings about metacognition; the researchers consider its use a strong predictor of an increase in academic achievement. Although loosely defined as thinking about one's thinking, it is more formally considered to be the "ability of a person to know and regulate the cognitive processes" (Kaur et al., 2018, p. 735). The Inclusive Schools Network (2015) detailed metacognitive strategies as methods that help students understand how learning happens. These strategies help students develop a plan for learning new information, this plan will eventually become routine (Inclusive Schools Network, 2015). There are four metacognitive strategies that are related to this study: DOTS Chart, Story Map, THIEVES, and Vocabulary Instruction.

DOTS Chart

The DOTS Chart is a strategy utilized to build upon students' background knowledge of specific topics that are gleaned from the text. Following the initial background step, teachers take note of current student knowledge and utilize it to target individual student needs. Knowing the "funds of knowledge" (Herrera, 2016, p. 76) or what facts and concepts each student knows or has learned at home is not enough, teachers must take the time to comprehend how students learn so the ability to convey new knowledge is present (Gay, 2010; Howe, 1999). As discussed

in chapter 1, Vygostky believes that the ZPD illustrates how social and cultural influences affect the development of intellectual activity (Wass & Golding, 2014). DOTS Chart is implemented to promote comprehension by utilizing the student's ways of perceiving, thinking, and application are the foundation of learning (Herrera, 2016). Figure 2.1 outlines the process of implementing the DOTS Chart, adapted from Herrera (2016).

Table 2.2 DOTS Chart Process

A	Responsibilities:			
Acronym:	Student:	Teacher:		
Determine	prior knowledgeexpected learning	what students knowZone of Proximal Development		
Observe	 Look for clues provided Look for what the message is Document what was learned and from it was found 	Students using DOTS chart for formative assessment		
Talk	 Share my thinking List to others' perspectives Together: use tool to add-to, explain and make connections 	 Set expectations for discussion Share meaningful connections with the class 		
Summarize, Solve, Synthesize	Use the tool as a resource to share what was learned	Use the tool as a resource to share what was learned		

Socorro Herrera (2016) suggests that the

use of the DOTS chart provides each learner with a hands-on tool for

- documenting background knowledge in the activation phase;
- making physical connections between words, ideas, and concepts in the connection phase' and
- supporting self-evaluation and summative assessment of learning in the affirmation phase (p. 104)

The DOTS Chart enables students to be active contributors to the learning process and provides students the opportunity to be actively engaged in their learning (Herrera, 2016). Teachers are no longer simply transferring knowledge to students, teachers have become facilitators of learning (O'Dwyer, 2006). The DOTS Chart is a strategy that helps build student autonomy, an alternative strategy for building study autonomy is through the implementation of the Story Map.

Story Map

Much like the DOTS Chart mentioned above, story mapping supplies a step-by-step metacognitive strategy for how to read a story (Foley, 2000). Davis and McPherson (1989) define a story map as a "graphic representation of all or part of the elements of a story and the relationships between them" (p. 232). This graphic representation enables students to organize story elements in a meaningful way (Davis & McPherson, 1989). The idea of the story map was put into action by Beck & McKeown as way to combat the recommendation for "more attention be given to higher levels of comprehension through questions that elicit inferences, evaluation, and appreciation" (Beck & McKeown, 1981, p. 914). A study done by Gordon and Pearson (1983) found that utilizing a story structuring tool including various story elements had a positive impact on students' reading comprehension (Davis & McPherson, 1989). By utilizing story maps repeatedly, it enables students to internalize the process. Once the process is internalized, students are able to sustain their comprehension by self-monitoring their own reading even after removing the story map graphic representation (Foley, 2000; Davis & McPherson, 1989).

Table 2.3 Story Map Structure

Title of the Story:					
Setting:	Characters:				
Plot					
Beginning:					
Middle:					
End:					

Story maps have numerous uses within the classroom. Teachers can use story maps as response activities, a way to gather formative data, as well as an activity to assist students in writing their own stories (Foley, 2000). Story maps provide students with a process for analyzing specific elements of the text, throughout the process students look for the important pieces of the story and separate them from the irrelevant information (Foley, 2000). Utilizing story maps in the classroom not only provides a structure for students to utilize while analyzing texts, it also provides a structure for teachers to implement and easily apply across a variety of texts (Foley, 2000). When readers are reading to comprehend, the task at hand is to scan for important information, ignore the irrelevant information, identify patterns and then categorize the information in a way that makes sense to them (Foley, 2000); story maps are just one way to do that. Another way to read to comprehend is through the use of the strategy THIEVES.

THIEVES

THIEVES is a comprehension strategy that was adapted from the work of S.L. Manz (2002) on how to preview textbooks (Gear, 2008). This strategy helps students lay the

foundations for reading a new text by giving them a structure to follow that highlights the important information (Gear, 2008); enabling students to readily recall information (Wassman & Rinsky, 1997). The THIEVES process is outlined in Figure 2.2, adapted from Gear (2008).

Table 2.4 THIEVES

Acronym	Text Feature
T	Title
Н	Headings
I	Introduction
Е	Every First Sentence
V	Visuals
Е	Ending
S	So What? Identify Most Important Ideas

Research has found that certain places within a text house pieces of the most important information (Gear, 2008). By knowing where to look, students are able to identify what the text is about before it is even read. By implementing THIEVES prior to the first read, it is often found that after reading the text the reader has already found the most important pieces of information. (Gear, 2008). This process enables students to retrieve prior knowledge as well as build in the purpose for reading allowing future readings to be that much more meaningful (Manz, 2002). Identifying important information is just one piece of the comprehension puzzle. In any text, there are bound to be words that students are unfamiliar with. By taking the time to do explicit vocabulary instruction surrounding those words, helps build student comprehension even stronger and more diverse.

Vocabulary Instruction

Vocabulary instruction in education tends to look different depending on what content area is being observed. Vocabulary can be defined as knowledge of a word, "the knowledge of a word not only implies a definition, but also implies how that word fits into the world" (Stahl, 2005, p. 95). Research has shown that by making students aware of any new vocabulary that may be encountered, as well as providing them with the opportunity to practice those words in a variety of settings, greatly improves the students' understanding of the word (Bulut & Karasakaloglu, 2017, p. 108). It also greatly increases the likelihood of students adding their newly learned words to their daily vocabulary.

Emphasizing vocabulary instruction can not only help students' comprehension skills, it also enables them to focus on their metacognition and to monitor their own progress. It has been suggested that the knowledge one has on a subject is based on the vocabulary used (Sprenger, 2014; Marzano & Pickering, 2007). The brain is making connections between what is read and what prior knowledge is already acquired. These connections aid the ability to monitor one's learning helps the students to be able to develop goals and plans of action to meet those goals (Kaur et al., 2018, p. 735). By developing plans and setting goals, it helps determine a direction for one's learning as it plays a vital role in one's metacognitive processes (Bursali & Öz, 2018; Marzano, Pickering, & Pollock, 2001).

Goal Setting

In order to utilize metacognitive processes, one must know about oneself as a learner, know the expectation for the task at hand, as well as a plan of what strategies to implement to see the task through (Bursali & Öz, 2018; Dotson, 2016; Flavell, 1979; Ozan & Kincal,

2018). Teachers cannot simply have goals; goals must go along with strategies and plans. Utilizing goal setting strategies accompanied with teacher support and feedback are imperative to enhancing academic success (Cheung, 2004). The implementation of these strategies in the classroom teaches students how to be self-sufficient and independent in their own learning (Bursali & Öz, 2018). That learning should be directly manifested in student grades, grades should be evidence of the learning process and be directly aligned to the objectives being taught. By tying together a student's metacognition, goal setting, and evidence of the learning process with the use of Standards-Based Grading, it provides teachers, students, and families with clarity of the student's performance.

Representation of Grades

Grading practices have changed immensely over the years, as evidenced in the historical background. When the realization that the grades that were being given did not reflect proficiency in learning came to light, education shifted in efforts to find a grading practice that provides information about student learning (Brookhart, 2011; Wormelli, 2006; Cox, 2011). When a learning environment is based on standards, "it makes the most sense to use a standards-based or standards-referenced report card" (Heflebower et al., 2019, p. 128). Standards-Based Grading moves past the idea of ranking to provide accurate measures of student knowledge (Hardegree, 2012). It provides a summative score for each standard that was assessed during that grading period (Heflebower et al., 2019).

There are many benefits to this type of grading measure, among those are "the equity potential within this grading system, the provision of a predictive tool to identify struggling students, and the requirement that teachers offer and assess students' understanding" (Paeplow, 2011, p. 211). These benefits are directly related to the zone of proximal development discussed

in Chapter 1. This equity potential not only outlines what students have the potential of achieving with support, it also aids in the assessment of students' current level of knowledge as well as identifying struggling students. In a study performed by Paeplow (2011, p. 212), there was evidence of strong correlations between grades and end of the year assessment scores. Based on that correlation, she suggests that student grades can predict a student's performance on end of the year assessments. Given that end of the year assessment scores measure student knowledge of state standards, Paeplow's (2011) findings suggest that Standards-Based Grading may be a more impartial grading system. Although most researchers focus on the quantitative side of data, there is still a place for the perceptions of those directly involved. These perceptions set the stage for the story that the data pieces are telling. When perceptions are left out of the discussion it discounts the thoughts, feelings, and reactions of those directly involved.

Perceptions

Implementation of Standards-Based Grading requires a large mind shift on behalf of all stakeholders. Going from one system to another "entails a shift, a jump, a discontinuity or transformation – in a word, a change – of the greatest theoretical and [...] practical importance, for it provides a way *out of* a system" (Watzlawick, 2011, p. 11). In a study performed by Shappell (2018, p. 138), his qualitative analysis identified four areas of shift that occurred during the implementation of Standards-Based Grading, the four areas are: "(1) requiring increased rigor; (2) providing students multiple opportunities for success; (3) scaffolding instruction; and (4) a more personalizing approach to instruction." Teachers no longer use nonacademic factors such as: late work, extra credit, effort grades, etc. to influence their grading (Shappell, 2018). This is evidenced through the response from one teacher who utilized standards-based

questions along with summative assessments as evidence for grades; even though the teacher assigns homework, it is not collected nor utilized as evidence for grades (Cox, 2011). Fink (2015) noted that students were more intrinsically motivated to learn in a standards-based classroom compared to the traditional classroom where students are only concerned about the grade itself. This type of change requires support from principals, instructional coaches and specialists, along with continuous professional development throughout the transition from traditional grading to Standards-Based Grading (MacCrindle, 2017).

Summary

The purpose of this study is to explore the perceptions of four classroom teachers who have implemented Standards-Based Grading and the impact it has on academic performance with the use of metacognition and goal setting strategies in an urban elementary school serving economically disadvantaged students. The literature reviewed above is directly related to the implementation of this study. Based on the research related to this study, it is anticipated that classroom teachers will perceive the implementation of Standards-Based Grading paired with metacognition and goal setting to have a positive impact on student achievement.

Chapter 3 - Methodology

This chapter describes the research methodology that was employed in this study, as described in Organization of the Study in chapter 1. The study utilized a qualitative methodology in order to examine the central and subsidiary research questions. The researcher examined these questions through a hermeneutic phenomenological approach utilizing one-on-one interviews with participants. Creswell & Creswell (2002), states that "qualitative research is fundamentally interpretive. This means that the researcher makes an interpretation of the data" (p. 182). Throughout this study, the researcher will act as a participant observer and examine participant perceptions in order to make an interpretation of the data.

Purpose of Research

The purpose of this study is to explore the perceptions of four classroom teachers who have implemented Standards-Based Grading and the effect it has on academic performance with the use of metacognition and goal setting strategies in an urban elementary school serving economically disadvantaged students.

Research Questions

Primary Question

1. In what ways do the participants describe the role that Standards-Based Grading has on the academic performance of economically disadvantaged students?

Subsidiary Questions

1. How do the participants describe their navigation of a second-order change in grading measures?

- 2. In what ways do the participants describe the role that Standards-Based Grading plays in the economically disadvantaged students' use of metacognition?
- 3. In what ways do the participants describe the role that Standards-Based Grading plays in the economically disadvantaged students' use of goal setting?

Research Design

The Research Site

The participants in this study came from an urban elementary school in a Midwest state. This institution has an average enrollment of three hundred students PreK through fifth grade with fifteen classroom teachers. The students who attend this institution are predominately Hispanic (71.72%), with roughly 12.46% of students identifying as White, 9.09% of students identifying as African American, and 6.73% of students identifying as Other, with roughly 94% of students qualify as economically disadvantaged (Kansas State Department of Education, 2019). The classroom teachers who are employed at this institution are predominately White (73.33%), with roughly 6.67% of classroom teachers identifying as African American, and 20.00% of classroom teachers identifying as Hispanic.

The researcher selected this site to conduct this case study due to the implementation of Standards-Based Grading beginning in the Fall of 2018 as well as the current place of employment of the researcher. In the past, this institution utilized a traditional grading format of ABCDF. With the implementation of Standards-Based Grading, one of the goals of the institution was to ensure that "consistent grading practices are established across the district based on achievement of what students should know and are able to do at each grade level" (Unified School District 259, 2019). The transition to Standards-Based Grading was a large

endeavor and required the study site staff to work together in order for the endeavor to be effective. The researcher believed that the analysis of this implementation was an opportunity for the study site to share the story of the outcomes of the implementation. Due to the continuous collaboration between site staff, the urban elementary school represented an ideal case to study the outcome of the endeavor.

Participant Selection

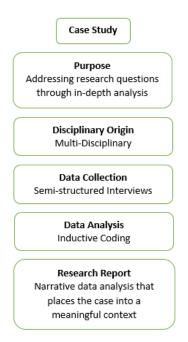
Convenience sampling in this study was collected by presenting the study in a restricted professional development meeting and requested that interested volunteers attend an informational meeting. Participation was based on the teachers' involvement in the entire Standards-Based Grading implementation beginning in the Fall of 2018 and culminating in the Spring 2020. The researcher was anticipating up to five participants and there were four classroom teachers that volunteered to participate in this study.

Data Collection

Merriam and Tisdell (2015) describe case study research as an "inquiry that investigates a contemporary phenomenon (the 'case') within the real-life context" (p. 37). In this study, interpretivist research was conducted by the researcher observing and analyzing the experiences and perceptions of classroom teachers throughout the interview process. In order for classroom teachers to perceive value in what strategy or process is being implemented, teachers must have a concrete understanding that in order to form new knowledge, it is imperative to build on the prior knowledge of the subject. This study values in the experiences and perceptions of classroom teachers through qualitative research methods based on theories of individual perceptions (Yin, 2003). Schwandt (1997) notes qualitative research contains "an inherent or phenomenal property

or essential characteristic of some thing (object or experience)" (p.130). It is this focus on experiences and perceptions that provide a depiction of the case study that is under investigation. The researcher looked at the experiences and perceptions of classroom teachers in the implementation of Standards-Based Grading. In efforts to increase the reliability of the case study, the researcher utilized a methodological framework for data collection, see Figure 3.1.

Figure 3.1. Methodological Framework



Note: Adapted from What Is an Example of a Theoretical Framework in Qualitative Research pdf (2019).

Interviews were conducted throughout the semester following the full implementation of Standards-Based Grading. The researcher conducted three interview sessions in order to ensure the accuracy of the teachers' thoughts, feelings, and perceptions as outlined in the Interview Protocol in Appendix A. Each interview was recorded utilizing Zoom Video Conferencing platform and transcribed to ensure accuracy. The participants were asked to share their lived experiences, those of instruction, teaching styles, and reflection on their students' learning in the

classroom. The primary method of data collection was through semi-structured interviews, which guided the research with pre-determined questions. The questions asked during the interview were developed as "subquestions in the research study, phrased in a way that interviewees can understand" (Creswell & Poth, 2018, p. 164), as well as pieces of evidence submitted by the participants. The interviews were semi-structured as additional questions emerged throughout the interview process and asked to facilitate clarification, additional information, or discussion of topics. The interview questions invited the participants to share their perceptions, experiences, and evidence rather than answering many questions of a narrower nature.

The first round of interviews were conducted one-on-one at a mutually agreed upon time during weeks one and two of the study duration. The first interview had a set of pre-determined questions (see Interview Protocol in Appendix A) created by the researcher. In order to gather baseline data the researcher began with a sorting activity to provide evidence of the participants' knowledge of Standards-Based Grading. Each interview was recorded and transcribed to ensure accuracy. The researcher then coded the responses, utilizing NVivo Qualitative Data Analysis software (2020), in order to expose commonalities and recurring themes. The second and third round of interviews were conducted one-on-one at a mutually agreed upon time during weeks three, four, five, and six of the study duration. Utilizing sets of pre-determined questions (as seen in the Interview Protocol in Appendix A) as well as the baseline data gathered in the first round of interviews, the researcher created questions to expound and deepen the participants' reflection. Each interview was recorded and transcribed to ensure accuracy. The researcher then coded the responses, utilizing NVivo Qualitative Data Analysis software (2020), in order to expose commonalities and recurring themes.

Data Analysis

The analysis of the data took place in the second half of the semester following the study duration. Upon completion of the study, the researcher coded the responses, in order to expose commonalities and recurring themes (Saldana, 2016). The codes that were identified were "not a fixed representation but a dynamic and malleable process" (Saldana, 2016, p. 9). Utilizing the process of codifying allows data to be reorganized, connections to be made and to determine meaning and explanations (Saldana, 2016). The utilization of coding enabled the researcher to organize similarly coded data into groups based on shared characteristics which then creates the beginning of patterns (Saldana, 2016). Throughout the data collection and analysis processes, the researcher protected the anonymity of the classroom teacher research participants by assigning pseudonyms. Information gained from the classroom teachers had no way affect their degree employment at the institution. However, the information gained during this study has been used in order to determine the perceptions of classroom teachers on the process of implementing standards-based grading.

The researcher conducted three interview sessions per participant in order to ensure the accuracy of the teachers' thoughts, feelings, and perceptions; as outlined in the Interview Protocol in Appendix A. Each interview was recorded utilizing Zoom Video Conferencing platform and transcribed to ensure accuracy. Following the completion of each interview, the researcher reviewed the Zoom transcript for accuracy prior to uploading the file into the NVivo Qualitative Data Analysis software (2020). The researcher then coded the responses, utilizing NVivo Qualitative Data Analysis software (2020), in order to expose commonalities and recurring themes (Saldana, 2016). The timeline for this study is outlined in Table 3.1.

Table 3.1 Study Timeline

Month	Action
1	IRB Approval
2	Interviews
3	Analysis: Coding Round 1 - Provisional Coding
4	Analysis: Coding Round 2 - Subcoding
4	Analysis: Coding Round 3 - Pattern Coding
5	Draft of Findings and Conclusions
6	Revisions of Dissertation
7	Defense of Dissertation

For the first cycle of coding, the researcher utilized the initial approach of Provisional Coding. Provisional Coding enabled the researcher to have a list of codes in mind prior to starting the data analysis. According to Saldana (2016), "Provisional Codes can be revised, modified, deleted, or expanded to include new codes" (p. 168). Although the list of codes were altered throughout the data analysis process, the presence of a list of content-appropriate codes provided the first cycle of coding to go smoother. Following the creation of a provisional coding list, the researcher utilized Concept Coding to represent a broader meaning "than a single item or action - a 'bigger picture' beyond the tangible and apparent" (Saldana, 2016, p. 119). This type of coding enabled the researcher to take an object or observable behavior and code it as an idea or concept (Saldana, 2016).

During the initial round of coding, four common ideas were identified among the four interviewees, see Figure 3.2.

Figure 3.2 Coding Round 1

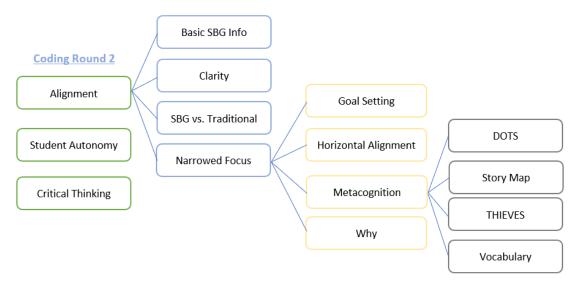
Alignment Narrowed Focus Student Autonomy Critical Thinking

These commonalities were labeled as alignment, narrowed focus, student autonomy and critical thinking. Although alignment is a broad term, the code was used to encompass any item that has a linear connotation or that brought clarity to the endeavor. It included items that would be considered basic implementation knowledge that set the tone for the process. Narrowed Focus is a term that was utilized in the building that the research took place and therefore showed up frequently in the interviews. This code encompasses the thought process that teachers took to help identify the priority standards/skills/strategies. Student Autonomy is something that educators strive for, for students. With the implementation of standards-based grading, students are taking on some of the responsibility for their grades and cognitive thinking. This code highlights the steps and instructional strategies that are referenced by teachers that symbolize the increase in student autonomy and responsibility. All four interviewees made reference to critical thinking strategies and processes that students were taught, practiced, and internalized. This code encompasses the various statements interviewees made that surrounded the idea of critical thinking and making students dig deeper into the content.

The beginning of the data analysis process was overwhelming for the researcher. The first round of coding took the twelve interviews and turned each interview into hundreds of data points. Due to the overwhelming presence, it drove the researcher to consider more efficient and cognizant next steps. This in turn became the process of breaking each code down even further (Second Cycle) and looking for patterns (Third Cycle).

For the second cycle of coding, the researcher used the method of subcoding. According to Saldana (2016), subcoding is used when "the researcher realizes that the classification scheme may have been too broad" (p 92). This process adds specificity that may be needed in order for categorization and data analysis to occur (Saldana, 2016). The utilization of subcoding provided the researcher the ability to recognize and identify subcodes within previous codes, Figure 3.3.

Figure 3.3 Coding Round 2



The researcher focused on the alignment and narrowed focused codes due to the majority of the data being housed there. Alignment was broken down into three main sub-codes: basic Standards-Based Grading information, clarity and traditional vs. Standards-Based Grading. Basic Standards-Based Grading Information is an overarching code to include any bits

and pieces that were shared to help round out Standards-Based Grading knowledge. Clarity is one of the items that the interviewees mentioned repeatedly that was received from the implementation of SBG. This includes clarity into the standards, where students are at, as well as what students need to do to meet the standard. Throughout my interviews there were comparisons made between traditional grading and SBG. Traditional vs. Standards-Based Grading houses the multitude of comparisons that were made.

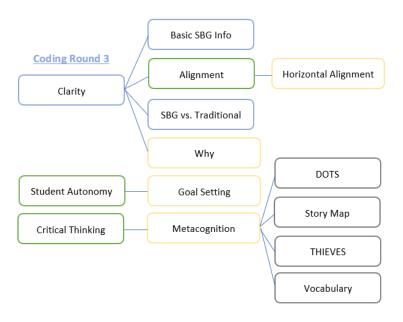
Following the analysis of the alignment code, it became evident that narrowed focus belonged as a sub-code of alignment. The researcher then was able to break narrowed focus down even further into four sub-codes: goal setting, horizontal alignment, metacognition, and why. Goal setting was a focus for one of the interview chunks so it makes sense to use it as a sub-code within narrowed focus. This code represents the utilization of goal setting with Standards-Based Grading. Metacognition was also a focus for one of the interview chunks so it also is applicable to be used as a sub-code. One of the building's focuses within the Standards-Based Grading implementation was having students think about their thinking. Teachers implemented that thought process in all content areas. The building chose specific strategies to be implemented for certain standards and worked to create a horizontal alignment for each strategy. This building spent a significant amount of time focusing on the building's mission statement, which is referred to as the why. It encompasses teachers' reasons for coming to school each day. It is referenced any time a decision needs to be made and is truly ingrained into the culture of the school. The why code houses all statements that are related to that why.

Due to the emphasis placed on metacognition by the interviewees, the researcher was able to break the idea of metacognition down into the four strategies/approaches the interviewees discussed: DOTS, Story Map, THIEVES, and Vocabulary Instruction. This code encompasses

the various phases of each strategy as it was scaffolded throughout the grade levels. The second round of coding had a large impact on the next steps of the project. The researcher believed it organized the data in a way that provided the opportunity to see connections and recurring themes clearly. It truly was the crux of when the data truly turned into a story opposed to a multitude of data points.

For the third cycle of coding, the researcher utilized Pattern Coding. Pattern Coding "is a way of grouping those summaries into a smaller number of categories, themes, or concepts" (Saldana, 2016, p. 236). This process helped the researcher pull together a multitude of data points into more meaningful and efficient units of analysis (Saldana, 2016). For this study the meaningful and efficient units of analysis consisted of three themes: Clarity, Critical Thinking, and Student Autonomy, as shown in Figure 3.4.

Figure 3.4 Coding Round 3



These three themes were present in every aspect of this study.

Positionality Statement

Throughout the research process, the researcher's role changed with the current context. One of the key factors in qualitative research is taking the time to build trust and rapport with the study participants. For the researcher, the trust and rapport was already there. During the process of implementing Standards-Based Grading at this particular institution, the researcher was employed as the instructional coach. The researcher has worked one-on-one with each of the study participants in different situations over the years. Taking the researcher's relationship with all participants into consideration, there is bound to be bias present. As an instructional coach the researcher knows the intricacies of Standards-Based Grading; in terms of what was happening in the classroom, the researcher is an outsider. In efforts to determine perceptions of classroom teachers on the process of implementing Standards-Based Grading, the researcher's relationships with each participant will aid in the depth and authenticity of the interviews. It is the job of the researcher, to play an active role in the interviews as well as note observations and/or thoughts in order to ensure the researcher is collecting as much relevant data as possible. Creswell & Creswell (2002) state that during qualitative research it "means that the researcher filters the data through a personal lens" and "one cannot escape the personal interpretation brought to qualitative data analysis" (p. 182). The researcher will serve as a participant observer.

As the researcher, I was drawn to the topic of Standards-Based Grading due to the implementation underway at the elementary school that I worked in. Having heard the idea of Standards-Based Grading and read about it, it intrigued me. Although I was participating in the implementation, as the instructional coach, I had an outsiders' perspective. I could see the toll the beginning stages of the implementation were taking on my colleagues and it made me wonder if

it was all worth it. Was the grueling process of analyzing the standards worth it? Were my colleagues going to get anything out of it? It was my hope that by focusing my research on Standards-Based Grading, I would be able to answer those questions.

When I started my career in education, I was a classroom teacher in a district that used no formal curriculum and/or common resources. The teachers followed a standards-based pacing scale so every teacher in a grade level was teaching the same standards at roughly the same time. As a first-year teacher, learning an entire set of standards as well as finding the materials and resources to teach them was daunting. I relied heavily on the standards and referenced them as I planned, assessed my students, and entered grades. When I moved to another district, I was in shock. My new district had formal curriculums for every content area as well as a pacing guide outlining when each lesson would be taught. The standards were referenced in the curriculum but there was no dialogue around what standard was being taught or how the curriculum met the standard. For someone whose sole experience had been standards-centered, it was a shock to the system.

After being in my new district for awhile, I came to understand how teachers went about planning their lessons and that there was dialogue during planning, just not around the pieces I was used to. It was not something that I necessarily agreed with but I understood the process. A couple of years later, our district hired a new superintendent and with the new superintendent came the implementation of Standards-Based Grading. It was my first year as an instructional coach and I was afforded the opportunity to bring the endeavor to my colleagues. From my experiences, I knew that standards streamlined instruction and helped keep focus on what to teach. I had never experienced Standards-Based Grading but in my naïve mind, I couldn't see a reason to dislike it or object the implementation based on my own experiences with standards. I

soon found out that I was only considering my thoughts and experiences in that judgement and my colleagues soon shared a multitude of opinions on the matter, one of the many joys of being an instructional coach.

Some had experiences like mine and were excited to bring standards back into instruction, while others had never worked with the standards and did not want anything to do with them. As the instructional coach, it was my job to facilitate the learning and to frame my professional development to meet my colleagues where they were at. I took the opportunity to use my small group sessions to build the foundation for Standards-Based Grading by getting them into the standards. Then I identified my high-fliers that had standards experience to help me instill positivity into the endeavor. From there, we worked together to take the implementation one step at a time at each colleague's own pace. Not everyone on a team was at the same place and that was ok, I did not want to rush them into something they weren't ready for.

I believe that learning to rely on the standards to survive my first few years of teaching had a large impact on my willingness to embrace Standards-Based Grading. Unlike some of my colleagues, I was not jaded by the standards nor did I see it as simply another educational fad. By learning along with colleagues who had those opinions, it enabled me to see their point of view. In order for me to be able to change their opinions, I had to see it through their eyes and really get to the center of their feelings. I believe the process of understanding helped me interpret my study participants responses because I had been with them throughout the entire process. I knew where they came from, where they are at now, and how they got there. This study is our story and I wanted it to be a true picture of our blood, sweat, and tears. Throughout this study I focused on the impact of Standards-Based Grading. I excluded the detailed-steps in

the process that our district had us follow because every district is going to do it differently and the fact is what we got out of the implementation is the most important piece.

Chapter 4 - Findings

As discussed previously, the purpose of this study is to explore the perceptions of four classroom teachers who have implemented Standards-Based Grading and the effect it has on academic performance with the use of metacognition and goal setting strategies utilizing a constructivist interpretivist case study framework. Through a hermeneutic phenomenological approach, open-ended semi-structured interviews were utilized to collect data (deMarrais, 2004). The interviews and evidence were then transcribed and coded to find the essence through the use of NVivo Qualitative Data Analysis software (2020), as described in Chapter 3. On account of the unique approach the study site employed to during the implementation of Standards-Based Grading, the researcher identified the research site as the case to analyze. This analysis utilized participants' experiences, perceptions, and provided pieces of evidence to add insight to the research questions posed in this study. By listening to and analyzing the perceptions of four classroom teachers, valuable information was obtained about the transition to Standards-Based Grading and the role metacognition and goal setting played in the implementation for one urban elementary school.

Research Participants

The findings of this qualitative study are based on the interviews of four classroom teachers from one urban elementary school. The four participants engaged in the study on a voluntary basis. All of the participants are considered veteran teachers, with more than three years of experience (IGI Global, 2021), who were involved in the entire district prescribed implementation of Standards-Based Grading beginning in the Fall of 2018 and culminating in the Spring 2020. A detailed description of the study site is presented in chapter 3. The four study participants and the researcher have worked together for several years, details describing study

participants' levels of experiences are outlined in Table 4.1. Participant perceptions were influenced by their individual experiences, the district prescribed implementation, the State Department of Education's state standards, as well as the staff developed building level why that was used to align each and every team decision with the reason staff come to work each day.

Table 4.1 Participant Information

Participant	Years Taught	Current Grade	Grade Levels Taught	States Taught In
		Level		
Joe	22	3	K-12,	KS &
			Administration	Indonesia
Emily	20	3	K, 3, 4, 5, 6, 7,	NM, NV, CA,
			8	OK, KS
John	12	5	3, 4, 5	KS
Ashley	24	4	K, 1, 2,3, 4, 5	KS

Joe has been teaching for twenty-two years. A majority of his experience is from overseas where he taught in Indonesia for sixteen years. Working in Indonesia provided Joe the ability to teach a little bit of everything as well as having the opportunity to work in administration. Upon moving back to the states, Joe worked with middle schoolers before transitioning to the elementary level. Joe has recently finished his master's in Teaching English Speakers of Other Languages (TESOL) and is currently a third-grade teacher.

Emily has been teaching for twenty years. She has taught students as young as kindergarten all the way up to eighth graders. Due to her husband's job, she has made her way around the United States and has taught in New Mexico, Nevada, California, Oklahoma, and Kansas. Emily has a master's degree in Educational Administration. She is currently a third-grade teacher.

John has been teaching for twelve years. He has spent his career at the elementary level and has taught third, fourth, and fifth grades in Kansas. John has recently started his master's in Educational Administration. He is currently a fifth-grade teacher.

Ashley has been teaching for twenty-four years. She has had the opportunity to teach kindergarten all the way up to fifth grade as well as the pleasure of working as an instructional coach. Ashley has her master's degree in Educational Administration. She is currently a fourth-grade teacher.

Each participant took part in the case study through three separate interview sessions. Interview times varied and were scheduled at the convenience of both the participant and the researcher. Per the interview protocol (Appendix A) each interview possessed semi-structured questions focused on one area of the study: Standards-Based Grading, metacognition, and goal setting. The interviews were semi-structured as additional questions emerged throughout the interview process and asked to facilitate clarification, additional information, or discussion of topics. The interview questions invited the participants to share their perceptions, experiences, and evidence. All interviews were conducted during the months of October and November of 2020 via Zoom video conferencing software. Zoom was an effective and safe way to communicate with participants due to the 2020 COVID 19 Pandemic that called for the use of face coverings and social distancing of six feet. The Zoom software allowed for the convenient transcription of the recorded sessions. The transcriptions were then verified by the researcher for accuracy following the conclusion of each interview.

Research Questions

This study was designed to analyze classroom teachers' perceptions of an urban school's transition to Standards-Based Grading. This study was outlined the following research questions:

Primary Question

1. In what ways do the participants describe the role that Standards-Based Grading has on the academic performance of economically disadvantaged students?

Subsidiary Questions

- 1. How do the participants describe their navigation of a second-order change in grading measures?
- 2. In what ways do the participants describe the role that Standards-Based Grading plays in the economically disadvantaged students' use of metacognition?
- 3. In what ways do the participants describe the role that Standards-Based Grading plays in the economically disadvantaged students' use of goal setting?

Research Findings

Primary Question

Clarity.

In what ways do the participants describe the role that Standards-Based Grading has on the academic performance of economically disadvantaged students?

Standards-Based Grading provides clarity to the academic performance of economically disadvantaged students. John suggests that it is knowing their current level of knowledge; it provides a better picture of broad categories versus the extremely broad category of math (personal communication, October 21, 2020). Everything went into their grades and it "would give us a picture of what they [students] were able to do independently as well as what they were gleaning from others or able to think through when they were able to use their oral language" (John, personal communication, October 21, 2020). It is evident that when teachers know their students' current level of knowledge, it helps teachers to narrow the focus of instruction to this one skill for that day. Students are then able to track their own progress based on what a level 2 looks like and what a level 3 looks like (John, personal communication, October 21, 2020). One of the big differences between Standards-Based Grading and traditional grading is that there's the opportunity to take it a "step further with the students and give them feedback, not just a level 2 or 3 but you're at a 2 because ... it's marking up their work and giving them that written feedback so that they [students] understand their level of proficiency and why they [students] got what they got" (John, personal communication, October 22, 2020). It is now common knowledge between the teacher and the student what areas the student needs to work on, making it that much easier to target instruction to meet their needs (John, personal communication, October 23, 2020; Ashley, personal communication, November 11, 2020). As John and Ashley described, the implementation of Standards-Based Grading has provided transparency to the academic performance of students. Not only does it clarify the student's current level of knowledge, it also indicates what the student's next steps are to allow for critical thinking to occur.

Critical Thinking.

The implementation of Standards-Based Grading has helped build the process of critical thinking in economically disadvantaged students. Once students have a clear picture of what their current level of knowledge is, students can take ownership of the learning and start to do something about it (Joe, personal communication, October 22, 2020). It can be a slow process but

just those few little words that say I can't quite do on my own. 'I can start to do it on my own' those words that tell them how they're doing. I think that has helped to promote that thinking process and that metacognitive process of I have control of this. I don't have to wait for my teacher to tell me what to do or how to fix it (Emily, personal communication, October 22, 2020).

The clarity of the student's abilities provides the opportunity for the student to take ownership of their learning. Once an assignment is returned with feedback, students start to have these reflective self-talks and say "if I would have put this on there with that, [the teacher] would give me a three. What if I put, oh, oh, I can and I can, and I can" (Emily, personal communication, October 22, 2020). These critical thinking and reflective self-talks allow students to continuously dig deeper until the ability to successfully solve the problem independently is mastered.

Student Autonomy.

The most arduous step in the learning cycle is the independent application piece. Once a class has been working on a targeted skill for a while, it is time to measure how well the students comprehend and can apply that skill. Teachers will be looking for elements of evidence that the students are applying what they've been working on as well as their comprehension of the skill

(John, personal communication, October 22, 2020). When students know feedback will be given that very day, it triggers that intrinsic motivation to pay attention and to practice independently to get to the point where, when asked to show thinking process and learning, students are able to do it independently. Students are motivated by this process; it makes learning and feedback more relevant (John, personal communication, October 23, 2020). One of the greatest benefits to Standards-Based Grading is that "if a student is struggling with a standard, that doesn't mean they [students] are struggling across the board. Kids that may be struggling with one standard can have success in another standard" (John, personal communication, October 23, 2020) and get a win which then provides the motivation to keep trying. Joe shared that "when they [students] are informed and they're empowered then they [student] can choose to do something about it if they [student]want to, they [student] may not choose to do that." As referenced by the study participants, when clear and accurate student data is presented to students, it puts the opportunity to improve on the students if intrinsic motivation is present (Joe, personal communication, October 22, 2020).

Subsidiary Questions

How do the participants describe their navigation of a second-order change in grading measures?

Clarity.

As with any large-scale change, there is bound to be tension and resistance. Within this study, two participants were unabashedly against making the switch to Standards-Based Grading. One participant openly admitted to not really knowing what the standards were prior to the implementation (Joe, personal communication, October 15, 2020). Through the

implementation of Standards-Based Grading, study participants have found that "being more familiar with the standards helps me [the teacher] to be able to say this is what I need to be teaching. This is what I need to be focusing on and because of that focus, then I [teacher] can collect that data, analyze that data, and talk about that data with the kids" (Joe, personal communication, October 22, 2020). The implementation of Standards-Based Grading has added clarity to what is being taught as well as what is being graded and what it means. This clarity enables all stakeholders to take an active role in the student's education.

Standards-Based Grading has added clarity for all stakeholders involved; utilizing a 0-4 grading scale leaves less room for error because it explicitly states what each level is (Emily, personal communication, October 15, 2020). Although each level is broken down for each standard, participants found that using a generic scale with students was easier for students to comprehend. If it's a zero, it should be very blatant that the student is not even trying (Emily, personal communication, October 15, 2020). A one means that the student is attempting it but needs teacher or adult help. A two means the student can do some parts independently but the student still needs help with others; level two skills are "the foundational skills that the kids need to have in order to be able to get to a three and to meet the grade level standard" (Ashley, personal communication, November 11, 2020). A three means the student could do it independently and that the student didn't need the teacher's help and a four means that the student can take this idea and the standard and the student could do other things with it (Joe, personal communication, October 21, 2020). By utilizing a generic scale, students, teachers, and parents are able to understand the gist of the score without the cumbersome details. Stakeholders can then look into the details to determine what skills are needed in order to get to the next level. The scale

outlines the things that they [students] should know beforehand. Hopefully if they [students] have those foundational skills before they come to the grade level, then it's going to make those grade level skills a lot easier. I [Ashley] know that a lot of kids don't come that way. Then it turns into pinpointing which foundational skills do they [students] still need so that they can get up to the grade level skills (Ashley, personal communication, November 11, 2020).

Many students do not come to a grade level having all of the foundational skills that are needed. The clarity brought by the implementation of Standards-Based Grading provides teachers with a clear picture of what skills the students are able to demonstrate and what foundational skills the students still need.

Standards-Based Grading not only adds clarity to students' current level of knowledge, it also helps enhance the lesson planning process; "if I [Ashley] just focus on the standard, then that helps me to streamline my planning" (Ashley, personal communication, November 11, 2020). Teachers must ask themselves "what is this standard really asking? How are we going to measure the standard and if this is how the standard is measured, how are we going to teach it and what resources are we going to use? That has aided our ability to plan" (John, personal communication, October 21, 2020). This clarity has enabled teachers to identify the skills that are imperative to teach and the skills that students will have another opportunity to learn later.

Standards-Based Grading has helped teachers put a name to the standard and to know that this is "a required skill for third grade. I [Joe] know that now, I know the skill. I know the standard that's with it and I know the scale. I know it now" (Joe, personal communication, October 15, 2020). With that knowledge, teachers can then look for strategies and identify things that teachers can do to help students learn (Joe, personal communication, October 21,

2020). Throughout the study, participants described their process of narrowing their focus. As a building, staff set out to identify strategies that matched specific skills to implement. The process has provided the opportunity for vertical and horizontal collaboration among teachers. The collaborative conversations were centered around the specific strategies, this type of conversation enabled teachers to enhance the way students think about things and increase their critical thinking skills.

Critical Thinking.

Study participants describe the fact that by focusing on specific strategies it has helped guide "us to go a little deeper in the discussion and in our text or in our topic. It allows us to go deeper with the material than we would have a few years ago. I'm grateful that we've moved more intentionally" (Joe, personal communication, October 21, 2020). The intentionality described by one participant is illustrated through reading the same story every year and having the ability to dig "into deeper levels of conversation" (Joe, personal communication, October 21, 2020) that have not been possible in the past. With the ability to change the students' thought process and persevere, students are able to keep working through things (Emily, personal communication, October 21, 2020). Supporting them through their perseverance by having conversations around "what could you [student] have put there or what could you have added that would have told me a little bit more" (Emily, personal communication, October 21, 2020), enhances their critical thinking skills in a non-confrontational way while building in their ability to think independently.

Student Autonomy.

The implementation of Standards-Based Grading has truly put students in control of their own learning. One strategy that was described was through the use of "a flow chart to grade the

work. It told us what elements of our strategy we were looking at to measure their standard, but we also gave that flow chart to the students" (John, personal communication, October 22, 2020), as shown in Table 4.2. By providing students to resources to know what elements of the strategy that the teachers would be looking at to see progress made, the students knew what a level 2 or 3 was on that standard. It gave the students a much better picture of teacher expectations as well as the students' current level of knowledge (John, personal communication, October 22, 2020).

Table 4.2 Flow Chart Example

RL.5.3b Describe relationships between events	Level 3: #2, #4, #10 Level 2:
RL.5.3a Compare characters, settings, events	Level 3: #6, #7, #9 Level 2: #5, #8
RL.5.2 Identify details that develop theme	Level 3: #1, #2, #3, #4, #8, #10 Level 2: #3 *#3 by itself is a level 2 question. It can also be taken into consideration of the bigger picture of details that develop theme (level 3)*

Having these types of conversations and cycles of feedback have provided students the knowledge and ability to go back and correct what was missed. The flow chart gave students something concrete to refer back to that helped them understand the mistakes that were made, identify what their end goal was and helped them take ownership over their learning (Emily, personal communication, October 22, 2020).

Study participants perceived clarity, critical thinking, and student autonomy throughout the navigation of second-order change. Through the second-order change to Standards-Based Grading participants perceived clarity in what was needed to be taught (Joe, personal communication, October 22, 2020) as well as what a student's current level of knowledge is

(Ashley, personal communication, November 11, 2020). This transition has enabled study participants to dig deeper into the content with their students (Joe, personal communication, October 21, 2020) and teach them how to persevere when things get tough (Emily, personal communication, October 21, 2020). When the standard is fixed and the details spell out exactly what needs to be accomplished, it enables students to take it upon themselves and do it independently (John, personal communication, October 22, 2020).

In what ways do the participants describe the role that Standards-Based Grading plays in the economically disadvantaged students' use of metacognition?

Clarity.

Metacognition is one of those things in education that everyone has heard of but doesn't totally understand. Study participants spent the three years of Standards-Based Grading implementation working on ways to integrate metacognition into their instruction. One study participant shared

I honestly don't see how you can do SBG without metacognition because I'm thinking you have to know what you already know and you have to know how it connects to the new learning. If you don't have that, then you either aren't going to understand how to figure out a problem or you're not going to understand the meaning behind something. To me I don't know how it would work with it (Ashley, personal communication, November 11, 2020).

On the quest for integration, the study site adopted some specific strategies as a building to aid in the utilization of metacognition. Another study participant shared that "we tried to tie in metacognition to every piece of their learning from the students' organization to the strategies that they [student] were using to comprehend, to their [student] goal setting, and their [student]

progress monitoring" (John, personal communication, October 22, 2020). The strategies that were chosen were "practical. We [teachers] can apply them [strategies] in every single lesson and really in every single subject" (Joe, personal communication, October 21, 2020), providing students with repetition and the ability to foresee what strategy is going to be used based on the type of text. Not only does it add clarity to the task, it also makes the need for critical thinking imperative and the transition to independent utilization seamless.

Critical Thinking.

Study participants utilized specific metacognitive strategies to increase the critical thinking skills of their students. These specific metacognitive strategies are: DOTS chart (Herrera, 2016), Story Map (HMH, 2020), THIEVES (Gear, 2008), and specific vocabulary instruction. Within each of these strategies, students are using the tool in hand (Herrera, 2016), writing thoughts down in order to be prepared for the discussion with that tool. Study participants focused on these factors during the discussions: "Can they [students] talk about it? Can they [students] differentiate their thinking? I'm [teacher] also going to expect that as we're talking about it as a group, part of metacognition is that they're [student] listening to others and adding to their [student] thinking. So I [teacher] want to see evidence of that on their [student] tool" (John, personal communication, October 22, 2020). One study participant described it as fun to watch them [student] struggle, try to figure that stuff out and to be like, oh, you know what I've [student] noticed? When they're [students] collaborating they're [students] more willing to listen to each other instead of just my [student] idea is the right way. (Emily, personal communication, October 22, 2020)

Discussion around each strategy is found below.

DOTS Chart

The DOTS chart strategy was found in Soccoro Herrera's book *Biography-Driven*Culturally Responsive Teaching (2016). This strategy helps students make connections to their vocabulary words (Emily, personal communication, October 21, 2020), as discussed in chapter 2.

One study participant shares that a

big positive is just the kids bringing in their own experiences and their own pieces of evidence to connect to their learning. I think that when that happens and it kind of embeds it more, it makes it more meaningful to them. Having them check back and look at their notes is them looking for connections on their own. If they [students] don't have anything to connect to it, but we've taken notes on it, then going back and trying to figure it out on their own, it's going to stick with them more than me just telling them. (Ashley, personal communication, November 11, 2020)

By adding to their notes and making connections, students are able to critically think about the text and what it is trying to tell them.

Story Map

Much like the DOTS Chart mentioned above, story mapping supplies a step-by-step metacognitive strategy for how to read a story (Foley, 2000), as discussed in chapter 2. Study participants utilized versions of the story map from *Journeys*, the Houghlin Mifflin Harcourt (2017) curriculum. Special attention was given to how to implement across grade levels while scaffolding the intensity of the story map (Davis & McPherson, 1989). Story maps were the tool in hand for every fictional text that was read. After the completion of a first read, study participants described asking students to add "details to the story map that they [student] had

comprehended and then every week we were adding to our story map and we were emphasizing the specific standards that we were teaching utilizing the story map and having them add to through discussions" (John, personal communication, October 22, 2020). It is reassuring to see how the story map content builds and develops the same vocabulary among students, it provides students the ability to then start dialoguing around specific pieces of the map (Joe, personal communication, October 21, 2020). The goal of story mapping is to get them familiar with the process and help them to see that it is a great tool to monitor their comprehension (John, personal communication, October 22, 2020). Utilizing a story map and the process of adding to it and making connections, utilizes students' critical thinking skills. Another way that story maps were utilized was when students were working with narratives. Emily shared that it gives them a structure to think through their writing and "it helps them to get it sequentially like it needs to be" (personal communication, October 21, 2020). Throughout every discussion, the students' story maps were their tool in hand (John, personal communication, October 22, 2020). Students brought colored pencils to the discussion to add to the maps; enabling student to not only gather more and more detail to comprehend, students were able to dialogue around its contents with peers. Based on that description, it is evident that the students were able to increase the level of comprehension through critical thinking skills.

THIEVES

Study participants were looking for a comprehension strategy that was designed to be employed with nonfiction texts. They decided to implement Adrienne Gear's strategy of THIEVES from her book *Nonfiction Reading Power* (2008), as discussed in Chapter

2. THIEVES

is a strategy where the students are previewing the text, looking at title headings, every first sentence, and visual endings. After they [students] had previewed each section of the text, they [students] had to think about the main idea, they [students] then predict what the main idea of that text would be of that section and then write their own question about the main idea that they [students] wanted to answer the next time. Then they [students] read that text again. (John, personal communication, October 22, 2020)

The implementation of the process took a lot of practice. Study participants found that if students had a goal during the previewing of the text, it aided in the comprehension. Once students went back and did the first full read, a target was present to look for during the reading. Since the process is focused on a chunk of text and not the whole text, "it really broke it up and allowed them [students] to focus their comprehension" (John, personal communication, October 22, 2020), by thinking critically about the text.

Vocabulary Instruction

The routine that was used by study participants for vocabulary instruction is a hodgepodge of instructional strategies pieced together by the building principal. The principal's instructional routine outlined 5 basic steps:

Table 4.3 Vocabulary Routine

Step	Activity		
1.	Identify unknown words		
2.	Read and define unknown words		
3.	Meaningful Sentences		
4.	Identify Connections		
5.	Quiz, Quiz, Trade		

After the students identify the words from the text that are unknown, the next step is to read and define those words. Study participants shared that slides were created with pictures to go along

with the word and the group would dialogue around the meaning of the word (Joe, personal communication, October 21, 2020). As students worked through the routine vocabulary cards were created and information added to the cards throughout the week's instruction. Next students would utilize a meaningful sentence web to help them develop the various pieces of the sentence. Once the web was complete, students worked individually, in pairs, or a group to create a new sentence using the vocabulary word correctly (Joe, personal communication, October 21, 2020). One study participant described the amount of creativity that was seen as students were working and making connections (Joe, personal communication, October 21, 2020). The last step entails utilizing the Kagan & Kagan (2016) structure *Quiz-Quiz-Trade* to master the vocabulary words. One study participant shared that "the vocabulary routine encompasses so much. We were able to pull out the teachable moments and let them justify their thinking" (John, personal communication, October 22, 2020). By implementing a predictable routine, students were able to foresee what activities that were going to be utilized. Knowing what is going to happen, enables students to focus on the content and think critically about what is being learned.

Student Autonomy.

The purpose of education is to get students to do academic tasks independently, utilizing personal intrinsic motivation. Study participants utilized the aforementioned metacognitive strategies to increase student comprehension as well structure students for success. One study participant shared about structuring for success,

does it look like them doing a story map, no because we want them reading for enjoyment. But it could look like sticky notes that they're putting in their book and marking connections that they've made. Teaching them that they [students] can do it,

even without the formal graphic organizer (John, personal communication, October 22, 2020).

Instilling in them how imperative it is to analyze the situation and use thinking to determine what tool is needed to be uses to get the answer that is needed (Emily, personal communication, October 21, 2020). Determining what tool to use requires students to analyze and think critically about the text in order to pick the more appropriate tool. One of the complicated pieces of metacognition is that it is very observational. Metacognition is all about what connections and reasoning students can demonstrate. Since students are producing pieces all day long the sheer number of pieces of evidence can be overwhelming. One study participant shared that if students have "their tool in hand and they've written their metacognitive thoughts, I'm grading their thinking" (John, personal communication, October 22, 2020), providing students the opportunity to share their thinking numerous times throughout the day.

In what ways do the participants describe the role that Standards-Based Grading plays in the economically disadvantaged students' use of goal setting?

Clarity.

Study participants believe that Standards-Based Grading has a positive impact on students' use of goal setting (Joe, personal communication, October 22, 2020). Standards-Based Grading has allowed students to know whether or not the ability to do something is present. It has afforded students the opportunity to say "I know how to do this part of it but I don't know how to do this other part" (Ashley, personal communication, November 11, 2020) then setting a goal for completion. This implementation has added transparency to student instruction, allowing students to track individual data and to know personal performance level (Joe, personal

communication, October 22, 2020). There will always be those students who "it really didn't matter whether we had a goal setting conversation or not because there were other factors that were more important than those goals" (Joe, personal communication, October 22, 2020). In the very least, goal setting conversations identify a student's current level of knowledge, what is needed to learn before moving to the next level, and highlight where a student's motivation lay.

Critical Thinking.

When students are exposed to goal setting and the conversations around it, the ability to think critically about individual learning is present. Once students receive feedback on an assignment "they [students] look at that goal, and they [students] look at their score. You just see their thinking, there's very little that I [teacher] have to say when I hand something back" (Emily, personal communication, October 22, 2020). The next step is to focus on any skill that did not earn a three and make a goal. Thinking about what steps to take to meet that goal, what is needed from the teacher, and what the student needs to do. By identifying what skills need work, "it helps the kids narrow their focus to what they [students] still need to master in order to move to whatever level they're trying to get to" (John, personal communication, October 23, 2020). One study participant shared with students "it's not just about me [teacher]. I [teacher] can do my part but if they're [student] not going to do their part, then they're not going to meet their goal" (Ashley, personal communication, November 11, 2020). The process of goal setting requires students to think critically about individual current level of knowledge, where the end goal is, and what process is going to get there. Students must routinely analyze progress in relation to the end goal.

Student Autonomy.

Standards-Based Grading makes it "so easy to set goals with kids because you know what skills they [student] are lacking in and you [teacher] can chart their progress. When you [student] hit this point, you've met your goal. So now move on to another one" (Ashley, personal communication, November 11, 2020). Once students have been through a goal setting cycle before, the teacher can step back and let the student take ownership of the goal. If students are able to comprehend the target that is being worked towards, "then they're able to monitor their own progress. It allows them to know what their target is to be able to monitor whether they're hitting the target" (John, personal communication, October 23, 2020). One study participant shared that

it gives ownership to the kids. They [students] know the things that they [students] need to work on and it's not just me [teacher] harping on them [students]. It's in their hands. They [student] have ownership over it. They [student] were motivated, they wanted to meet their goals, they [student] wanted to get better. They [student] wanted to improve and it was all their self-motivation. (Ashley, personal communication, November 11, 2020)

It is the educator's job to prepare students for success. One way to do that is to teach students to determine individual level of knowledge, identify the end goal, and come up with a plan of how to get there. Once the process is taught, it can be replicated over and over as students reach adulthood.

Summary

The transition from traditional grading to Standards-Based Grading is not a decision to take lightly. There are many moving pieces that need to be laid out prior to implementation.

Things become clear when process is laid out in an organized comprehensible fashion; allowing all stakeholders to know what the expectations are as well as where the student is performing. By being aware of a student's academic performance, it enables teachers to push students to utilize their critical thinking skills at their own level. When teachers design instruction that helps build the students' self-worth, it prepares them to take control of their education and helps to build their autonomy. These three themes play an immense role in the effectiveness of Standards-Based Grading. Chapter 5 presents a discussion of the aforementioned findings as well as implications for various stakeholders. It will also provide recommendations for future research in the area of Standards-Based Grading.

Chapter 5 - Discussion

As illustrated in the findings of Chapter 4, there were several themes that came to light during analysis. These themes were present in the findings of all four research questions. The discussion of the findings outlines the connections between the research questions and the recurring themes. The implementation of Standards-Based Grading yields implications for various stakeholder groups. Based on the findings of this study, there are recommendations for future study in the area of Standards-Based Grading.

Discussion of Findings

Three distinct themes emerged from the research data. The major themes identified from the results of this study included:

- 1. **Clarity** in the expectation of the standards and the representation of grading.
- 2. Opportunities for students to engage in **Critical Thinking**.
- 3. Strategies to build **Student Autonomy**.

The themes of clarity, critical thinking, and student autonomy resonated throughout the study designed to answer the aforementioned research questions. Each theme is described in further detail below.

Theme 1: Clarity

Standards-Based Grading adds an element of clarity to education for all stakeholders involved. The most notable addition is to the specificity of what teachers are teaching. With any change, comes some eye-opening take-aways. This change has allowed teachers to have more accountability, not only for themselves but their students as well (John, personal communication, October 23, 2020). A study done by Buttrey (2014) found that the implementation of Standards-

Based Grading adds clarity for teachers and provides focus on what needs to be taught. The findings from this study go hand-in-hand with Buttrey (2014) as it was found that Standards-Based Grading provides teachers an outline of standards that are imperative to teach right now and what standards can be covered at another time (Joe, personal communication, October 15, 2020). It also clarifies the standard and the understanding of what a level 3 skill is, what a level 2 skill is, etc. This allows teachers the ability to know whether students have mastered a given skill or if the student needs more practice (Joe, personal communication, October 15, 2020).

By utilizing metacognitive strategies, students are awarded a clear picture of their current level of knowledge as well as knowing what items need to be focused on to meet the next level's expectations. Pairing that metacognitive knowledge with goal setting allows all parties to be involved in the process (Joe, personal communication, October 22, 2020). A study done by Fink (2015) found that student scores were more reflective of student academic levels and that students were able to articulate the learning outcomes that went along with their grades. Those findings are mirrored in the current study that found when students have the ability to write specific goals that clearly relate to their daily instruction, it transforms students' academic achievement into public knowledge for teachers, students, and parents (Joe, personal communication, October 22, 2020).

Standards-Based Grading has brought about clarity to the academic performance of economically disadvantaged students through the manifestation of Piaget's Theory of Cognitive Development, Flavell's Theory of Mind, as well as Vygotsky's Zone of Proximal Development. Ashley (personal communication, November 11, 2020) and John's (personal communication, October 23, 2020) perceptions suggest that a student's current level of cognitive development is identified, the process provides the student the opportunity to think critically about what is

known and what is not, and then take the steps to identify what their next steps are. After multiple repetitions, students reach autonomy and then are able to progress through the process independently [student autonomy].

Theme 2: Critical Thinking

With the clarity of expectations for classroom instruction, Standards-Based Grading has taken the act of lesson planning to the next level with the ability to narrow the focus and target instruction (John, personal communication, October 23, 2020). Standards-Based Grading helps teachers stay on track and ensures that their lesson plans are not simply lower level thinking. A study conducted by Shappell (2018) concluded that the implementation of Standards-Based Grading increased rigor in teachers' instruction enabling students to utilize their critical thinking skills more frequently. This study found that teachers are working to continuously keep students engaged and motivated and it has pushed them to differentiate their instruction to meet their students' needs. The students want more, students want to keep going. It is the teacher's job to plan lessons that will keep the highest and the lowest students engaged (Ashley, personal communication, November 11, 2020).

Keeping students engaged is no easy task; the implementation of Standards-Based Grading along with students' metacognition has helped build that intrinsic motivation. Students have to know independent current level of understanding as well as how it connects to new learning in order to determine and meet the end goal. Otherwise, students will not be able to understand how to figure out a problem or understand the meaning behind something (Ashley, personal communication, November 11, 2020). Utilizing that metacognitive knowledge to determine when to ask for help plays a substantial role in the implementation of Standards-Based Grading.

Standards-Based Grading has brought about critical thinking in the economically disadvantaged students' use of metacognition through the manifestation of Piaget's Theory of Cognitive Development and Flavell's Theory of Mind. Metacognitive strategies were utilized in every aspect of school life, ensuring that students were consistently thinking critically about their thinking (John, personal communication, October 22, 2020). Due to frequent use, students know the expectations of each strategy and how to implement it (Joe, personal communication, October 21, 2020). Student autonomy was apparent as there is ample amounts of evidence that students are thinking about their thinking (John, personal communication, October 22, 2020).

Theme 3: Student Autonomy

Student autonomy is the epitome of education. Teachers want students to be able to meet their goals on their own, with their own motivation. The implementation of Standards-Based Grading has emphasized the importance of student autonomy. In the past, teachers have felt that it was their responsibility to ensure their students succeed. Teachers needed to know where the students were at, what help was needed, and how to get students to the end goal. Now, it's not just on the teacher. By inviting students into the conversation, teachers are helping students build that autonomy. Teachers are asking students to be a part of the dialogue around current performance levels, what is needed to do to get to the next level, and how to get there. It transfers part of that ownership to the student (Joe, personal communication, October 22, 2020). These findings echo Andrews, Barnes & Gibbs (2016) previous work that found that students were taking the steps to complete work and fully engage in class following the implementation of Standards-Based Grading. A participant in this study shared that when students are willing to say "I'm not dumb. I'm not stupid. I [student] can learn this. I have an

adult that's willing to help me' they [students] are ready to take control of their education" (Joe, personal communication, October 22, 2020).

Standards-Based Grading has brought about student autonomy in the economically disadvantaged students' use of goal setting through the manifestation of Piaget's Theory of Cognitive Development, Flavell's Theory of Mind, and Vygotsky's Zone of Proximal Development. Standards-Based Grading has made it clear to students whether they have the cognitive development to master the skill or not (Ashley, personal communication, November 11, 2020). If the student has not mastered the skill, it is time to think critically to identify what still needs to be learned (John, personal communication, October 23, 2020). Once students have mastered the goal, it is time for them to move on and set another goal independently (Ashley, personal communication, November 11, 2020).

Implications

As the expectations that are placed on educational stakeholders become more rigorous with higher accountability, the implementation of Standards-Based Grading paired with metacognitive strategies and goal setting is one way to provide a clear picture of student academic performance, increase the opportunity for critical thinking, as well as enhance the presence of student autonomy. Implications surrounding the implementation of Standards-Based Grading are present for various stakeholder groups.

Teachers

Discovery.

If the school district is looking to implement Standards-Based Grading, there is bound to be some form of professional development surrounding the purpose, process, and product of Standards-Based Grading. A study conducted by MacCrindle (2017) found a benefit to working in teams is that the collaboration affords the ability to better comprehend the skill and meet the end all goal. This collaboration enables teams to reflect and process together prior to instruction. In regard to this study, participants echoed the same sentiments and that "a lot of it [implementation] was self-discovery or at least team discovery" (Joe, personal communication, October 15, 2020). Sitting down with a team and dialoguing around the standards, determining the best course of action to take.

Narrowed Focus.

Although it may feel time-consuming, a suggestion from this study's participants is that "extra time needs to be spent as teachers and grade levels identifying what we're measuring and narrowing our focus on what's being measured so that we can actually utilize the data" (John, personal communication, November 11, 2020). Taking the time to ensure everyone is on the same page and prepared will save time when it comes to presenting Standards-Based Grading to students. When the time and effort is put into effective planning and implementation, students will have positive perceptions of academic achievement compared to those in a traditional classroom according to Fink (2015).

Differentiated Instruction.

The implementation of Standards-Based Grading has made it easy to differentiate instruction for students. A study conducted by Sieling (2013) relays the same sentiments through the recommendation for teachers to use formative assessment data to increase differentiated instruction in the classroom. Utilizing student data, teachers can group students based on a specific skill, allowing the teacher to sit down at the table with them, or a small group. Students do not need the same things, being able to pull them based on a needed skill is much more

effective than having an overall group that everyone is in (Ashley, personal communication, November 11, 2020). Pulling individual students or small groups to the back table, enables the teachers to focus specifically on the standard or skill students are struggling with.

Consistency.

As standards become more rigorous and expectations rise, many standards are becoming more focused on the end product of what a student is able to demonstrate. A study conducted by MacCrindle (2017) found that the focus of Standards-Based Grading is on learning activities and the process behind them. Along those same lines, a participant in this study shared that "being consistent in our instruction and the process that we provide for our kids to learn from is getting them to be able to produce [demonstrate] the standard that we need" (Emily, personal communication, October 15, 2020). This type of consistency aids the manifestation of student autonomy. It also enables students to dig deeper into the content instead of trying to figure out the expectations.

Another avenue to increase consistency is through horizontal and vertical alignment. The participants of this study utilized vertical alignment of how common instructional strategies were implemented while also utilizing horizontal alignment of what strategies are taught. Vertical alignment allows one to "see very clearly what grade one was doing and how that built and helped grade two and what grade two is doing and how that helped me in grade three when the kids came to me" (Joe, personal communication, October 21, 2020). Vertical alignment alleviates some of the necessity for in-depth beginning of the year instruction. If the instructional strategies are similar, it should only require a refresher for most students.

Perseverance.

The implementation of Standards-Based Grading is one that requires a great mind-shift. It can seem daunting and unnecessary. With a little perseverance and an eye on the standard goal, teachers will overcome the obstacle and the process will get easier. One research participant shared that "the second year I felt very comfortable with what standards are expected and what I needed to be teaching" (Joe, personal communication, October 15, 2020). Similar sentiments were found in a study conducted by MacCrindle (2017) that recommends that teachers are provided time to wrap their heads around the idea of Standards-Based Grading as well as time to learn how to implement Standards-Based Grading.

Students

Differentiated Instruction.

No two children bring the same knowledge and experiences to the table. Each child brings their own unique mixture. By implementing standards-based instruction, students will have access to more differentiated instruction based on their current level of knowledge. The importance of differentiated instruction is cemented in the findings of studies conducted by Sieling (2013) and Fink (2015) that suggest learning targets are based on students' current level of knowledge, therefore it is routine to see students engaged in a variety of learning strategies within the same classroom. Due to the consistent gathering of data, instruction is constantly changing to meet the current needs of the students.

Consistency.

When teachers utilize consistent instructional strategies, it affords students the opportunity to achieve greater academic success. Students are familiar with the strategies and

what the expectations are thus can focus on the content being taught, which allows for more rigorous instruction and deeper critical thinking. This finding is consistent with the findings of a study conducted by Shappell (2018), which found that more rigorous instruction enables students to use critical thinking skills more consistently.

Another avenue to increase consistency is through the vertical alignment of instructional strategies. This means that when students move to the next grade level the expectations and process for the instructional strategies that will be utilized are already mastered. The strategy may be utilized in a more rigorous way or have an added step due to the bulk of the strategy knowledge already being present; providing students extra time to focus on new learning.

Student Autonomy.

The implementation of Standards-Based Grading truly enables students to take ownership of learning. If the students know the expectations for the standard and/or assignment, then the capability of tracking progress and setting goals for instruction with more intrinsic motivation is present. Andrews et al. (2016) found that it helps build student autonomy; students may not get it the first time but if students keep working on it, mastery will come in time. Student motivation enables teachers to facilitate the learning without having to spoon feed information to students.

Recommendations for Future Study

The implementation of Standards-Based Grading is a long, arduous road. By separating the district mandated process and focusing on the perceived outcomes, the current study found that teachers' perspective of the implementation of Standards-Based Grading with the use of metacognition and goal setting is thought to add clarity, opportunity for critical thinking, as well as enhances student autonomy. Although the research surrounding Standards-Based Grading is limited, this study provides a good indication that the implementation of Standards-Based

Grading warrants further research. This study took place in one urban elementary school setting. An expansion of this study could be to examine the impact of the implementation of Standards-Based Grading at multiple urban elementary schools or to examine the impact of implementation of Standards-Based Grading at the middle or high school level. Considering this study focused on the perceived outcomes, the analysis of various process' of implementation would be beneficial to identify the most stream-lined process as well as the ability to perform quantitative research at any academic level would assess the correlation between traditional and Standards-Based Grading measures and end of the year standardized assessments. Due to the lack of breadth in the research surrounding Standards-Based Grading, the opportunities for further research are vast in both qualitative and quantitative research.

Summary

As the researcher, I was initially drawn to Standards-Based Grading due to the implementation at the elementary school building I was working at. The implementation of Standards-Based Grading was a large mindshift for many of my colleagues. As I dug deeper into the research surrounding Standards-Based Grading, it became apparent that the implementation of Standards-Based Grading came with mixed results and findings but had positively impacted students' academic achievement in some way. Based on the findings of this study, Standards-Based Grading has brought about clarity, critical thinking, and student autonomy in the economically disadvantaged students' use of metacognition and goal setting through the manifestation of Maslow's Hierarchy of Needs, Piaget's Theory of Cognitive Development, Flavell's Theory of Mind, Vygotsky's Zone of Proximal Development, and Change Theory.

The Hierarchy of Needs, Theory of Cognitive Development, Theory of Mind, and the Zone of Proximal Development provide the foundation and the substance for the thinking

processes. Change Theory provides the avenue for which the implementation happened. The transition from traditional grading to Standards-Based Grading requires a second-order change due to the acquisition of new knowledge and skills as well as resources and materials that have not been used before (Marzano et al., 2005). Second-order change requires perseverance from all involved in order to stay out of the implementation dip (Fullan, 2001) and to reach successful implementation.

Clarity, Critical Thinking, and Student Autonomy go hand-in-hand with Standards-Based Grading. Based on the findings of this study, the implementation of Standards-Based Grading with economically disadvantaged students will increase clarity in standard expectations as well as student grades and academic performance. It affords the opportunity to increase critical thinking and student autonomy in economically disadvantaged students. Teachers need to know how students are doing, what students know, what they don't know and any potential gaps in between. Teachers cannot do those things without looking at the standards. In the words of one study participant, "I wouldn't go back" (John, personal communication, October 21, 2020).

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Appendix A - Interview Protocol

A. 1 Interview Protocol

Interview Protocol

Session 1:

- Sort researcher Standards-Based Grading examples to illustrate proficiency.
- Please submit 2 artifacts as evidence of metacognition and goal-setting utilization.
- Semi-Structured Interview Questions:
 - Overall, how satisfied or dissatisfied are you with your current level of knowledge on standards-referenced grading?
 - During the 17-18 school year, how do you feel the student's grades reflected their proficiency?
 - During the 19-20 school year, how do you feel the student's grades reflected their proficiency?
 - Does the implementation of Standards-Based Grading have a positive impact on the accuracy of student grades?
 - Do you feel standards-referenced grading implementation has been at increasing student achievement on state assessments?
 - How important do you feel it is to grade students using standards-referenced grading?

Session 2:

- Sort participants provided evidence of metacognition.
- Interview Questions:
 - To what extent does standards-based grading lend itself to the utilization of metacognitive processes?
 - In the 17-18 school year, to what extent do you think students knew their current level of proficiency?
 - In the 19-20 school year, to what extent do you think students knew their current level of proficiency?
 - What are some ways that your students provide evidence of their utilization of metacognition in reference to Standards-Based Grading?
 - What are some of the positives to utilizing metacognition in the classroom, in reference to Standards-Based Grading?

Session 3:

- Sort participants evidence of goal setting
- Interview Questions:
 - To what extent does standards-based grading lend itself to the utilization of goal setting?
 - To what extent do you agree or disagree that standards-referenced grading lends itself to the utilization of goal setting?
 - What are some ways that your students provide evidence of their utilization of goal setting in reference to Standards-Based Grading?
 - What are some of the positives to utilizing goal setting in the classroom in reference to Standards-Based Grading?
 - If the option were presented again, would you be to support the transition to standardsreferenced grading?

Appendix B - IRB Approval



TO: Dr. J. Spencer Clark Proposal Number: 10242

Curriculum and Instruction

Bluemont Hall

FROM: Rick Scheidt, Chair

Committee on Research Involving Human Subjects

DATE: 09/10/2020

RE: Approval of Proposal Entitled, "Teacher Perceptions of An Urban School's Transition to

Standards-Based Grading."

The Committee on Research Involving Human Subjects has reviewed your proposal and has granted full approval. This proposal is approved for three years from the date of this correspondence.

APPROVAL DATE: 09/10/2020 EXPIRATION DATE: 09/09/2023

In giving its approval, the Committee has determined that:

There is no more than minimal risk to the subjects.
There is greater than minimal risk to the subjects.

This approval applies only to the proposal currently on file as written. Any change or modification affecting human subjects must be approved by the IRB prior to implementation. All approved proposals are subject to continuing review, which may include the examination of records connected with the project. Announced post-approval monitoring may be performed during the course of this approval period by URCO staff. Injuries, unanticipated problems or adverse events involving risk to subjects or to others must be reported immediately to the Chair of the IRB and / or the URCO.

Appendix C - Informed Consent

IRB Informed Consent Template Form Page 2				
PROJECT TITLE:				
Teacher Perceptions of An Urban School's Transition to Standards-Referenced Grading				
PROJECT APPROVAL. DATE: PROJECT EXPIRATION 11/1/2020 LENGTH OF STUDY: 8 weeks				
PRINCIPAL INVESTIGATOR: Makenzie Gurss				
CO-INVESTIGATOR(S): N/A				
CONTACT DETAILS FOR PROBLEMS/QUESTIONS: mgurss@ksu.edu				
IRB CHAIR CONTACT INFORMATION: Janine Duncan – duncanjm@k-state.edu				
PROJECT SPONSOR: 1. Spencer Clark				
PURPOSE OF THE RESEARCH:				
Researcher will be able to determine teachers' perception of the impact of standards referenced grading implementation on student achievement.				
PROCEDURES OR METHODS TO BE USED:				
This study will utilize a case study format consisting of three to four interview sessions per participant, based on flow and content present in sessions, as well as an elicited and enacted document review. The results will then be analyzed utilizing NVivo Qualitative Data Analysis software. Once findings are established, participants will be debriefed on the conclusions drawn from the study.				
BIOLOGICAL SAMPLES COLLECTED (Describe procedure, storage, etc.):				
N/A				
ALTERNATIVE PROCEDURES OR TREATMENTS, IF ANY, THAT MIGHT BE ADVANTAGEOUS TO SUBJECT:				
N/A				
RISKS OR DISCOMFORTS ANTICIPATED:				
Inconvenient use of their time and/or other engagements.				
BENEFITS ANTICPATED:				
A benefit would be for research participants and society as a whole to know teachers' perceptions of the impact standards-based grading has on student achievement. This study would provide perspective for those that are considering on making the switch to standards-based grading.				

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IRB	Informe	d Consen	t Templa	te Ferm

Page | 3

EXTENT		

Research subjects will not be identified in any write up or discussion of the study, pseudonyms will be used when identification is necessary. Results will be displayed in an anonymous format, the information collected cannot be linked in any way to a specific person. Data will be saved on an external hard drive that only the responsible graduate student and principle investigator have access to and data will be destroyed after the conclusion of the study.

The information or biospecimens that will be collected as part of this research could be used for future research studies or distributed to other investigators for future research studies without additional informed consent.

☐ Yes 図 No

		PPROVAL	

PARENT/GUARDIAN APPROVAL SIGNATURE:

DATE:	
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Terms of participation: I understand this project is research, and that my participation is voluntary. I also understand that if I decide to participate in this study, I may withdraw my consent at any time, and stop participating at any time without explanation, penalty, or loss of benefits, or academic standing to which I may otherwise be entitled.

I verify that my signature below indicates that I have read and understand this consent form, and willingly agree to participate in this study under the terms described, and that my signature acknowledges that I have received a signed and dated copy of this consent form.

(Remember that it is a requirement for the P.I. to maintain a signed and dated copy of the same consent form signed and kept by the participant).

PARTICIPANT NAME:

PARTICIPANT SIGNATURE:

WITNESS TO SIGNATURE: (PROJECT STAFF) DATE:

DATE: