The Impact Of A Standards-Based Approach On Student Motivation

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The Impact of a Standards-Based Approach on Student Motivation

By

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BA (Northeastern University) 2004
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A DISSERTATION

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ABSTRACT

The purpose of this individual case study was to investigate students’ perspectives on levels of motivation to reach mastery on identified standards when provided a standards-based approach to instruction, assessment, and reporting as compared to a traditional approach that utilized number and letter grades. The site studied is a rural elementary school located within a district that is beginning initiation of a standards-based approach. Resting on the foundation of motivational theory, this study sought to answer the question, how does the implementation of a standards-based approach to instruction and assessment impact the students’ perception of their level of motivation to work toward mastery on an identified standard? Qualitative data gleaned from surveys of four teacher participants was used to ascertain their feelings regarding the implementation of a standards-based approach and their perceptions of their students’ level of motivation in the classroom. Results showed that students felt more motivated to reach mastery on identified standards, were more aware of their strengths and weaknesses, and felt that their classrooms were more student-centered under a standards-based approach. Teachers felt that the shift to a standards-based approach was more motivating to students, enhanced student collaboration, and promoted a more supportive classroom environment.
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Doctor of Education

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CHAPTER 1

INTRODUCTION

Grading practices have been at the forefront of educational practices for decades (Guskey, 2011). Over time, the primary purpose of reporting in the form of grading remains to communicate the achievement status of a student to his or her parents or other educational institutions. If constructed correctly, an educational reporting tool can also help students self-assess their skills and provide educators with a method from which to select, identify, and group students for instruction, educational paths, or programs. Frequent formative assessments also allow educators to assess the effectiveness of instructional programs (Brookhart, 2013; McTighe & O’Connor, 2005).

With the adoption of agreed upon Common Core State Standards (CCSS) by many states, grading, assessment, and reporting practices are being revised. In theory, grading practices should accurately reflect what a child has learned and achieved. Grades must be based on what students know and are able to do according to defined standards (Marzano, 2006). Historically, in a traditional grading situation, behavior and work completion are factored into a student’s final grade. As a result, traditional grades are not reflective of solely learning and achievement towards mastery of a standard (Schinske & Tanner, 2014).

In a standards-based approach to grading and reporting, student performance is compared to a pre-determined set of standards and expectations. Students are provided consistent and timely feedback on their progress and have multiple opportunities for practice. Typically, in a standards-based approach, each standard is assessed using multiple data points and given an overall proficiency rating that indicates that a child is either working towards mastery, has reached mastery, or exceeds mastery on the identified standard. This information is
communicated to parents, students, and other educational institutions as needed. Furthermore, behaviors are assessed separately from academic standards (Marzano, 2006).

There is a vast body of existing literature on the topic of standards-based grading practices and the benefits of implementation. Studies on the topic suggest that the range of benefits include increasing students’ self-awareness and achievement levels (Hendry, Armstrong, & Bromberger, 2011; Marzano, 2010), fostering differentiation for all learners (Marzano, 2010; Voltz, Sims, & Nelson, 2010), and the positive impact on teacher professional development (Avalos, 2011). This study strived to compile existing literature relevant to the topic while taking into account the students’ perspectives on a standards-based approach in the classroom, specifically around their level of motivation towards reaching mastery on a standard.

**Problem Statement**

Reporting tools such as report cards should successfully communicate a child’s strengths and weaknesses and mirror a child’s growth and progression through a set of standards being taught in the classroom. Traditional letter and number grades are not reflective of what a child has learned on an identified set of standards, however this type of grading system remains one of the most enduring features of schooling (Johnson, 2011). Traditional grading practices often include averaged scores on a variety of assessments and also include non-academic factors such as behaviors in the classroom. According to Johnston (2011), many traditional grading practices actually decrease student achievement, and may, in fact, even lead to school failure and increased dropout rate. In this new era of standards-based instruction, it is essential that instructional practices are aligned with learning objectives, accurately reflect what a child has learned, and provide a means for student self-assessment and motivation to reach mastery.
In addition, reporting tools such as report cards should successfully communicate a child’s strengths and weaknesses and mirror a child’s growth and progression through a set of standards being taught in the classroom. The problem that was studied was the impact that these assessment and reporting methods had on students’ perceptions of their skills and their motivation to master a given standard.

**Purpose**

Standards-based grading practices have been at the forefront of change initiatives all over the country since the adoption of Common Core State Standards (CCSS) in 2010. The purpose of this study was to investigate the impact that a standards-based approach to instruction, assessment, and reporting had on student motivation from the perspective of the student. The proposed study was intended to create an even stronger case for the implementation of standards-based grading and reporting practices in a rural school district in New Hampshire.

The subject of standards-based grading practices is very widely debated. There is a tremendous amount of literature on the topic as well as research studies on the implementation of standards-based grading practices. The Malcom Report of 1993 (as cited in Marzano, 2011) first referenced the term “performance standard,” which was later enhanced by the work of many researchers including well-known proponents of the standards-based approach, Marzano (2000, 2006, 2011), Reeves (2011a, 2011b), and Wormeli (2006a, 2006b, 2010), to name a few. However, to date, there is very little research that takes into account the student perspective and how the implementation of standards-based practices impact student motivation to reach mastery of a subject and the students’ personal perceptions of what or how much they have learned within a particular context (Miller, 2013). This study addressed the gap in existing research and
strengthened the case for the implementation of a standards-based approach to instruction, assessment, and reporting.

**Significance of the Study**

The vast body of research on the topic of a standards-based approach to instruction and assessment takes into account the negative effects a traditional approach has on student motivation, but fails to account for the perspective of the student. This inquiry looked specifically at the impact a standards-based approach to instruction, assessment, and reporting had on student motivation and their self-perception of what they had learned. This research provided a unique perspective on existing literature and aimed to strengthen the case for a standards-based approach to instruction, assessment, and reporting in public elementary schools, specifically in a small rural school district in northern New Hampshire. Miller (2013) suggests that to ensure a standards-based approach is an effective way to increase student achievement the students themselves must be at the forefront of the initiative. Therefore, ascertaining the student perspective is essential to making meaningful change toward incorporating standards in the classroom (Guskey, 2011).

The existing body of literature on the topic of standards-based assessment indicates that relying on a traditional number and letter grade approach is not reflective of what a student has learned and can actually depress achievement over time (Johnston, 2011). It can be ascertained from existing literature that a standards-based approach is more student-centered in that it provides a clearer, more accurate representation of achievement. By gleaning students’ perspectives on their level of motivation toward reaching mastery on a standard, stakeholders will have a better understanding of the purpose and benefits to the implementation of a
standards-based approach in a student-centered classroom (Harris, Davidson, Hayes, Humphreys, LaMarca, Berliner, Poynor, & Van Houten, 2014).

**Research Questions**

Guiding this research was the overarching question: *How did the implementation of a standards-based approach to instruction, assessment and reporting impact a student’s perception of their level of motivation to work toward mastery on an identified standard?* 

Related research questions included:

- How well did students understand their personal strengths and weaknesses when presented with a standards-based approach to instruction versus a traditional model?
- How did teachers view a standards-based approach to instruction, assessment and reporting as it related to student achievement?

It was hypothesized that, although traditional grading practices motivated some students to achieve the highest grade, a standards-based approach motivated most students to master an identified standard. Additionally, it was also hypothesized that through the development of a stronger self-perception of academic strengths and weakness, students felt a stronger sense of control over their learning, which in turn, increased their motivation to reach mastery than the receipt of a traditional grade. A standards-based approach to instruction, assessment, and reporting provides a more student-centered environment where children create their knowledge rather than simply absorb it (Richmond, 2014a). This environment creates a more motivating learning experience where students are in control of their own learning (Weimer, 2012).

**Conceptual Framework**

This study was guided primarily by theories of motivation. Theories of what makes humans do what we do, or motivational theory, have been investigated since the early 1940’s
when Maslow (1943) first developed the theory. Since then, motivational theory has shifted from Maslow’s behaviorist standpoint to a constructivist view employed by many researchers more recently. At the onset of the theory, as viewed through a behaviorist lens, motivation was presumed to be influenced by the requirement to have one’s basic needs met. This notion evolved over time with the belief that motivation is impacted by the decision-maker’s ability to weigh the outcomes of an act; thus identifying the act as more favorable or unfavorable. In theory, a more favorable act would be more motivating in which to engage. Following this phase of development, motivational theory evolved to embody a more constructivist view that frames the person as a creator that makes meaning by considering the value and purpose of pursuing goals (Toshalis & Nakkula, 2012). More current research in the area of motivational theory includes Vroom’s work on Expectancy Theory in 1964 and Locke’s Goal Theory of 1968. More recently, Pink (2011) ascertains that the secret to high performance and satisfaction at work, at school, and at home is the deeply human need to direct our own lives, to learn and create new things, and to do better by ourselves and our world. He also argues that there are three elements of true motivation: autonomy, mastery, and purpose (Pink, 2011). These three elements were easily applied to the research study when looking at a student’s perception of motivation and learning when compared to traditional grading practices to those using a standards-based approach. As a subset of student motivation to reach mastery, this study investigated the power of student-centered learning and the benefits that occurred when students truly understood their needs as learners within a classroom setting.

In a student-centered classroom, students are viewed as major stakeholders in the learning process (McCarthy, 2015). In this environment, students are understood to be motivated by ethics of care, contribution, and compassion and therefore, and deserve programs and
approaches to instruction that meet their individual needs and varying skill sets (Toshalis & Nakkula, 2012). Additionally, a student-centered classroom environment supports the notion that the students generate knowledge rather than simply receive it, an exchange that mirrors a constructivist view of the human mind (Matthews, 2003). The constructivist view of motivation also supports the concept that, within the classroom, the most potent motivators are intrinsic to the student and are held internally based on values, feelings, and desires (Toshalis & Nakkula, 2012). This study examined how a standards-based approach to instruction, assessment, and reporting was employed; and whether the classroom environment was more student-centered, how students were active participants in their learning, and whether they were intrinsically motivated to reach mastery and improve their skills (Matthews, 2012).

There has been a tremendous amount of research done on self-determination as it relates to one’s motivation to achieve. Self-determination theory, developed by Deci and Ryan (2000), addresses three innate needs: competence, relatedness, and autonomy. The theory surmises that if these three innate needs are met, people function and grow optimally. In order to reach one’s fullest potential, the environment in which people function must support and nurture these innate needs. A student-centered classroom that supports and engages in a standards-based approach to instruction provides students with the feeling of competence; the opportunity to control the outcome of their own learning and reach mastery (Toshalis & Nakkula, 2012). The environment also allows students to experience relatedness as they work collaboratively on mastering identified skills while also encouraging autonomy; the desire to be causal agents of one’s own life. According to Matthews (2012), student-centered classrooms that foster the students’ level of self-determination significantly increase motivation, which in turn, increase student achievement.
Another pertinent theory to the foundation of this research study as it relates to student motivation is the self-regulation theory. Numerous contributing psychologists, including the well-known cognitive psychologist, Albert Bandura, have developed self-regulation theory over time (Bandura, 1991; Deci & Ryan, 2008). From an educational perspective, self-regulation theory is concerned with what students do to maintain engagement in a particular task. In order to be self-regulated in the classroom setting, students must be goal-focused and demonstrate control over their effort towards learning (Toshalis & Nakkula, 2012). In a student-centered classroom environment where a standards-based approach is employed, self-regulated learners are able to monitor how effective their learning strategies are and change their behavior to adapt to a multitude of situations (Brown, 2008). This study presumed that a standards-based approach to instruction, assessment, and reporting promoted self-regulated and self-determined learners who were more motivated to reach mastery on identified standards than students in a traditional classroom setting (Matthews, 2012).

To further support motivational theory including self-regulation and self-determination theories, this research also encompassed goal-achievement theory in the investigation of the students’ perception of motivation when reaching mastery on a standard. According to Seifert (2004), achievement goal theory posits that academic motivation rests on the student’s desires to achieve goals. Although slightly different than motivational theorists, goal theorists classify goals into mastery goals and performance goals. To reach a mastery goal, one must demonstrate understanding, skill, and content knowledge of the topic at hand. Conversely, performance goals require reaching a predetermined performance level or out-performing a comparison individual or group (Center on Education Policy [CEC], 2012). Research has shown that students who exhibit a mindset that aims to reach mastery goals are more inclined to understand topics on a
deeper level, generalize learned strategies more effectively, and are more adaptable to challenging situations (Brown, 2008; CEC, 2012). In contrast, students who focus on performance goals and compare themselves to one another are more apt to be unsuccessful when overcoming failure and do not feel that effort impacts success (CEC, 2012). The study proposed that, in conjunction with other theories of motivation, the goal-achievement mindset supported the culture of a standards-based classroom environment. Within this approach, where effort toward reaching mastery on identified standards is valued, it was hypothesized that students exhibited a higher level of motivation toward reaching their goals than those presented with a traditional approach.

Assumptions, Limitations, Scope

This study was conducted with the assumption that the archival data being analyzed accurately and truthfully represents the students’ school experiences and their level of motivation toward reaching mastery as well as their level of learning on identified standards.

It was assumed that the teachers involved shared the same general philosophy on what a standards-based approach to instruction, assessment, and reporting entailed within the classroom setting. The teachers involved had equal opportunity to investigate and research a standards-based approach through professional development in-services and professional reading provided by administration. It was assumed that the teachers involved actively engaged in the opportunities that were provided to them.

Limitations of this study included the small sample size of 74 students in self-contained fifth- and sixth-grade classes. This sample reflects the small size of the rural school district in which the school being researched was located. Additionally, the age of the students posed a limitation, as it was assumed that their self-reports are aligned with their young stage of
development. Despite this limitation, however, this study could be replicated in another location with a larger sample size of older students, and the results could be used to determine the appropriateness of a standards-based approach to instruction in an educational institution. This study was also limited to the socio-economic status of the students who attended the school being researched. At the time of data collection, 42% of the students received federal free or reduced lunch (District Report Card, 2016).

The scope of this study stretched throughout the school being studied and into the larger school district in which the school is located. Stakeholders who benefited from this research included educational leaders within the district and beyond, board members who are responsible for policy development around grading and reporting methods, teachers, families, and students.

Definition of Terms

Traditional Grading Approach- The practice of assigning a number or letter grade to a subject (O’Connor, 2002; Townsley, 2014a).

Standards-Based Approach- Refers to a system of instruction, assessment, grading, and reporting that are based on students demonstrating mastery in the knowledge and skills they are expected to learn on a given standard (“Standards-based,” 2014).

Common Core State Standards (CCSS)- A United States educational initiative that outlines what a student should know and be able to do in English Language Arts and Math for each grade level (“About the standards,” 2016).

Student-Centered Instruction- Refers to a wide variety of educational programs, learning experiences, instructional approaches, and academic-support strategies that are intended to address the distinct learning needs, interests, aspirations, or cultural backgrounds of individual students and groups of students. Often includes frequent assessments, including
self-assessments of students, to ensure that requisite content is mastered (Richmond, 2014; “Student-Centered Learning,” 2014).

Conclusion

This study strived to investigate the students’ perspective on their level of motivation to reach mastery when provided a standards-based approach to instruction, assessment, and reporting as compared to a traditional approach that utilized number and letter grades. Resting on the foundation of new and old theories of motivation, including self-determination, self-regulation, and goal-achievement theories (Bandura, 1991; Deci & Ryan, 2000, 2008; Pink, 2011; Seifert, 2004) this study provided a unique perspective on standards-based instruction that added to the already vast existing body of literature. This study sought to answer the question, how did the implementation of a standards-based approach to instruction and assessment impact the students’ perception of their level of motivation to work toward mastery on an identified standard? This included how well students understood their personal strengths and weaknesses when presented with a standards-based approach to instruction versus a traditional model. Additionally, how did teachers view a standards-based approach to instruction, assessment, and reporting as it related to student achievement? A thorough review of the existing literature supported the notion that a standards-based approach was student-centered and more accurate and informative than traditional methods, but failed to include the students’ perspectives of what they had learned and how motivated they were to reach mastery. This study looked deeply into students’ thoughts and opinions on the implementation of a standards-based approach through their responses on an archived questionnaire about their perceived levels of motivation toward reaching mastery.
CHAPTER 2

SELECTIVE REVIEW OF THE LITERATURE

This quantitative and qualitative research study compared students’ self-perceptions of their level of motivation when provided a standards-based approach to instruction, assessment, and reporting to when they were assessed using a traditional grading approach. The study involved students in self-contained fifth and sixth grade classes at a rural elementary school located in northern New Hampshire. The study also ascertained the students’ level of understanding about their personal strengths and weaknesses comparing both approaches.

This literature review delves into the impact standards-based grading practices have on teaching and learning. Resting on the foundation of motivational theory, this review compares the teacher-centered, traditional method of distributing number or letter grades to the student-centered, standards-based approach that more accurately reflects a student’s level of learning on a set of standards. The literature suggests that traditional grades are not reflective of what a child has learned, especially when they are averaged, do not include behaviors that support learning, or when students are graded on a curve (Guskey, 2011; Kohn, 2011; Vatterott, 2015; Wormeli, 2010). In contrast, this researcher suggests that a standards-based approach is student-centered. Under this philosophy, the student is considered an active and essential part of planning and designing instruction that meets his or her own unique needs as learners (Levy, 2014). Additionally, the literature supports the notion that this approach requires students to be self-aware, self-regulated, and self-determined consumers of knowledge (Levy, 2014; McCarthy, 2015). The existing body of literature proposes that a student-centered, standards-based approach to instruction, assessment, and reporting is more accurate, more meaningful, and increases
motivation as compared to traditional methods (Heflebower, Hoegh, & Warrick, 2014; Miller 2013).

This literature review also uncovers a major deficiency in existing research, which is students’ perspectives on how a standards-based approach impacts their level of motivation to reach mastery within a student-centered classroom environment. Providing new information on this essential component further strengthens the case for the implementation of a standards-based approach at the site under study.

History

Grading is one of the most enduring features of schooling. No matter what other reforms occur in a school, grading remains as one of the cornerstones of educational practice (Johnson, 2011). Recently, however, this long-standing tradition has again come under scrutiny with some alarming results. According to Johnston (2011), many traditional grading practices actually decrease student achievement, and may, in fact, even lead to failure and dropping out. In this era of standards-based instruction, it is essential that grading practices are aligned with learning objectives and accurately reflect what a child has learned. In addition, reporting tools such as report cards should successfully communicate a child’s strengths and weaknesses and mirror a child’s growth and progression through a set of standards being taught in the classroom (Marzano, 2006).

Objectives

The purpose of this study was to investigate the impact that a standards-based approach to instruction, assessment, and reporting had on student motivation to reach mastery on a set of standards from the perspective of the student. The study was intended to create an even stronger
case for the implementation of standards-based grading and reporting practices in a rural school
district in northern New Hampshire.

As this district strives for uniformity, consistency in assessing and reporting student
achievement is necessary. Across five elementary schools within this district, there are more than
eight different versions of the current report card. In three of the elementary schools, students in
grades K-3 receive a standards-based report card with teacher comments while students in grades
4-6 receive letter/number grades for broad subject areas with teacher comments. Currently, these
three elementary schools distribute the report card four times per year in grades 4-6 and twice per
year in grades K-3. Even among these three schools, there is variation among the different
versions of the report cards. A goal of this district’s leadership is to better communicate what
each child is learning in relation to the standards and provide more detailed feedback to parents.
Revising the reporting tool allows it to more accurately reflects a child’s growth and progression
through the adopted set of standards over the entire school year.

**Literature Collection Process**

The articles gathered for this review of literature were obtained using online databases
and by locating references cited in articles that provided relevant additions to the research. The
descriptors used to search the EBSCO and ERIC databases were standards-based assessment,
standards-based reporting, student achievement, standards, student motivation, student-centered
approach, and student perception. These descriptors were helpful in finding numerous sources to
be reviewed. Some prominent authors who were cited frequently in the works of other
researchers were investigated further by conducting a simple Google search. Additionally, many
books have been written on the topic of standards-based grading practices, and therefore were
cited in the research.
Theoretical Framework

This study compared students’ self-perceptions of their level of motivation to reach mastery when they were provided a standards-based approach to instruction and assessment, as opposed to when they were taught and assessed using a traditional approach. The theoretical framework centered on motivational theory, more specifically, the idea that traditional number and letter grades are not reflective of what a student has learned (Marzano, 2006) and hypothesized that students would be more motivated to learn the content being taught when traditional grades were removed (Heflebower, Hoegh, & Warrick, 2014; Miller, 2013). Additionally, this study relied on the notion that a student-centered classroom environment promoted self-determined and self-regulated learners who generated their own knowledge rather than simply absorbed content that was imposed upon them by the teacher (Levy, 2014; McCarthy, 2015). Therefore, a standards-based approach catered more to the individual students’ needs and it was hypothesized that this approach would increase motivation to reach mastery (Johnson, 2009; Matthews, 2012).

Motivational Theory

This research study relied heavily on the theory of motivation including self-determination, self-regulation, and goal-achievement theories. When making attempts to debunk traditional grading practices, prominent authors in the field reference motivational theory and how using traditional grades actually depresses student achievement as a result of shifting the focus from authentic learning to students simply working for the grade (Johnson, 2011; Kohn, 2011).

Evolution. Theories of what makes humans do what we do, or motivational theories, have been investigated since the early 1940’s when Abraham Maslow (1943) outlined his
Hierarchy of Needs in an article titled, “A Theory of Human Motivation”. Since then, many other researchers have studied motivational theory and have expanded upon the notion that humans are motivated by both intrinsic factors and extrinsic rewards (Pink, 2011).

Motivational theory has developed over time. Since Maslow first developed the notion in a behaviorist fashion, many others have transformed the theory to employ more of a constructivist view (Deci & Ryan, 2000; Palmer, 2005). Motivation, as viewed through a behaviorist lens, was thought to be influenced by the demand to have one’s basic needs met. This perspective evolved over time with the belief that motivation is impacted by the decision-maker’s ability to weigh the outcomes of an act, thus making the act seen as more favorable or unfavorable (Toshalis & Nakkula, 2012). In theory, a more favorable act would be more motivating to engage in. Following this phase of development, motivational theory evolved to embody a more constructivist view that frames the person as a creator who makes meaning by considering the value and purpose of pursuing goals (Toshalis & Nakkula, 2012). More recent research in the area of motivational theory includes Vroom’s work on Expectancy Theory (1964) and Locke’s Goal Theory of 1968. More recently, Pink (2011) ascertains that the secret to high performance and satisfaction at work, at school, and at home is the deeply human need to direct our own lives, to learn and create new things, and to do better by ourselves and our world. He also argues that there are three elements of true motivation: autonomy, mastery, and purpose.

**Extrinsic vs. intrinsic motivation.** In order to fully understand how a student’s level of motivation may vary when provided with different approaches to instruction, it is important to first understand the two types of motivators. Very simply defined, extrinsic motivation is the outside influence of a person, object, or reward that requires the achievement of a particular goal. Also very simply defined, intrinsic motivation is when the primary motivator for achievement or
accomplishment is entirely within one’s self (Frank, 2010). As it pertains to education, extrinsic motivators are often thought of as a way to shape behavior. However, Toshalis & Nakkula (2012) believe that the shift to a constructivist view of shaping behavior within the classroom supports the notion that intrinsic motivators are the best and strongest way in which to motivate a student. Research has shown that a student’s level of motivation is more potent, more resilient, and more easily maintained over time when it grows from internally developed goals versus goals that are imposed upon the student in the form of external coercion (Eccles & Wigfield, 2002).

This study rested on the premise that when presented with a standards-based approach to instruction and assessment, students would be more intrinsically motivated to reach mastery as compared to the use of traditional methods, since they would have naturally developed individual goals for achievement on a given standard (CEC, 2012). Likewise, traditional number or letter grades could be viewed as extrinsic motivators based on the body of research that argues their inaccuracy as opposed to the more intrinsic concept of mastery (Covington & Mueller, 2001).

Self-Determination Theory

There has been a tremendous amount of research on self-determination as it relates to one’s motivation to achieve. Self-determination theory, developed by Deci & Ryan (2000), addresses three innate needs: competence, relatedness, and autonomy. The theory surmises that if these three innate needs are met, people function and grow optimally. In order to reach one’s fullest potential, the environment in which people function must support and nurture these innate needs. A student-centered classroom that supports and engages in a standards-based approach to instruction provides students the opportunity to control the outcome of their own learning and reach mastery and supports their development of the feeling of competence (Toshalis & Nakkula,
The environment also allows students to experience relatedness as they work collaboratively on mastering identified skills while also encouraging autonomy; the desire to be causal agents of one’s own life (Reeve, Nix, & Hamm, 2003). According to Matthews (2012), student achievement motivation is enhanced when student-centered classrooms promote self-determined learners.

As a subset of motivational theory, self-determination theory contributes to the development of a student’s motivation to achieve as it blurs the lines between intrinsic and extrinsic motivation (Toshalis & Nakkula, 2012). At the core, self-determination theory acknowledges that, although behavior is often driven by external factors, external influences can be internalized and integrated, which ultimately results in autonomous functioning (Appleton, Christenson, & Furlong, 2008). In a student-centered classroom, the goal is for the student to move from compliance and performance expectations imposed upon them by the teacher to forms of self-regulated collaboration (Eccles & Wigfield, 2002). In this research study, the implementation and use of standards as benchmarks for student achievement were considered an external imposition, however, self-determination theory suggested that the integration of intrinsic mastery is appropriate (Deci & Ryan, 2000). It was hypothesized by this researcher that this blending, in the form of a standards-based approach, would increase students’ motivation to achieve within the classroom setting.

Self-Regulation Theory

Over time, numerous contributing psychologists, including the well-known cognitive psychologist, Albert Bandura, have developed self-regulation theory (Bandura, 1991; Deci & Ryan, 2008). From an educational perspective, self-regulation theory is concerned with what students do to maintain engagement in a particular task. The theory posits that in order to be self-
regulated in the classroom setting, students must be goal-focused and demonstrate control over
their efforts towards the learning activity (Toshalis & Nakkula, 2012). From a cognitive
perspective, self-regulated learners are able to set goals, plan, self-monitor, and self-assess at
various points in the learning process (Weimer, 2010). In a student-centered classroom
environment where a standards-based approach is employed, self-regulated learners are able to
monitor how effective their learning strategies are and change their behavior to adapt to a
multitude of situations (Brown, 2008). Self-regulation is likely to flourish when students are
motivated by a sense of competence. Therefore, this study presumed that a standards-based
approach would promote self-regulated learners who were more motivated to reach mastery on
identified standards than students in a traditional classroom setting (Weimer, 2010).

Achievement- Goal Theory and Mastery

According to Seifert (2004), achievement goal theory suggests that academic motivation
rests on the student’s desires to achieve goals. Although slightly different than motivational
theorists, goal theorists classify goals into mastery goals and performance goals. To reach a
mastery goal, one must demonstrate understanding, skill, and content knowledge of the topic at
hand. Conversely, performance goals require reaching a predetermined performance level or out-
performing a comparison individual or group (CEC, 2012). Research has shown that students
who exhibit a mindset that involves reaching mastery goals are more inclined to understand
topics on a deeper level, generalize learned strategies more effectively, and are more adaptable to
challenging situations (Brown, 2008; CEC, 2012). In contrast, students who focus on
performance goals and compare themselves to one another are more apt to be unsuccessful when
overcoming failure and do not feel that effort impacts success (CEC, 2012). This study submitted
that, in conjunction with other theories of motivation, the goal-achievement mindset supported a
standards-based classroom environment. Within this approach, where effort toward reaching mastery on identified standards is valued, it was hypothesized that students would exhibit a higher level of motivation toward reaching their goals than those presented with a traditional approach.

**Description of Theoretical Framework**

The theoretical framework that grounded this research study could be described as a compilation of concepts, personal ideas and experiences with standards-based grading and reporting, and the existing body of literature on student motivation. The theoretical framework combined original theories of motivation with more recent theories of motivation that were specific to the educational world. In addition, the theoretical framework looked at the vast body of research on the rationale for a standards-based approach to instruction, assessment, and reporting and expanded it to include the students’ perception of their level of motivation when a standards-based approach was implemented (Miller, 2013). This theoretical framework allowed for the clear identification of what was explored, measured, and described within this study: the student’s perception of their level of motivation to reach mastery when a standards-based approach to grading and reporting was implemented compared to more traditional methods.

There is a vast body of existing literature on theories of motivation as well as on standards-based instruction, assessment, and reporting in comparison to traditional practices. Studies on the topic suggest that the range of benefits include increasing student’s self-awareness and achievement levels (Hendry, Armstrong, & Bromberger, 2011; Marzano, 2010), fostering differentiation for all learners (Marzano, 2010; Voltz, Sims, & Nelson, 2010), and positively influence teacher professional development (Avalos, 2011).
Education improvement efforts over the last twenty years have focused primarily on articulating and communicating agreed-upon standards for student learning, fine-tuning the way educators assess students’ proficiency on those standards, and tying results to accountability initiatives. However, grading and reporting practices remain unaligned with these efforts (Guskey, 2011). The manner in which student progress and achievement are reported to families has remained unchanged. In most cases, report cards list a single number or letter grade for each subject area or course. Using the articulation of standards for student achievement as a starting point, educational systems can begin to implement a student-centered and differentiated approach to instruction, assessment, and reporting (Guskey, 2011) in an attempt to increase student motivation to reach mastery. In a traditional classroom where traditional grading practices are employed, the teacher directs the learning, and in a sense, forces it upon the student. According to Bogdan (2011), the educator’s role is changing from the traditional ‘imparter of knowledge’ to that of coach, consultant, and facilitator of mastery learning.

**The Teacher-Centered Classroom**

In the teacher-centered classroom, the student is viewed as the passive recipient of knowledge (Zophy, 1991). According to Weimar (2013), despite forward progress over the years, instruction is often characterized as one person delivering knowledge to a group of students. The students, as recipients of the information, are expected to demonstrate how well they received the knowledge that was delivered (as cited in Fahraeus, 2013). For the purpose of this research study, the teacher-centered classroom reflects the notion that, if students fail to learn the content being taught, their grade will suffer as a result (Zophy, 1991). This implies that it is the teacher’s responsibility to cover material and it is the student’s responsibility to learn it. From a teacher-centered perspective, it can be ascertained that traditional number and letter
grades indicate how well the child performed on specific evaluative tasks after content was imposed upon them (Levy, 2014).

**Impact of Traditional Grading Practices**

**Negative effects.** For decades, educational psychologists have studied the effects of grades on a variety of measures. Kohn (2011) suggests that when students led to focus on grades are compared with those who are not, the results support many confounding conclusions. The first conclusion was that grades tend to diminish students’ interest in whatever they are learning. Multiple studies show that grading and learning are inversely related and studies that investigated the impact on intrinsic motivation of receiving grades have found a negative effect. Second, traditional grades create a preference for the easiest possible task. If a teacher impresses upon students that what they are doing will count toward their grade, their response is to refrain from taking any unnecessary intellectual risks. According to Kohn (2011), these students are responding to adults who, by telling them the goal is to get a good mark, have sent the message that success, in the form of a grade, matters more than learning. And thirdly, grades tend to reduce the quality of students’ thinking. When in the presence of a traditional grading model, students tend to skim material for what they need to know and are less likely to question the validity of what they are learning or to generalize the knowledge to broader concepts. Instead, they focus solely on whether the material they are learning will be on a test; a reaction that promotes memorization of material versus true understanding of inter-related concepts (Kohn, 2011). In one experiment, students told they would be graded on how well they learned a social studies lesson had more trouble understanding the main point of the text than did students told that no grades would be involved. Even on a measure of rote recall, the graded group remembered fewer facts a week later than the ungraded group (Grolnick & Ryan, 1987).
Wormeli (2011), an expert in the field of assessment and grading practices, strongly believes that traditional letter and number grades have very little meaning and are often based on factors that are not relevant to student learning. Many of these factors include behaviors, work completion, quality of work, and academic preparedness. When these factors, though relevant to student success, are included in a child’s grade, the grade becomes less reflective of student learning and skill acquisition and more reflective of the child’s ability to display expected student-like behaviors. The adoption of standards in public education should not lessen the need to accurately articulate student achievement. Standards do, however, make the traditional reporting practices more difficult to connect to the standards themselves (Guskey, 2001).

Traditional grading policies such as refusing to accept late work, giving grades of zero, and refusing to allow students to re-do their work are typically intended to be punishment for poor performance, but according to Wormeli (2006) and Guskey (2011), these policies will not really teach students to be accountable and they provide very little useful information about the students’ mastery of the material. Wormeli (2006) argues that grades are not the effective teachers or accountability measures they are intended to be. Teachers often mistakenly think that these traditional practices teach accountability, which is actually far from the truth. Likewise, it has been determined that low grades actually prompt students to withdraw from the learning experience rather than encourage them to try harder (Guskey, 2011). In the best-case scenario, traditional grading practices reinforce simple compliance behaviors, but do not accurately articulate learning and engagement (Vatterott, 2015).

Reeves (as cited in Johnston, 2011), believes that two of the most common practices, averaging and giving zeros for missing work, are "an academic death sentence.” Many grades are determined using arbitrary indicators of performance including the averaging of grades. In his
evaluation of this system of grading, Guskey (2011) believes that the practice of averaging falls far short of providing an accurate description of what students have learned. Furthermore, the case has been repeatedly made that the use of zeroes in computing a grade is a practice that must be eliminated entirely. This research paper posited that the use of traditional grading practices were blatantly unfair and resulted in an inaccurate description about what a student had learned. Wormeli (2010) strongly believes that the practice of using a 100-point scale to “measure and report human progress against a goal with great specificity” is a “corruption” as it was never intended to be used in that manner. Traditional grades on a 100-point scale are typically broken down into segments that represented the letter associated with them. For example, an A is typically represented by a grade of a 90 to 100, a B by a grade of 80 to 89 and so on. When a student is given a grade of zero on a 100-point scale indicating that they did not complete the assignment, or failed the assignment, the zero becomes more heavily weighted than a failing grade which, on a 100-point scale, would have been at least a 60. Therefore, traditional grades not at all reflective of authentic learning taking place, and when averaged, are totally inaccurate depictions of achievement on a 100-point scale (Wormeli, 2010). Averaging a few zeros among stronger grades can actually make it more difficult for a student to recover an acceptable overall rating since the zero is actually several gradients below failure (Wormeli, 2010). This is not to suggest that a failing grade is not warranted in some cases where there is an absence of learning, but Wormeli (2010) believes that a good teacher must still attempt to motivate children to want to try, and therefore stop the practice of giving zeros and averaging grades; a practice that promotes withdrawal (Guskey, 2011; Kohn, 2011).

Incorporation of behaviors that support learning. Wormeli (2006) suggests that a grade is supposed to provide an accurate indicator of a student's mastery of learning standards
and is not meant to be part of a reward, motivation, or behavioral contract system. He explains that if a grade is distorted by weaving in a student's personal behavior, character, and work habits, it cannot be used to successfully provide feedback, document progress, or inform instructional decisions. Unlike traditional grades, assessment, and feedback, particularly during the course of learning, are the most effective ways for students to learn accountability in their work and personal lives (Levy, 2014). Merging academic grades on tests, quizzes, and assignments with behaviors that support learning grossly alters the meaning of the final grade (Guskey, 2011). Differentiating between progress, product, and learning criteria is essential, yet often overlooked (Guskey & Bailey, 2010). When students are aware of the standards being taught and the indicators of success being used to assess their learning, true accountability and intrinsic motivation are present. Rather than rewarding students for on-time assignment completion or penalizing students for disorganization and bad behavior, standards based grading practices not only accurately reflect what a child has learned, but can also improve motivation and student achievement (Miller, 2013).

**Reliability, validity, and objectivity.** In addition, traditional grades are not reliable, valid, or objective (Kohn, 1999). The basis for traditional grades is completely arbitrary. They are reflective of how the assessment was written or how one particular individual interpreted the assessment. According to Kohn (1999), traditional grades reflect a false attempt at communicating an objective evaluation, when in reality; the grade itself is incredibly subjective. Grades also distort the curriculum. When teachers are teaching within a traditional grading model, it is easier to teach the facts or skills that are going to count toward the final grade on any number of assessments. The focus becomes less on the essential questions or big ideas within the
curriculum and more on the final assessment given that produces the final grade. Kohn (1999) also believes that the time spent calculating overall grades is better spent actually teaching.

It is often argued that grades spoil the relationships between teachers and students as well as the relationships between students to one another (Kohn, 1999). Researchers have found that the distribution of traditional grades encourages cheating. The more students are led to focus on getting good grades, the more likely they are to cheat, even if they themselves regard cheating as wrong (Anderman, Griesinger, & Westerfield 1998; Milton, Pollio, & Eison 1986).

Another incredibly destructive form of grading is that which grades students based on comparing them to their peers. Grading “on a curve” often does this, such that the number of top grades is artificially limited: no matter how well all the students do, not all of them can get an A. Using a summative assessment measure that compares students to one another does not accurately reflect what a student has learned over time, nor does it clearly indicate their skill acquisition on a standard measure (Guskey, 2011). Although traditional grading practices may motivate students to cheat or to compare themselves, they do not increase motivation to reach mastery on identified content standards.

Johnston (2011) believes that it is essential to allow students to re-do assignments as many times as it takes for them to truly show that they understand the standards being taught. He also strongly believes that practice, despite how long it may take, is an integral component to learning and students should not be penalized on a summative assessment measure. The notion of practice and diligence to reach mastery is not often fostered in a classroom where the teacher is solely responsible for delivering instructional content. This practice is not only unfair, but actually teaches students that other students are barriers to their success. If the assessment being used is considered a fair representation of the content that was taught, when all grades fall within
the normal bell curve, one can assume that the children at the bottom of the curve have failed to learn the material. In a logical sense, this should fall on the shoulders of the teacher (Guskey, 2011). However, we continue to engage in this practice. In reality, grading on a curve has very little influence on the intellectual lives of students in a traditional classroom environment (Milton et al., 1986). Comparing students to one another is not only artificial and subjective but it also makes learning highly competitive (Guskey, 2011). As a result, students are discouraged from being collaborative or supporting one another, as it may impact their success at obtaining the few high grades that are distributed by the teacher (Guskey, 2011).

**The Student-Centered Classroom**

A student-centered classroom that supports and engages in a standards-based approach to instruction provides students with the feeling of competence; the opportunity to control the outcome of their own learning and reach mastery (McCombs & Miller, 2009; McCombs & Whistler, 1997). This environment also allows students to experience relatedness as they work collaboratively on mastering identified skills while also encouraging autonomy; the desire to be causal agents of one’s own life (Toshalis & Nakkula, 2012).

One of the most well-known and influential radical educational theorists of the 20th century, Paulo Freire’s (1990) philosophy of liberatory education supports the idea of problem-posing education, a similar approach to a student-centered learning environment more recently under study. Freire (1990) believed that in order to create an educational environment that embraces students as the main focus, the teacher must build respectful relationships, promote meaningful dialogue, and believe that school is a place where knowledge is co-constructed (as cited in Bartlett, 2008). The student-centered classroom encourages the co-development and implementation of a plan of action that involves the student in the decision-making process.
(McCarthy, 2015). When students share in the decision-making process, they are more likely to understand the value of the content and are more willing to invest effort to reach mastery (CEC, 2012; Richmond, 2014a).

According to McCarthy (2015), in a student-centered environment, the teacher believes in the student’s capacity to lead. Students tend to be the most skilled at leading activities in ways that appeal to other students. In essence, they know what works best for them as learners (McCarthy, 2015). In this environment, the teacher relinquishes some control to the students and acts as facilitator or coach of conversation and collaboration (Levy, 2014). The goals of a student-centered classroom are clear: to motivate and interest students while fostering collaboration and critical thinking skills that promote active engagement in the classroom (Levy, 2014).

This study presumed that a standards-based approach to instruction, assessment, and reporting promoted self-regulated and self-determined learners who were more motivated to reach mastery on identified standards than students in a traditional classroom setting (Matthews, 2012). The implementation of a standards-based approach is an indication that the classroom teacher employs a student-centered philosophy, as students are part of the learning process. Instruction, assessment, and reporting measures are accurate representations of what students have learned over time and demonstrate that they are integral parts of a very collaborative and creative process (McCarthy, 2015; Richmond, 2014a; Wormeli, 2010).

**Grading Reform**

**National Need for Grading Reform**

A vital component of the standards-based grading movement is the use of clear, measurable outcomes as well as the use of accurate assessments to determine where each student
stands in relation to the standards being taught (Oliver, 2011; Schmoker & Marzano, 1999). With the adoption of common core state standards and a focus on standards-based learning, it is assumed that teachers are aligning their planning and assessment to the new standards. Despite the fact that the standards are being taught, however, in many schools the manner in which we report student mastery to parents remains unaligned. Many teachers still employ traditional grading practices using number and letter grades, and, in fact, there is little articulation between the grades students receive and the content standards that are taught (Oliver, 2011). Some educational writers have even surmised that current grading practices lack real meaning and reported achievement data is inconsistent, imprecise, and as Marzano (2010) has concluded, are meaningless. Traditional grading practices are an outdated system that have not previously made sense and are even more problematic in the current educational climate. These practices have been in place for so long that they have historically gone unnoticed and unchallenged. It is critical to use research-based alternatives when moving to a system that is sensible, realistic, and up-to-date (Guskey, 2011; Oliver, 2011).

Local Need for Grading Reform

The school district under study completed a community-wide needs assessment in 2014, which resulted in the development of a five-year Strategic Plan. One focus area that surfaced as a result of this process was the need for professional development in the area of creating a student-centered classroom environment as well as implementing a standards-based instructional model (District Strategic Plan, 2014). Based on feedback gathered from discussions with elementary school teachers and community members, it is evident that grading practices vary greatly from school to school and from teacher to teacher. The next step in moving forward toward consistency between schools in order to meet the goals outlined in the Strategic Plan is to
develop a shared vision among teaching staff with a goal for the adoption of a standards-based approach to grading and reporting. A specific goal in the Strategic Plan aims to establish a cohesive, comprehensive curriculum, instruction, and assessment system that is consistent with the vision and mission of the district and that meets the changing needs of the student population. In regards to the necessity of the proposed research, one action step under this goal area addresses the need to establish consistent assessment points based on standards as well as develop student-centered approaches to assessment that allows students to share their learning in a variety of ways (District Strategic Plan, 2014).

As this district strives for uniformity, consistency in assessing and reporting student achievement is necessary. Across the five elementary schools within this district, there are more than eight different versions of the current report card. In three of the elementary schools, students in grades K-3 receive a standards-based report card with teacher comments while students in grades 4-6 receive letter/number grades for broad subject areas with teacher comments. Currently, these three elementary schools distribute a report card four times per year in grades 4-6 and twice per year in grades K-3. Even among these three schools, there is variation among the different versions of the report cards. A goal of district leadership is to better communicate what each child is learning in relation to the standards and provide more detailed feedback to parents. Based on these identified inconsistencies in the current reporting methods, it can be ascertained that the elementary schools in the district under study need to better communicate what each child is learning in relation to the standards and provide more detailed feedback to parents in a systematic and consistent manner. Based on studies reviewed, revising the reporting tool would more accurately reflect a child’s growth and progression through the adopted set of standards over the entire school year.
In terms of the type of reporting tool most successful in standards based grading practices, Guskey (2001) believes that there are variety of tools that can be successful but the most important aspect is that the purpose of the tool is clearly articulated to parents. The reporting tool should identify each standard being implemented and be consistent in its presentation and interpretation.

**Obstacles to Reform**

Educators seeking to reform grading must combat five long-held traditions that stand as formidable obstacles to change according to Guskey (2011). These traditions stem largely from misunderstandings about the goals of education, the purposes of grading, and why they remain ingrained in our grading practices within the classrooms. The five obstacles Guskey (2011) describes include: grades should be the basis for differentiating instruction for students, grade distributions should resemble a normal, bell-shaped curve, grades should be based on students’ standing among classmates, poor grades prompt students to try harder, and that students should receive one grade for each subject or course. These very common misconceptions about grading create roadblocks for forward progress and grading reform. It is essential that school staffs that seek to implement standards-based grading practices address these misconceptions in an attempt to combat very archaic grading practices. Research has shown that these traditional grading practices are not relevant to student learning and achievement (Guskey, 2011). It was hypothesized that they also do not increase student motivation to reach mastery on identified standards in the traditional classroom environment.

**Impact of Standards-Based Grading Practices on Teaching and Learning**

The Common Core State Standards (CCSS) were released in 2010 as an attempt to establish consensus on expected outcomes for student achievement in English Language Arts and
Mathematics. The initiative was intended to have four main benefits to educational practices in the US including: shared expectations of student achievement that offers consistency from state to state, a focus on curriculum development, an increase in efficiency nationwide, and the improvement of the quality of standardized assessments that measure achievement (Porter, McMaken, Hwang, & Yang, 2011).

A standards-based approach makes grades meaningful because the standards create a profile of student achievement that shows the student’s areas of strength and areas that need improvement or more instruction (O’Connor & Wormeli, 2011). Vatterott (2015) believes that in standards-based instruction the focus on mastery of content produces the highest level of student achievement. In addition, when mastery of content is reflected in standards-based grading practices, reporting tools can accurately reflect student progress and can significantly improve both teaching and learning. Furthermore, Heflebower, Hoegh and Warrick (2014) believe that accurate and timely reporting using a standards-based reporting tool that identifies progress toward an identified set of standards in the classroom can notably improve student achievement.

In a qualitative research study conducted by Miller (2013), results showed that students felt less pressure in the classroom when they knew they were being assessed on their progress towards an identified standard versus knowing that they were going to be given one culminating grade. In addition, they felt that they were able to take more ownership of their learning compared to a traditional approach to assessment. Taking into account the students’ perceptions and perspectives on a standards based approach to grading is an important component of the process (Guskey, 2011). It is easy to get caught up in focusing on teachers and parents in this change initiative but it is equally as important to keep in mind how a change such as this impacts students and student achievement in the classroom (Miller, 2013).
Best Practices in the Implementation of a Standards Based Approach

Wormeli (2011) and Guskey (2001), among many others, believe that in order for standards-based grading practices to be successful, there needs to be consistency across schools and within school districts. Wormeli (2011) also suggests that schools and districts can ensure more effective reporting practices through clarity of purpose, the use of performance standards, and implementing clear policies and procedures. According to Ainsworth and Viegut (2006), one of the first steps in the process must be to create consistency in assessment practices, disaggregate student data, and unwrap the standards. The authors support the notion that effective instruction is achieved when consistent expectations and reporting methods are shared between teachers and schools.

Developing Teachers’ Capacity

A large part of the overall success of this change initiative are the teachers who are ultimately responsible for communicating the change to parents and assessing student learning so that the information articulated is accurate (Stiggins, 2007). Johnston (2011) believes that the first step in implementing standards-based grading practices is to simply start the conversation. Brookhart (2011) suggests that when beginning the conversation with teachers about moving toward a standard-based grading system, schools should focus on guiding questions about what the teachers would like their grades to convey and to whom do teachers want to convey the information. According to Johnston (2011), this is considered determining the audience; the second step in beginning this change process. In theory, maintaining focus on these guiding questions, the professional conversations are more likely to stay on track and not get caught up in the details about grading practices and/or the inconsistencies in personal philosophies about grading practices. Johnston (2011) refers to this as the “elimination of toxic grading practices”
and considers this an important step in the collaboration phase of this change initiative. Johnston (2011) also believes that it is beneficial to develop standards-based rubrics from which teachers can assess a student’s level of understanding on any given standard and encourages administrators to provide ample time for teachers to use these rubrics and deeply discuss student work.

Another major concern for teachers is whether or not the implementation of a standards based grading practices increases a teacher’s workload or violates their professional autonomy (Levy, 2014; McCarthy, 2015). Guskey and Bailey (2010) provide strategies for communicating with parents and other stakeholders about the changes associated with standards based grading and reporting and recommends guidelines for implementation so that teachers take the process one step at a time and are not overwhelmed with the larger picture.

**Combating Challenges**

**Professional development.** It is imperative that for any change initiative, all stakeholders are knowledgeable on the topic and fully prepared to clarify misconceptions or questions that may arise. The teachers are at the forefront of this issue and when not provided with ample time to practice and participate in professional development, the likelihood of the initiative failing is quite high. In a study conducted by Tierney, Simon, and Charland (2011), the teachers’ perceptions on fairness in grading were analyzed. Researchers looked at how teachers in one standards-based educational system determined secondary students’ grades, focusing specifically on the extent to which they followed a specific set of principles for grading. The results support previous research in the standards-based grading approach and suggest that a better understanding of essential principles is needed for grades to accurately reflect students’ achievement and for the overall success of the initiative. These findings further reinforce the
importance of ensuring that, before beginning the implementation of a standards-based approach to assessment and instruction, all teachers need to be provided professional development opportunities in which the philosophy behind the approach is clearly articulated. In order for grades to accurately reflect what a child has learned in accordance with a set of standards, the teachers need to be able to understand the principles behind the approach and fully incorporate the “fair is not equal” ideal in their classrooms.

**Articulating purpose.** Along a similar thread, Guskey and Jung (2006) discuss how, shortly after beginning the process of implementing a standards-based report card at the elementary level, most schools find themselves facing controversy, particularly with parents who were not educated about standards-based report cards before seeing one sent home for the first time. Developing a report card that satisfies the diverse needs of parents and the school is essential but is often hard to accomplish. The authors focus on four challenges in grading and reporting. They include: clarifying the purpose of the report card, differentiating grading criteria, moving from letter grades to standards, and grading students with special needs.

**Addressing students with special needs.** When all students are assessed on a set of agreed upon standards, the question arises as to how to accurately report the learning of special education identified students or those who are working on standards that are well below or well above their current grade level. Guskey and Jung (2009) suggest five strategies for improving reporting practices so that learning is accurately reflected for all students. One strategy focuses on establishing clear standards for student learning that emphasize product, process, and progress goals. Another strategy suggests that educators determine whether accommodations need to be made for each standard being assessed and if so, the adaptations that will make the student most successful should be clearly articulated to the student’s team. These authors also suggest making
specific modifications to the standards-based on the individual needs of the student. When implementing a standards-based reporting tool, it is important to note on the standards being assessed which of them are modified and/or adapted to meet the student’s individual needs. These authors also suggests including a narrative portion explaining the rationale for the modifications for parents.

**The need for common assessments.** Another inherent challenge to implementing a district-wide, standards-based reporting tool is that unless there are common assessments, the teacher’s ability to rate a student on a particular standard will never be as accurate as it should be in relation to other students being rated on the same standard (Ainsworth & Viegut, 2006). Administrators need to provide ample time for the development of common assessments and professional development opportunities, perhaps through professional learning communities, on rating a child’s level of mastery on a particular standard using the assessments developed (National Staff Development Council, 2009).

**Impact on higher education.** When discussing this initiative with many secondary level teachers or parents of high school students, the question often arises as to how a standards-based approach to grading impacts a student’s candidacy for acceptance into colleges and universities. Typically, these institutions look at class rankings, GPA, and overall grades as criteria for acceptance. At the moment, plenty of admissions officers enjoy the convenience of class ranking (Guskey, 2014). Kohn (1999) argues that this is because they have confused being better than one’s peers with being good at something; they are looking for winners rather than learners. However, relatively few colleges actually insist on this practice (Guskey, 2014). When a 1993 NASSP survey asked 1,100 admissions officers what would happen if a high school stopped computing class rank, only 0.5 percent said the school’s applicants would not be
considered for admission, 4.5 percent said it would be a “great handicap,” and 14.4 percent said it would be a “handicap” (Levy & Riordan, 1994). In other words, it appears that the absence of class ranks would not interfere at all with students’ prospects for admission to four out of five colleges.

**Cases of the Successful implementation of a Standards-Based Approach**

A major initiative in the Commonwealth of Kentucky is to develop a statewide, standards-based, student report card for reporting the learning progress of individual students at all grade levels K-12. Led by a team of researchers with expertise in grading and reporting, 36 educators from three diverse school districts created two reporting forms: one for elementary and another for secondary level. These reporting forms were piloted by 41 teachers who distributed both the new form and the traditional report card to parents and guardians during the school year. Information gathered through surveys administered to teachers, parents/guardians, and students was used to determine satisfaction with the new reporting tools and to guide revisions for future distributions. Overall, results showed that the majority of parents were in favor of eliminating the traditional reporting methods and moving toward the new form indicating that they felt they knew more about what their child had learned from looking at the standards versus simply reviewing the overall number of letter grades typically given. In addition, this case describes new plans to expand professional development, enhance technical support, and establish a basis for statewide implementation (Department of Educational, School, and Counseling Psychology, 2010).

Although focused on middle and high school students, a rural school district similar to the district under study, implemented a student-centered, standards-based approach to instruction and assessment with positive results. The grade 7-12 campus in Pittsfield, New Hampshire is in
the third year of implementation and has discovered, in a relatively short amount of time, that a student-centered approach has created a stronger connection with academic learning and real-life experience for students. Student-led discussions, small-group work, and individual projects dictate the nature of the classroom environment. The traditional grading system of distributing number and letter grades has been replaced with a standards-based approach that details the skills and knowledge students are expected to master in each class. Once noted as one of the state’s most underperforming schools, Pittsfield leadership now believe that this approach has assisted their students in becoming motivated learners who are developing critical-thinking skills that are necessary to be college and career ready (Richmond, 2014b).

From a teacher’s perspective, a standards-based approach to grading is beneficial as well. Matt Townsley, a high school math teacher, was bothered by the fact that his grades penalized students for not learning content quickly (Townsley, 2014). Students could master every standard, but low quiz grades and homework assignments not completed lowered their final grade. Lack of formative assessments made it appear they did not fully grasp the material. When Townsley learned about standards-based grading, he saw its potential and adjusted his grade book so that it reported student progress toward learning targets, rather than their performance on specific assignments. He also gave students multiple opportunities to demonstrate mastery of the standards. Gradually, Townsley’s standards-based grading practice spread, beginning with a small group of teachers at his high school and spilling into the middle school. By the time Townsley accepted an administrative position, district leaders sought to implement the practice district-wide. After a year of study involving students, teachers, and community members, the district’s board of education approved a two-year implementation plan that is now in its second year (Townsley, 2014). This story depicts the approach to standards-based grading
from the teacher’s perspective. When implementing a change as widespread as this, it is essential to remember that all stakeholders are approaching the change from various lenses and levels of understanding.

**Deficiencies in Current Body of Research**

Although there is a tremendous amount of research on the implementation and use of a standards-based approach to instruction, assessment, and reporting, there is very little research that investigates the students’ perspective of this approach. To further support the notion that a standards-based approach is more reflective of what a student has learned and increases motivation to reach mastery, it is important to learn more about what the student perceives as motivators to their learning (Guskey, 2011). This study looked more deeply at students’ perception of their level of learning when a standards-based approach was implemented as compared to a time when traditional grading practices were employed.

**Importance of Student Perceptions of Personal Learning Experiences**

**Self-awareness.** Shepard (2000) believes that classrooms should be inclusive of individual student needs and that students should be regularly assessing themselves as learners. By conducting regular self-assessments, students are able to take control over their learning and engage actively in the learning process. Similarly, students become more aware of the standard and the criteria on which they are being assessed and take more responsibility for their successes towards the particular standard (McMillan & Hearn, 2008). When implemented correctly, student self-assessment can increase intrinsic motivation, produce internally controlled effort, and promote more meaningful learning. In essence, conducting regular self-assessments increases the awareness a student has about his or her personal strengths and areas of deficiency (McMillan & Hearn, 2008).
According to Zimmerman & Schunk (1989), students who do not demonstrate a strong sense of self and doubt their ability to learn are more likely to become anxious and may avoid learning situations that are difficult for them. Additionally, when this fear of failure develops, they are more likely to generalize this feeling to a multitude of situations. This study posited that traditional grading practices did not provide students with an accurate depiction of what they had learned, and therefore a poor grade, potentially based on a number of factors, indicated failure level versus the level of learning that actually took place. Repeated instances of poor grades, in turn, have a negative impact on achievement (Kohn, 2011). It was hypothesized that when provided a set of standards to work towards, students would see progress and trust in their ability to learn and acquire skills.

**Student motivation.** Referring to Pink (2011) and Maslow’s (1943) motivational theories, high performance and satisfaction at work, at school, and at home is a deeply human need. Humans have an innate need to direct our own lives, to learn and create new things, and to do better by ourselves and our world. Based on the three elements of true motivation: autonomy, mastery, and purpose (Pink, 2011), this research sought to determine if a standards-based approach to instruction and assessment provided students with a basis for reaching individual autonomy, mastery and purpose in their learning as opposed to when a traditional approach to grading was used.

In a student-centered classroom, students are viewed as major stakeholders in the learning process (McCarthy, 2015). In this environment, students are understood to be motivated by ethics of care, contribution, and compassion and therefore drive programs and approaches to instruction that meet their individual needs and varying skill sets (Toshalis & Nakkula, 2012). Additionally, a student-centered classroom environment supports the notion that the student
generates knowledge rather than absorbs it, which mirrors a constructivist view of the human mind (Matthews, 2003). The constructivist view of motivation also supports the concept that within the classroom, the most potent motivators are intrinsic to the student and are held internally based on values, feelings, and desires (Toshalis & Nakkula, 2012). This study examined how a standards-based approach to instruction, assessment, and reporting was employed. A classroom environment that is more student-centered and where students are active participants in their learning supports opportunities where students are intrinsically motivated to reach mastery and improve their skills (Miller, 2013).

A student-centered classroom promotes the development of self-regulated and self-determined learners. An environment that supports and engages in a standards-based approach to instruction provides students with the feeling of competence; the opportunity to control the outcome of their learning and reach mastery (Weimer, 2010). The environment also allows students to experience relatedness as they work collaboratively on mastering identified skills while also encouraging autonomy; the desire to be causal agents of one’s own life (McCombs, 2009). According to Matthews (2012), when a classroom is truly student-centered and capitalizes on the power of self-determination, the environment can substantially enhance a student’s motivation to achieve. Additionally, self-regulated and self-determined learners are able to monitor how effective their learning strategies are and change their behavior to adapt to a multitude of situations (Brown, 2008). This study presumed that a standards-based approach to instruction, assessment, and reporting promotes self-regulated and self-determined learners who were more motivated to reach mastery on identified standards than when students were placed in a traditional classroom setting (Weimer, 2010).
Guskey (2011) suggests that educational leaders must be aware of what works for students in order to change policy and practice around the implementation of a standards-based approach to instruction. He argues that educational leaders must support the meaningful learning experiences of students and must also enhance their self-perceptions as learners. However, there is very little research that takes into account the student’s perspective on what motivates them to reach mastery. Palmer (2005) has redefined the historical theories of motivation to assert that there may be a way to increase motivation in students by employing a constructivist-informed teaching model in a student-centered classroom. Simply stated, Palmer suggests that life is made up of experiences. The way we interpret these experiences allows us to make meaning and develop our own understandings. Essentially, we construct our own knowledge. Therefore, teachers have a very passive role in the classroom, where they provide experiences for students in order to facilitate their learning (Palmer, 2005). Lepper and Hodell (1989) proposed that intrinsic motivation could be enhanced in the classroom by providing challenge, curiosity, fantasy, and control. Control is characterized by feelings of self-determination and autonomy (Palmer, 2005), both of which are diminished by external rewards or competition (Deci & Ryan, 2000; Pink, 2011). Both rewards and competition are inherent in a traditional approach to instruction, assessment, and reporting (Guskey, 2011; Wormeli, 2010).

Research has also shown that when competition is present in the classroom in the form of grades, the student’s focus shifts from the content being taught to the students he or she is being compared to (Palmer, 2005). When taking into account the four dimensions of motivation: competence, autonomy and control, interest and value and relatedness, students in a traditional, teacher-centered model often feel incompetent as compared to others or to the criteria on the assessment charged with measuring their ability (CEC, 2012). On the contrary, when the goal is
to explore new material or reach mastery in mutually developed areas of focus, students retain more interest and knowledge of the material over time (Sheldon & Biddle, 1998); a practice typically employed in a student-centered, standards-based classroom environment (Guskey, 2011; Wormeli, 2010).

**Conclusion**

Education improvement efforts over the past two decades have focused primarily on articulating standards for student learning, refining the way educators assess students' proficiency on those standards, and tying results to accountability (Reeves, 2011). The one element still unaligned with these reforms is grading and reporting. Student report cards today look much like they looked a century ago, listing a single grade for each subject area or course (Guskey, 2011). The literature suggests that traditional grades are not reflective of what a child has learned, especially when they are averaged, do not include behaviors that support learning, or when students are graded on a curve (Guskey, 2011; Kohn, 2011; Vatterott, 2015; Wormeli, 2010, 2011). In contrast, existing literature suggests that a standards-based approach is student-centered. Under this philosophy, the student is considered an active and essential part of planning and designing instruction that meets his or her own unique needs as learners (Levy, 2014). Additionally, the literature supports the notion that this student-centered, standards-based approach requires students to be self-aware, self-regulated, and self-determined consumers of knowledge (Levy, 2014; McCarthy, 2015). The existing body of literature proposes that a student-centered, standards-based approach to instruction, assessment, and reporting is more accurate, more meaningful and increases motivation as compared to traditional methods (Heflebower, Hoegh, & Warrick, 2014; Miller 2013).
With the adoption of Common Core State Standards in 2010 and the momentum pushing educators towards instruction around an agreed upon set of standards, this is a perfect time to provide educators with the rationale behind accurately reporting what a child has learned and the progress they have made towards individualized instructional goals. Additionally, it is evident that there is a significant need to investigate the students’ perception of a standards-based approach in terms of their level of learning on a set of identified standards-based on deficiencies in current literature (Guskey, 2011). Providing new information on this essential component further strengthen the case for the implementation of a standards-based approach at the site under study.
CHAPTER 3

METHODOLOGY

This study was conducted as a single case study in a rural elementary school in Northern New Hampshire (Creswell, 2013; Merriam, 2009). This case study used quantitative measures to ascertain the students’ perspectives on a standards-based approach to instruction as they related to student motivation and self-awareness of skill acquisition. This study used archival data from 2015-2016 and 2016-2017 school years as a maximum variation sample (Creswell, 2015) of students’ electronic responses on the locally developed Student School Experience Questionnaire (SSEQ, Appendix A) about their school experiences. The study was conducted over a one-month period using archival data from ten target items on the SSEQ administered in January 2016 and January 2017 to all fifth and sixth grade students at the site.

Additionally, this study used qualitative measures in the form of teachers’ responses to online survey questions using Survey Monkey (Appendix E) regarding their experiences with implementing a standards-based approach in the classroom to provide supplementary anecdotal information to the school district under study.

This study aimed to answer the question: How did the implementation of a standards-based approach to instruction, assessment, and reporting impact a student’s perception of their level of motivation to work toward mastery on an identified standard? Related research questions included:

- How well did students understand their personal strengths and weaknesses when presented with a standards-based approach to instruction versus a traditional model?
- How did teachers view a standards-based approach to instruction, assessment and reporting as it related to student achievement?
The existing body of research on the topic of standards-based approaches to instruction and reporting primarily addresses the impact of such approach on older students. This study investigated the impact of a standards-based approach as compared to a traditional approach on upper elementary students, thus adding another study to the existing literature.

The study investigated the implementation of a standards-based approach to assessment and reporting from the perspective of the student. Findings may inform other educators striving to implement a standards-based grading and reporting practices in a small, rural school district in Northern New Hampshire. As the district strives for uniformity between schools, consistency in reporting student achievement in a useful manner for all stakeholders is necessary.

Setting

This study took place in a rural elementary school located in northern New Hampshire in which the researcher is the principal. Over the past three years, the school had an average enrollment of 263 students in Kindergarten through sixth grade. Over the past three years, the school had an average free and reduced lunch population of 42% and continues to receive Title I federal funding (District Report Card, 2015, 2016). The district in which the school is located had been investigating the preliminary steps necessary to implement a standards-based report card in all self-contained Kindergarten through sixth grade classrooms, therefore providing context for the focus of this study. The results of the study provide the district with a rationale for future decisions on the initiative. The study was conducted over a one-month period using archival data on all fifth and sixth grade students at the site. All teachers in fifth and sixth grade had implemented a standards-based approach to instruction during the 2016 and 2017 school year and had employed a traditional approach to instruction, assessment, and reporting prior to this year.
Participants

Through the review of archival data collected over the past two school years, participants in this study included all fifth and sixth grade students at the school site who had completed the SSEQ and who had been enrolled in the school for all of the last three school years, a total of 74 students. Students who had recently enrolled in the school as a result of a family move and those who began at the school, were enrolled elsewhere, and have since returned to the school, were omitted from the participant pool of archived data. This maximum variation sample of student data provided information on a differentiated group of participants who varied from one another in terms of gender, ethnic and socio-economic background, and academic achievement levels, but all of whom shared a similar school experience (Creswell, 2013).

After approval from the Superintendent, supplementary qualitative data from teachers who had volunteered and granted consent and who had implemented a standards-based approach was solicited through electronic, open-ended survey questions using Survey Monkey. All teachers in fifth and sixth grades, four in total between the ages of 42 and 61, who had implemented a standards-based approach to instruction within the 2016 and 2017 school year and had employed a traditional approach to instruction, assessment, and reporting prior to that, were included. This approach provided a means for comparing students’ responses under both approaches using the archived questionnaire responses. The two years of data allowed the teachers to share their experiences under both conditions. This supplementary data provided district leaders with anecdotal information as they progress forward with decision-making necessary for the implementation of a standards-based approach.

A recruitment letter (Appendix B) was sent to the four potential teacher participants via their school email addresses found on the district’s website. The recruitment letter contained
information regarding the study as well as a link to the Survey Monkey survey. Upon clicking the link, the voluntary teacher participants had access to the consent document (Appendix C) for review followed by a prompt that asked them to click ‘Yes’ for informed consent to participate. Clicking ‘Yes,’ and therefore granting informed consent to participate directed the voluntary teacher participants to the survey questions. At the end of the survey (Appendix D), teachers were directed to provide contact information to the researcher. There was no compensation offered to the teacher participants in this study. All participation was voluntary and non-coercive.

Stakeholders who benefited from this research included educational leaders within the school district being studied and beyond, board members who were responsible for policy development around grading and reporting methods, teachers, families, and students.

Data

Archival data from the 2015-16 and 2016-17 SSEQ for fifth and sixth grade students was analyzed using quantitative measures. On the SSEQ, students were asked to rate their responses indicating the level to which the statement pertained to them and their experiences. The survey contained questions that required students to rate their experiences using a five-point Likert scale as well as provided opportunities for comments. Nine target items that pertained to motivation, academic self-awareness, and student-centeredness were the only items analyzed. Actual statements on the SSEQ that are considered target items that sought the students’ perception on motivation were the following: *I feel confident to keep trying even when the work gets challenging for me; I try extra hard to reach academic goals; During academic times, I feel engaged and excited to learn new things or reach my goals; I believe that learning the information being taught is more important than my performance on a test.* Target items that sought the students’ perceptions on their academic self-awareness included: *In my classroom, I*
feel in control of my learning; In my classroom, I feel that I have an understanding of what I am good at and what areas I need to work on; The feedback I get from teachers (in the form of my report card, notes on my work, or in conferences) helps me to improve my skills. Finally, statements on the SSEQ that were considered target items that sought the students’ perceptions on how student-centered their classroom experiences were the following: In my classroom I have a lot of chances to help decide things (for example, classroom rules, activities, ways to show what I’ve learned); I feel that my teachers understand what I need to learn even if it is different than my peers. The purpose of utilizing a rating scale method, as well as opportunities to provide comments on the SSEQ, was provide a variety of ways for the students to communicate their feelings and experiences that did not solely require the use of expressive language.

The SSEQ has been administered at the research site for the past three school years for students in self-contained fourth, fifth, and sixth grade classes. The 2016-17 school year marked the first year of full implementation of a standards-based approach to instruction, assessment, and reporting. Therefore, target items on the 2015-16 SSEQ were analyzed and classified as students’ responses under a traditional approach to instruction, assessment, and reporting. This archival data were compared to the 2016-17 target items on the SSEQ, which was classified as the students’ responses under a standards-based approach. Although this questionnaire was administered to fourth, fifth, and sixth graders, only fifth and sixth grade data were analyzed for the purpose of this study. This decision was due to the fact that in Kindergarten through third grade at the research site, a standards-based-type approach has historically been implemented with the absence of traditional number or letter grades. As a result, current fourth graders in the 2016 and 2017 school year did have experience with a traditional approach; therefore, their responses to the target items on the questionnaire were not relevant to this study.
Archived SSEQs did not have identifiable student information available to the researcher other than the students’ grade and the school year, but each student was randomly assigned a number to track their responses from one year to the next. Students numbered 1 through 38 had archived data from the 2015-16 school year when they were in fourth grade and from the 2016-17 school year, in which they are currently in fifth grade. Students numbered 39 through 74 had archived data also from the 2015-16 school year when they were in fifth grade and from the 2016-17 school year, in which they are current sixth graders. Randomly numbering the students in this manner allowed the researcher to compare responses from the same student over a two-year period. Overall, there were 38 students whose archived data was eligible for review in the current fifth grade and 36 students whose archived data was eligible for review in the current sixth grade.

Supplementary qualitative data from teachers who had implemented a standards-based approach was solicited through electronic, open-ended survey questions in order to provide the district with anecdotal information as they move forward with decision-making steps necessary for implementation of a standards-based approach. The initial proposal included follow up interviews, but they were unable to be completed for all four teachers.

Analysis

The quantitative data from the target items on the archived questionnaires were analyzed by comparing student responses from the 2015-16 school year to those during the 2016-17 school year. A t-test was performed in order to see if the differences from year to year were statistically significant. All open-ended responses were coded according to themes that developed.
The qualitative supplementary data gleaned from the teachers was coded to identify emerging themes. All survey data was organized in a case study database (Merriam, 2009). This database was then organized in a way that displayed the themes that had emerged throughout the process. Once the data had been analyzed, the findings were shared with the teacher respondents in a member check meeting as a way to provide internal validity to the study (Merriam, 2009). All of the open response survey questions were checked with the teachers to ensure that the researcher’s analysis of the responses was accurately conveyed and understood.

**Participant Rights**

Parents and guardians were notified of the school’s participation in the study. As a general practice, prior to administration of the SSEQ, parents were notified and provided the opportunity to contact the school if they did not wish their child to participate. After administration of the SSEQ in 2016 and 2017, the responses were automatically converted to a spreadsheet with all names and identifiable student information removed prior to any analysis by the reviewer. Each response was coded with a number so that responses were comparable from year to year without the use of student names (e.g., Student 1, Student 2, etc.). The principal investigator was the only person reviewing the archived data and collecting the voluntary teacher responses to ensure the anonymity of the setting and participants, as well as to provide uniform collection procedures. Teacher participants were coded with letter (e.g., Participant A, Participant B, etc.) to protect their anonymity and maintain organization of the data throughout the month-long collection, analysis, and reporting process. The data was kept on only one personal home computer, password-protected and accessed only by the principal investigator, with a back-up hard-drive system on-site and off-site. The identifiable teacher data was omitted from the dissertation report’s text. Results were summarized based on the sample’s responses.
Individual responses were reported without the participant’s name and school. Identifying information was removed from the investigator’s computer after the study’s completion and will not be accessible for future studies.

Although the researcher has total access to the setting, the relationship of the researcher to the site presents some ethical concerns primarily around the voluntary participation of the teachers to provide their experiences in the form of open-ended survey questions. The researcher reassured all teachers that participation or nonparticipation would not affect their evaluation in any way. Participants’ rights were fully guaranteed and privacy was protected to ensure that the teachers’ decision whether to participate did not pose any concerns about status within the school setting. Any survey data that needed to be printed for the purpose of analysis was stored in a locked file cabinet and was destroyed at the conclusion of the study.

Potential unintended outcomes were unlikely but could have included difficulty receiving the teacher surveys back in a timely manner that allowed for ample time to analyze the supplementary data. While the study did not intend to impose any risks or hardship on the teacher participants, unintended outcomes of participation were possible. Participants may have felt burdened by the time commitment made to complete the survey, thus losing time for other commitments or responsibilities.

The teacher participants stood to benefit from the findings in that they were actively involved in the delivery of instructional models. They gained opportunity to learn from the experiences of other teachers regarding how they viewed a standards-based approach to instruction, assessment, and reporting. The volunteer teacher participants gained an opportunity to potentially influence the initiative involving the implementation of a standards-based approach in the school district in which they work. The minimal risk and potential burdens on the teachers
associated with participation were reasonable in relation to the impact they could have had on
decision-making efforts in their school district.

**Potential Limitations**

Limitations to the study included the researcher’s affiliation with the schools and district
in which the study took place. The researcher was close to the topic and had a personal
investment in the results, as positive results of a standards-based approach may ultimately impact
district-wide decision-making related to the topic. The researcher will be held accountable for
implementing changes in assessment. Additionally, the researcher’s personal philosophy on
traditional grading practices, while aligned with the majority of literature on the topic, could be
viewed as promoting one approach more favorably than another.

Limitations of this study also included the small sample size of 74 students in self-
contained fifth and sixth grade classes. This was attributed to the small size of the rural school
district in which the school being researched was located. Additionally, the age of the students
poses a limitation; it was assumed that their self-reports reflect their young stage of development.
Despite this limitation, however, this study could be replicated in another location with a larger
sample size of older students, and the results could be used to determine the appropriateness of a
standards-based approach to instruction in an educational institution. This study was also limited
by the socio-economic status of the students who attend the school being researched. At the time
of data collection, 42% of the students received federal free or reduced lunch (District Report
Card, 2016).
CHAPTER 4

RESULTS

The purpose of this single case study was to investigate the impact that a standards-based approach to instruction, assessment, and reporting had on student motivation to reach mastery on a set of standards from the perspective of the student. The study’s findings may inform school leaders and others’ decisions about implementation of standards-based grading and reporting practices in a rural school district in northern New Hampshire.

Over the past three years, the site of this study had an average enrollment of 263 students in Kindergarten through sixth grade. The district in which the school was located had been investigating the preliminary steps necessary to implement a standards-based report card in all self-contained Kindergarten through sixth grade classrooms. The study was conducted over a one-month period and used archival data on all fifth and sixth grade students at the site. All teachers in fifth and sixth grade had implemented a standards-based approach to instruction within the 2016 and 2017 school year and had employed a traditional approach to instruction, assessment, and reporting prior to that.

Participants in this study included all fifth and sixth grade students at the school site who had completed the Student School Experiences Questionnaire (SSEQ) and who had been enrolled in the school for the last three school years, for a total of 74 students. Supplementary qualitative data from fifth and sixth grade teachers who volunteered and granted consent and who had implemented a standards-based approach was solicited through electronic, open-ended survey questions using Survey Monkey. This provided a means for comparing students’ responses under both approaches using the archived questionnaires and allowed the teachers to share their experiences under both conditions.
This study aimed to answer the question: How did the implementation of a standards-based approach to instruction, assessment, and reporting impact a student’s perception of their level of motivation to work toward mastery on an identified standard? Related research questions include:

- How well did students understand their personal strengths and weaknesses when presented with a standards-based approach to instruction versus a traditional model?
- How did teachers view a standards-based approach to instruction, assessment and reporting as it related to student achievement?

This chapter will present, discuss, and synthesize the data collected over the course of this study, including the method for analyzing the data collected, a presentation of the results, and a summary of those findings. The data collected were both quantitative and qualitative. The quantitative data was collected from archived student responses on the SSEQ over the past two years. A one-tailed paired t-test was performed to test whether the differences in responses were statistically significant.

The qualitative data was collected by surveying two fifth grade and two sixth grade teacher participants using open-ended questions about their experiences using a traditional versus standards-based approach to instruction. The open-ended teacher surveys and member check-ins allowed a comprehensive analysis of the results and ensured validity of the findings (Merriam, 2009).

**Analysis Method**

Two forms of data were collected during this phase of the study. The first form of data was the archived responses from the SSEQ. Two groups of quantitative data were formed, the current sixth grade students’ responses on nine target items on the SSEQ in the 2015-2016
school year and their responses on the same nine target items on the questionnaire in the current 2016-2017 school year and current fifth grade students’ responses in the 2015-2016 school year and their responses on the same questionnaire in the current 2016-2017 school year. The second form of data that was collected was qualitative using the fifth and sixth grade teachers’ responses on the electronic, open-ended survey about their experiences implementing a standards-based approach to instruction and their perceptions of their students’ level of motivation when this approach is utilized.

Participants

Through the review of archival data collected over the past two school years, participants in this study included all fifth and sixth grade students at the school site who had completed the SSEQ and who had been enrolled in the school for the last three school years, a total of 74 students; 38 in the current fifth grade and 36 in the current sixth grade. Students who had recently enrolled in the school as a result of a family move and those who began at the school, were enrolled elsewhere and have since returned to the school, were omitted from the participant pool of archived data. This maximum variation sample of student data provided information on a differentiated group of participants who varied from one another in terms of gender, ethnic and socio-economic background, and academic achievement levels, but all of who shared a similar school experience (Creswell, 2013).

Survey data is provided from teachers who had implemented a standards-based approach was solicited through electronic, open-ended survey questions using Survey Monkey. All teachers in fifth and sixth grade, four in total between the ages of 42 and 61 who had implemented a standards-based approach to instruction within the 2016-2017 school year and had employed a traditional approach to instruction, assessment, and reporting prior to that, were
included. This combination of data provided a means for comparing students’ responses under both approaches using the archived questionnaires and also allowed for the teachers to share their experiences under both conditions.

Data Collection Procedure

Archived student data review. The archived SSEQ data review provided the researcher with an account of each student’s responses on the nine target items over the past two school years. Data was retrieved from archived Excel spreadsheets and a one-tailed t-test for paired samples was conducted using the Microsoft Excel data analysis tool (QI Macros, n.d.). The purpose of this t-test was to compare the means of the student ratings on the five-point Likert scale from the 2015-16 school year under a traditional approach to assessment, grading, and reporting to the student ratings from the 2016-17 school year when a standards-based approach to assessment, grading, and reporting was implemented to determine if there was a difference and if that difference was statistically significant, or merely due to chance.

Teacher survey administration. An electronic, open-ended survey using Survey Monkey was administered to all fifth and sixth grade teachers, four in total. The purpose of the survey was to elicit the teachers’ feelings in regards to the implementation of a standards-based approach to instruction, assessment, and reporting as compared to a traditional approach. All four teachers completed the survey. Survey results were organized into a spreadsheet by question.

Coding of Data

Two rounds of coding were performed to be able to effectively develop themes and categories, which could be tied to the corresponding research questions. Within the summary spreadsheet, responses to the survey were rearranged so that all current fifth grade teacher responses were together and all current sixth grade teacher responses were presented together.
The researcher added a break in between to isolate the two groups. This spreadsheet allowed the researcher to view all responses together so that similarities in responses became quickly identifiable. Within the first round of coding, similar responses were highlighted with the same color as a way to identify similarities quickly and easily. Under each question, common responses were tallied by grade, which indicated the number of fifth grade teachers who responded similarly and the number of sixth grade teachers who responded similarly. The researcher added a total of the tallies for each question. After the first round of coding, the three expected categories elicited similar responses from the teacher participants. These categories were student motivation, student self-awareness, and student-centeredness.

Once all of the common responses were listed on the spreadsheet, additional themes emerged and were grouped into categories. After the analysis of the responses, additional categories were created and included supportive classroom climate, student collaboration, and student groupings.

**Presentation of Results**

The results of this study have been presented in both quantitative and qualitative forms. Categories were developed through the literature review and the coding process and are identified as student motivation, self-awareness, and student-centeredness. Additional categories gleaned from the open-ended survey questions were analyzed qualitatively and included teacher experience, supportive classroom climate, and student collaboration.

**Category 1: Student Motivation**

The category on student motivation was studied through both quantitative and qualitative data sources and has been presented from the students’ perspective as well as from the teachers’.
Student perspective. Four of the nine target items on the SSEQ were directly related to student motivation. These items included: *I feel confident to keep trying even when the work gets challenging for me; I try extra hard to reach academic goals; During academic times, I feel engaged and excited to learn new things or reach my goals, and; I believe that learning the information being taught is more important than my performance on a test.* A one-tailed, paired t-test was conducted on each of the targeted items pertaining to the students’ perception of their level of motivation in 2015-16 and 2016-17 under a traditional approach and under a standards-based approach respectively. These students, 38 current fifth graders and 36 current sixth graders ($N=74$) had been enrolled in the school for all of the last three school years and had experienced a traditional approach and the newly implemented standards-based approach. From a global perspective, it was found that there was a statistically significant difference between the responses on all four of the target items related to motivation of both fifth and sixth graders’ responses on the SSEQ from 2015-16 when a traditional approach to instruction, assessment, and reporting was employed to 2016-17 when a standards-based approach was initiated. Therefore, on all four target items pertaining to motivation in both grade-level groupings, the null hypothesis that the means of student responses from one year to the next are the same is rejected since the mean responses on the SSEQ administered in 2016-17 when a standards-based approach was employed is significantly higher. Individual target item results are listed below in tables 1 and 2.
Table 1
Comparison of current fifth grade students' responses on the SSEQ motivation target items

<table>
<thead>
<tr>
<th>Motivation Target Item: <em>I feel confident to keep trying even when the work gets challenging for me.</em></th>
<th>Current Fifth Grade</th>
<th>SSEQ 2015-16 (Grade 4)</th>
<th>SSEQ 2016-17 (Grade 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.9736842211</td>
<td>3.736842105</td>
<td></td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.8216</td>
<td>0.6011</td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>0.674964438</td>
<td>0.361308677</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>38</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.532889008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>-6.587782953</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P (T&lt;=t) one-tail</td>
<td>5.05033E-08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.68709362</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Motivation Target Item: <em>I try extra hard to reach academic goals.</em></th>
<th>Current Fifth Grade</th>
<th>SSEQ 2015-16 (Grade 4)</th>
<th>SSEQ 2016-17 (Grade 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.026315789</td>
<td>3.684210526</td>
<td></td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.8216</td>
<td>0.6197</td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>0.674964438</td>
<td>0.384068279</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>38</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.229094077</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>-4.462978152</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P (T&lt;=t) one-tail</td>
<td>3.65355E-05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.68709362</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Motivation Target Item: <em>During academic times, I feel engaged and excited to learn new things or reach my goals.</em></th>
<th>Current Fifth Grade</th>
<th>SSEQ 2015-16 (Grade 4)</th>
<th>SSEQ 2016-17 (Grade 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.210526316</td>
<td>3.447368421</td>
<td></td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.8107</td>
<td>0.6857</td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>0.657183499</td>
<td>0.470128023</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>38</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.652579551</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>-2.303133687</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P (T&lt;=t) one-tail</td>
<td>0.013496578</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.68709362</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Motivation Target Item: <em>I believe that learning the information being taught is more important than my performance on a test.</em></th>
<th>Current Fifth Grade</th>
<th>SSEQ 2015-16 (Grade 4)</th>
<th>SSEQ 2016-17 (Grade 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.394736842</td>
<td>3.552631579</td>
<td></td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.7548</td>
<td>0.645</td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>0.56970128</td>
<td>0.416073969</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>38</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.261492261</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2
Comparison of current sixth grade students’ responses on the SSEQ motivation target items

Motivation Target Item: *I feel confident to keep trying even when the work gets challenging for me.*

<table>
<thead>
<tr>
<th>Motivation Target Item</th>
<th>Current Sixth Grade</th>
<th>SSEQ 2015-16 (Grade 5)</th>
<th>SSEQ 2016-17 (Grade 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.111111</td>
<td>3.805556</td>
<td></td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.747</td>
<td>0.749</td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>0.55873</td>
<td>0.561111</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>36</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.345855</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>-4.86825</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P (T&lt;=t) one-tail</td>
<td>1.19E-05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.689572</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Motivation Target Item: *I try extra hard to reach academic goals.*

<table>
<thead>
<tr>
<th>Motivation Target Item</th>
<th>Current Sixth Grade</th>
<th>SSEQ 2015-16 (Grade 5)</th>
<th>SSEQ 2016-17 (Grade 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.194444</td>
<td>3.638889</td>
<td></td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.889</td>
<td>0.798</td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>0.789683</td>
<td>0.637302</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>36</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.14208</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>-2.40896</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P (T&lt;=t) one-tail</td>
<td>0.010698354</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.689572</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Motivation Target Item: *During academic times, I feel engaged and excited to learn new things or reach my goals.*

<table>
<thead>
<tr>
<th>Motivation Target Item</th>
<th>Current Sixth Grade</th>
<th>SSEQ 2015-16 (Grade 5)</th>
<th>SSEQ 2016-17 (Grade 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.222222</td>
<td>3.666667</td>
<td></td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.866</td>
<td>0.676</td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>0.749206</td>
<td>0.457143</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>36</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.569576</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>-3.62994</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P (T&lt;=t) one-tail</td>
<td>0.000449</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.689572</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Motivation Target Item: *I believe that learning the information being taught is more important than my performance on a test.*

<table>
<thead>
<tr>
<th>Motivation Target Item</th>
<th>Current Sixth Grade</th>
<th>SSEQ 2015-16 (Grade 5)</th>
<th>SSEQ 2016-17 (Grade 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.194444</td>
<td>3.388889</td>
<td></td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.577</td>
<td>0.645</td>
<td></td>
</tr>
</tbody>
</table>

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On the target item, *I believe that learning the information being taught is more important than my performance on a test*, the mean responses of current fifth graders from the 2015-16 school year \((M = 2.39, SD = 0.7548)\) to the 2016-17 school year \((M = 3.55, SD = 0.645)\) increased more than any other target item. Likewise, on the same target item, the mean responses of current sixth graders from the 2015-16 school year \((M = 2.19, SD = 0.577)\) to the 2016-17 school year \((M = 3.39, SD = 0.645)\) increased more than any other target item.

On the target item, *during academic times I feel engaged and excited to learn new things or reach my goals*, the mean responses of current fifth graders from the 2015-16 school year \((M = 3.21, SD = 0.8107)\) to the 2016-17 school year \((M = 3.45, SD = 0.6857)\) increased less than any other target item. Likewise, on the same target item, the mean responses of current sixth graders from the 2015-16 school year \((M = 3.22, SD = 0.866)\) to the 2016-17 school year \((M = 3.67, SD = 0.676)\) increased less than most other target items with the exception of, *I try extra hard to reach academic goals*, which increased by the same amount over the two-year period.

**Teacher perspective.** On the open-ended survey, teachers were asked to describe their students’ level of motivation to reach mastery on a given standard when a standards-based approach was implemented in their classrooms. All four of the fifth and sixth grade teacher participants stated that they felt that students were generally more motivated in a standards-based classroom environment versus a traditional environment where number and letter grades were distributed through assessment. This feeling is illustrated in the following quotes:
● “When grades are removed, students are more motivated to focus on actually grasping the material versus consuming their time worrying about a summative grade” (Fifth Grade Teacher Participant A).

● “They know exactly what they need to work on and are therefore more motivated to master it since they feel that it is necessary for their success” (Sixth Grade Teacher Participant B).

● “There is not as much pressure imposed on students as with a traditional model, therefore students seem to be more motivated to learn the material versus simply being motivated to get the grade” (Sixth Grade Teacher Participant A).

● “When students know what they need to work on, they are given the opportunity to internalize their learning, which seems to be more motivating to them and much more rewarding in the end. Their excitement and motivation to ‘get it’ is more significant than I had expected it to be” (Fifth Grade Teacher Participant B).

When asked how they were able to assess the students’ level of motivation within their classrooms, the teacher participants were not as aligned in their responses:

● “Motivation is hard to measure, but through observation, it seems that students are more engaged and motivated to reach mastery” (Fifth Grade Teacher Participant A).

● “I have asked students how motivated they feel given this approach and many have informed me that they feel more excited and motivated to learn” (Fifth Grade Teacher Participant B).

● “Through conversation with my students, I have come to realize that they feel less pressure than when grades are the focus, but they all seem to have a different definition
of motivation as it relates to each of them individually” (Sixth Grade Teacher Participant A).

- “I have asked them to informally rate their level of motivation to reach mastery on particular concepts and it seems that they feel more motivated to grasp the material than before” (Sixth Grade Teacher Participant B).

When asked if there were specific behaviors that stood out regarding a student’s level of motivation or had students communicated their level of motivation to them in any way, all four of the teacher participants indicated that this was hard to determine but that for most of them, on-task behavior had increased and that many students had communicated feeling less pressure and more excitement to reach mastery on concepts.

In the category of motivation, the grade the teachers taught seemed to have little impact on their responses to the questions, although their methods for assessing their students’ level of motivation varied from teacher to teacher. None of the teacher participants indicated having any formalized manner by which they assess motivation, but most seem to have tried to gather this information through informal methods such as conversation, observation, or self-assessments.

Category 2: Student Self-Awareness

The category on student self-awareness was studied through both quantitative and qualitative data sources and has been presented from the students’ perspective as well as from the teachers’.

Student perspective. Three of the nine target items on the SSEQ were directly related to student self-awareness. These items included: In my classroom, I feel in control of my learning; In my classroom, I feel that I have an understanding of what I am good at and what areas I need to work on; The feedback I get from teachers (in the form of my report card, notes on my work or
helps me to improve my skills. A one-tailed, paired t-test was conducted on each of the target items pertaining to the students’ perception of their level of self-awareness in 2015-16 and 2016-17 under a traditional approach and under a standards-based approach respectively.

These students, 38 current fifth graders and 36 current sixth graders (N=74) had been enrolled in the school for all of the last three school years and had experienced a traditional approach and the newly implemented standards-based approach. From a global perspective, it was found that there was a statistically significant difference between the responses on all three of the target items related to self-awareness of both fifth and sixth graders’ responses on the SSEQ from 2015-16 when a traditional approach to instruction, assessment, and reporting was employed to 2016-17 when a standards-based approach was initiated. Therefore, on all three target items pertaining to self-awareness in both grade-level groupings, the null hypothesis that the means of student responses from one year to the next are the same is rejected since the mean responses on the SSEQ administered in 2016-17 when a standards-based approach was employed is significantly higher. Individual target item results are listed below in tables 3 and 4.

Table 3

**Comparison of current fifth grade students’ responses on the SSEQ self-awareness target items**

<table>
<thead>
<tr>
<th>Self-Awareness Target Item: <em>In my classroom, I feel in control of my learning.</em></th>
<th>SSEQ 2015-16 (Grade 4)</th>
<th>SSEQ 2016-17 (Grade 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.842105</td>
<td>3.394737</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.8229</td>
<td>0.6384</td>
</tr>
<tr>
<td>Variance</td>
<td>0.677098</td>
<td>0.407539</td>
</tr>
<tr>
<td>Observations</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.636359</td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>-5.28132</td>
<td></td>
</tr>
<tr>
<td>P (T&lt;=t) one-tail</td>
<td>2.94883E-06</td>
<td></td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.687094</td>
<td></td>
</tr>
</tbody>
</table>

Self-Awareness Target Item: *In my classroom, I feel that I have an understanding of what I am good at and what areas I need to work on.*
<table>
<thead>
<tr>
<th>Mean</th>
<th>SSEQ 2015-16 (Grade 4)</th>
<th>SSEQ 2016-17 (Grade 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Deviation</td>
<td>2.315789</td>
<td>3.536316</td>
</tr>
<tr>
<td>Variance</td>
<td>0.7391</td>
<td>0.6467</td>
</tr>
<tr>
<td>Observations</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.547619</td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>-11.2373</td>
<td></td>
</tr>
<tr>
<td>P (T&lt;=t) one-tail</td>
<td>8.69094E-14</td>
<td></td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.687094</td>
<td></td>
</tr>
</tbody>
</table>

Self-Awareness Target Item: The feedback I get from teachers (in the form of my report card, notes on my work, or in conferences) helps me to improve my skills.

<table>
<thead>
<tr>
<th>Mean</th>
<th>SSEQ 2015-16 (Grade 4)</th>
<th>SSEQ 2016-17 (Grade 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Deviation</td>
<td>2.026316</td>
<td>2.684211</td>
</tr>
<tr>
<td>Variance</td>
<td>0.8216</td>
<td>0.7391</td>
</tr>
<tr>
<td>Observations</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.674964</td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>-4.61664</td>
<td></td>
</tr>
<tr>
<td>P (T&lt;=t) one-tail</td>
<td>2.28998E-05</td>
<td></td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.687094</td>
<td></td>
</tr>
</tbody>
</table>

Table 4

Comparison of current sixth grade students’ responses on the SSEQ self-awareness target items

Self-Awareness Target Item: In my classroom, I feel in control of my learning.

<table>
<thead>
<tr>
<th>Mean</th>
<th>SSEQ 2015-16 (Grade 5)</th>
<th>SSEQ 2016-17 (Grade 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Deviation</td>
<td>2.888889</td>
<td>3.444444</td>
</tr>
<tr>
<td>Variance</td>
<td>0.708</td>
<td>0.558</td>
</tr>
<tr>
<td>Observations</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.634871</td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>-5.97614</td>
<td></td>
</tr>
<tr>
<td>P (T&lt;=t) one-tail</td>
<td>4.15014E-07</td>
<td></td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.689572</td>
<td></td>
</tr>
</tbody>
</table>

Self-Awareness Target Item: In my classroom, I feel that I have an understanding of what I am good at and what areas I need to work on.

<table>
<thead>
<tr>
<th>Mean</th>
<th>SSEQ 2015-16 (Grade 5)</th>
<th>SSEQ 2016-17 (Grade 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Deviation</td>
<td>2.25</td>
<td>3.472222</td>
</tr>
<tr>
<td>Variance</td>
<td>0.841</td>
<td>0.696</td>
</tr>
<tr>
<td>Observations</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-0.0122</td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>35</td>
<td></td>
</tr>
</tbody>
</table>
On the target item, in my classroom, I feel that I have an understanding of what I am good at and what areas I need to work on, the mean responses of current fifth graders from the 2015-16 school year ($M = 2.32, SD = 0.7391$) to the 2016-17 school year ($M = 3.53, SD = 0.6467$) increased more than any other target item. Likewise, on the same target item, the mean responses of current sixth graders from the 2015-16 school year ($M = 2.25, SD = 0.8419$) to the 2016-17 school year ($M = 3.47, SD = 0.6967$) increased more than any other target item.

On the target item, in my classroom, I feel in control of my learning, the mean responses of current fifth graders from the 2015-16 school year ($M = 2.84, SD = 0.8229$) to the 2016-17 school year ($M = 3.39, SD = 0.6384$) increased less than any other target item. Likewise, on the same target item, the mean responses of current sixth graders from the 2015-16 school year ($M = 2.89, SD = 0.708$) to the 2016-17 school year ($M = 3.44, SD = 0.558$) increased less than any other target item.

Teacher perspective. On the open-ended survey, teachers were asked to describe their students’ level of self-awareness when presented a standards-based approach in comparison to a traditional model. All four teachers felt strongly that their students seemed more self-aware in
their classrooms when a standards-based approach was employed. Their feelings are illustrated in the comments below:

- “I feel like there is no comparison when talking about how self-aware students are in a standards-based classroom versus our old model” (Sixth Grade Teacher Participant A).
- “When the focus is on standards and not grades, students must self-assess and monitor their progress towards mastery. They become far more self-aware than when they are given a traditional grade that doesn’t tell them much about their strengths and/or weaknesses” (Sixth Grade Teacher Participant B).
- “I love being able to show a student exactly where they excel and where we need to focus more time to reach mastery. Students are empowered knowing themselves as learners. I have even seen them get excited to share their needs with their parents during conferences” (Fifth Grade Teacher Participant B).
- “A standards-based approach exemplifies personalization of learning. When students know themselves, they are more likely to think of themselves as individuals and are less likely to compare themselves (or their grades) to others” (Fifth Grade Teacher Participant A).

In the category of self-awareness, there was very little variation in responses between the fifth grade teachers and the sixth grade teachers. In other words, the grade they taught seemed to have little impact on the themes that emerged from their responses to the questions.

**Category 3: Student-Centeredness in the Classroom**

The category on student-centeredness was studied through both quantitative and qualitative data sources and has been presented from the students’ perspective as well as from the teachers’.
**Student perspective.** Two of the nine target items on the SSEQ were directly related to student-centeredness. These items included: *In my classroom, I have a lot of chances to help decide things (for example, classroom rules, activities, ways to show what I’ve learned); I feel that my teachers understand what I need to learn even if it is different than my peers.* A one-tailed, paired t-test was conducted on each of the target items pertaining to the students’ perceptions of how student-centered their classrooms were in 2015-16 and 2016-17 under a traditional approach and under a standards-based approach respectively. These students, 38 current fifth graders and 36 current sixth graders (N=74) had been enrolled in the school for all of the last three school years and had experienced a traditional approach and the newly implemented standards-based approach. From a global perspective, it was found that there was a statistically significant difference between the responses on both of the target items related to student-centeredness of both fifth and sixth graders’ responses on the SSEQ from 2015-16 when a traditional approach to instruction, assessment, and reporting was employed to 2016-17 when a standards-based approach was initiated. Therefore, on both of the target items pertaining to student-centeredness in both grade-level groupings, the null hypothesis that the means of student responses from one year to the next are the same is rejected since the mean responses on the SSEQ administered in 2016-17 when a standards-based approach was employed is significantly higher. Individual target item results are listed below in tables 5 and 6.

**Table 5**

*Comparison of current fifth grade students’ responses on the SSEQ student-centeredness target items*

<table>
<thead>
<tr>
<th>Student-Centeredness Target Item: <em>In my classroom I have a lot of chances to help decide things (for example, classroom rules, activities, ways to show what I’ve learned).</em></th>
<th>SSEQ 2015-16 (Grade 4)</th>
<th>SSEQ 2016-17 (Grade 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Fifth Grade</td>
<td>Mean</td>
<td>3.342105</td>
</tr>
<tr>
<td></td>
<td>Standard Deviation</td>
<td>0.9087</td>
</tr>
<tr>
<td></td>
<td>Variance</td>
<td>0.825747</td>
</tr>
</tbody>
</table>
Table 6

Comparison of current sixth grade students’ responses on the SSEQ student-centeredness target items

Student-Centeredness Target Item: *I feel that my teachers understand what I need to learn even if it is different than my peers.*

<table>
<thead>
<tr>
<th>Current Fifth Grade</th>
<th>SSEQ 2015-16 (Grade 4)</th>
<th>SSEQ 2016-17 (Grade 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.789474</td>
<td>3.710526</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.9052</td>
<td>0.7679</td>
</tr>
<tr>
<td>Variance</td>
<td>0.819346</td>
<td>0.589616</td>
</tr>
<tr>
<td>Observations</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.765417</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>t Stat</td>
<td>-9.66714</td>
<td></td>
</tr>
<tr>
<td>P (T&lt;=t) one-tail</td>
<td>5.72521E-12</td>
<td></td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.687094</td>
<td></td>
</tr>
</tbody>
</table>

Student-Centeredness Target Item: *I feel that my teachers understand what I need to learn even if it is different than my peers.*

<table>
<thead>
<tr>
<th>Current Sixth Grade</th>
<th>SSEQ 2015-16 (Grade 5)</th>
<th>SSEQ 2016-17 (Grade 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.388889</td>
<td>3.694444</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.728</td>
<td>0.577</td>
</tr>
<tr>
<td>Variance</td>
<td>0.530159</td>
<td>0.33254</td>
</tr>
<tr>
<td>Observations</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.563276</td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>-2.93688</td>
<td></td>
</tr>
<tr>
<td>P (T&lt;=t) one-tail</td>
<td>0.002913953</td>
<td></td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.689572</td>
<td></td>
</tr>
</tbody>
</table>

Student-Centeredness Target Item: *In my classroom I have a lot of chances to help decide things (for example, classroom rules, activities, ways to show what I’ve learned).*

<table>
<thead>
<tr>
<th>Current Sixth Grade</th>
<th>SSEQ 2015-16 (Grade 5)</th>
<th>SSEQ 2016-17 (Grade 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.916667</td>
<td>3.861111</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.874</td>
<td>0.762</td>
</tr>
<tr>
<td>Variance</td>
<td>0.764286</td>
<td>0.580159</td>
</tr>
<tr>
<td>Observations</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.711545</td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>35</td>
<td></td>
</tr>
</tbody>
</table>
On the target item, *I feel that my teachers understand what I need to learn even if it is different than my peers*, the mean responses of current fifth graders from the 2015-16 school year ($M = 2.79$, $SD = 0.9052$) to the 2016-17 school year ($M = 3.71$, $SD = 0.7679$) increased more than the other target item in the category of student-centeredness. Likewise, on the same target item, the mean responses of current sixth graders from the 2015-16 school year ($M = 2.92$, $SD = 0.874$) to the 2016-17 school year ($M = 3.86$, $SD = 0.762$) increased more than the other target item in this category.

**Teacher perspective.** On the open-ended survey, teachers were asked to provide examples of a student-centered classroom and were also asked to provide evidence of the characteristics of student-centeredness present in their own classrooms. More than one of the teacher participants noted the following characteristics of student-centeredness:

- Individual learning goals are communicated to students (Fifth Grade Teacher Participant A, Fifth Grade Teacher Participant B, Sixth Grade Participant A).
- The presence of student voice and choice in decision-making (Fifth Grade Teacher Participant B, Sixth Grade Participant A).
- Reflection on progress toward individual goals (Fifth Grade Teacher Participant A, Sixth Grade Teacher Participant B).
- Frequent student collaboration to enhance understanding, support the learning of others, and to provide opportunities for ownership (Fifth Grade Teacher Participant A, Sixth Grade Teacher Participant A, Sixth Grade Teacher Participant B).
“Classroom environment is conducive to individual student needs: flexible seating, etc.” (Fifth Grade Teacher Participant A).

“Creative student groupings aimed at common strengths or areas of need” (Fifth Grade Teacher Participant B).

“In a student-centered classroom, students are in control of their learning and the teacher acts as facilitator” (Fifth Grade Teacher Participant B).

When asked to assess how student-centered their classrooms were, teachers generally felt that the shift toward a standards-based approach has made them more student-centered. Their feelings are illustrated by the quotes below:

“I feel that teaching in a traditional model forces you to teach to the ‘average’ student regardless of whether or not there are outliers on either end of the curve. When I focused more on individual student strengths and teaching towards individual progress, I feel that my classroom became more student-centered” (Sixth Grade Teacher Participant B).

“Reworking units to include more student voice and choice has empowered my students and has made the classroom feel more student-centered” (Fifth Grade Teacher Participant B).

“Students understand their own learning needs and the needs of their peers, so groupings have been more effective and collaboration has increased, making my classroom more learner-centered” (Fifth Grade Teacher Participant A).

In the category of student-centeredness, there was very little variation in responses between the fifth grade teachers and the sixth grade teachers indicating alignment in their level of understanding of the category and in their day-to-day practice. The grade they taught seemed to have little impact on the themes that emerged from their responses to the questions.
Category 4: Supportive Classroom Climate

Qualitative data gathered from the open-ended survey questions uncovered themes related to the classroom environment when a standards-based approach was employed. All of the teacher participants indicated that the implementation of a standards-based approach to instruction, assessment, and reporting allowed for a more supportive classroom environment as compared to a traditional model. For the purposes of this research and based on the teachers’ comments below, a “supportive classroom climate” was characterized as:

- “A classroom where students support each other’s learning through constructive feedback, sharing of ideas, and a willingness to assist one another” (Fifth Grade Teacher Participant A).
- “Less competition among students to receive the highest grade” (Sixth Grade Teacher Participant A).
- “Students owning their own learning and recognizing that it may be different from that of their peers, therefore they are more willing to showcase their strengths and address their needs since everyone is viewed and valued as an individual” (Fifth Grade Teacher Participant B).

Results show that the teacher participants perceived a standards-based approach to instruction, assessment, and reporting as a positive influence on the creation of a supportive classroom climate. One important factor to fostering a supportive classroom climate as noted by all four of the teacher participants is student collaboration.
Category 5: Student Collaboration

Data gathered from the open-ended teacher surveys indicated that when a standards-based approach was commissioned in the classroom, student collaboration was enhanced. The feelings of the teacher participants on this category are illustrated below:

- “Once the worry of a final grade was removed and students truly understood their own learning needs, I saw their interactions with one another skyrocket” (Sixth Grade Teacher Participant A).
- “They all seem to understand that everyone needs something different; that what one student is working on may be different than that of another” (Fifth Grade Teacher Participant A).
- “My groupings have finally become functional in the way I have always imagined. Students are actually taking responsibility for moving the thinking of their peers and accepting challenge and dissonance as a positive aspect to learning” (Fifth Grade Teacher Participant B).
- “All competition has seemed to cease. No longer are students worried about how their performance impacts their grade but seem to be more worried about everyone ‘getting it’ and helping each other along the way” (Sixth Grade Teacher Participant B).
- “Student to student collaboration is incredible to watch. By playing on student strengths, I am able to create groupings of students that support the needs of each other and students have taken on the role of the supports for one another. I feel like I act as a coach and not the manager as I’ve felt in the past” (Fifth Grade Teacher Participant B).

All four teacher participants had similar responses that did not appear to be impacted or influenced by the grade they were assigned to teach.
Category 6: Teacher Experience

Qualitative data gleaned from the open-ended survey included the teachers’ level of understanding of a traditional approach to instruction, assessment, and reporting as compared to a standards-based approach, their assessment of overall strengths and weaknesses to a standards-based approach, and their opinion on professional development that is necessary to make this approach successful. The data about the teachers’ experiences were broken into sub-categories and are reported below.

**Background knowledge.** The first two questions on the open-ended teacher survey asked teacher participants to describe their experiences using a traditional approach to instruction, assessment, and reporting and their experiences using a standards-based approach. When asked to include descriptors and years of experience with a traditional model, or about their general feelings towards a standards-based approach, the four teacher participants reported the following:

- “I have been teaching for several decades and have been through a lot of changes with educational practices. Historically, I have been under a traditional approach where an overall grade is given to a particular content/subject area. The problem is that this arbitrary grade also took into account a student’s behaviors and wasn’t based solely on what they had learned” (Sixth Grade Teacher Participant A).

- “I have been teaching for 16 years. I was always encouraged to teach content to the assessment I was being asked to administer. It didn’t really matter what the children had learned but rather how they did on the test. This traditional model was all I knew at first. I imagine that teachers of the primary grades may have been more familiar with an alternative to the traditional number or letter grades, but I have always taught the upper
grades, so eliminating number or letter grades was new for me” (Sixth Grade Teacher Participant B).

- “I have been teaching for 8 years. In my experience with a traditional model, parents were mostly concerned with how their child did on the report card, like, how many A’s they received overall. I always felt torn giving letter grades to elementary aged students when the goal should be the acquisition of knowledge not the summative grade” (Fifth Grade Teacher Participant A).
- “This is my 18th year teaching. Although overwhelming at first, I agree with a standards-based philosophy as it forces you to think about each individual student and what he or she may need to be successful even if it is different than what others may need. This was always my goal, but seems easier to accomplish under this model” (Fifth Grade Teacher Participant B).

**Successes in implementation.** The four teacher participants had similar responses to the survey question that asked them to reflect on the successes of implementing a standards-based approach to instruction, assessment, and reporting. Generally speaking, they all reported very affirmative feelings about the initiative citing the positive impact the approach has had on students’ level of motivation, self-awareness, and engagement in the classroom. All four teachers noted that the approach felt more student-centered. Their remarks are reflected in the following statements retrieved from their individual survey responses:

- “I feel that each child was studied as an individual on a set of common standards and so I became more student-centered in my thinking and my instruction focused solely on each student as opposed to the class as a whole” (Fifth Grade Teacher Participant B).
• “I felt that there was less pressure on the students and that my classroom felt lighter in terms of climate. Students were motivated to improve their skills and enjoyed the self-discovery that occurred when they learned that what they needed was often different from their friends” (Sixth Grade Teacher Participant A).

• “I realized how little attention I had given to assisting students in owning their strengths and needs. By focusing more time and energy on this, I learned about their needs more intimately and they took control over their skill acquisition. Things just felt more meaningful” (Fifth Grade Teacher Participant A).

• “This initiative had a positive impact on a lot of things. I think the most important influence was on the students and their excitement to learn more about themselves and accomplish their individual goals that we set” (Sixth Grade Teacher Participant B).

Challenges in implementation. Although the teacher participants indicated that a standards-based approach yielded positive results, they also noted some challenges in implementation. Their perspectives on the challenges are essential in providing the school district with potential obstacles to expanding this initiative into other grade-levels or into other schools. The two sixth grade teacher participants both noted that their biggest challenge was assisting the students in “getting over” the worry about not having traditional grades. One noted that the students needed fairly constant reassurance in the beginning that her new method was acceptable and approved by the building principal (Sixth Grade Teacher Participant A). Additionally, another teacher noted that she should have dedicated more time to explaining the rationale and research behind this new approach so that students understood the reason for the shift more thoroughly (Fifth Grade Teacher Participant B). Along the same vein, all four teacher participants noted challenges in educating parents about the new initiative. They felt that:
• “Once parents understood the reason for the shift (to communicate more accurately where each student was in terms of achievement and mastery) they were on board, but this took longer than expected and I was surprised at how much information they wanted to know” (Fifth Grade Teacher Participant A).

• “Some parents were worried about removing traditional grades in terms of how it impacted their child’s future in middle school. They wanted specifics about how class selections were made and how teachers would be able to determine which classes students should be in without looking at grades. I had to take some extra time to explain to them the process and was able to alleviate their worry” (Sixth Grade Teacher Participant A).

• “Although never stated in conversation, I felt that a few parents worried that this approach was lowering the standards that students had been held to in the past. Through thorough explanation and information sharing, I tried to help them understand that kids were progressing through their own levels and were provided enrichment opportunities and chances to go deeper in their understanding when they demonstrated that they were ready” (Sixth Grade Teacher Participant B).

**Professional development needs.** The need for professional development was the underlying foundational element to the success of this initiative (Dueck 2014). The four teacher participants stated that they felt prepared to implement a standards-based approach based on the preliminary work they had done as a staff through research, reading articles, developing a shared philosophy, and conversations had within their professional learning communities. When asked specifically about additional need for professional development, they stated:
● “I would like to continue to fine-tune my understanding of how to differentiate and individualize assessments for each student or group of students” (Fifth Grade Teacher Participant A).

● “I feel that I need to see how other teachers are keeping track of student progress in terms of record keeping” (Fifth Grade Teacher Participant B).

● “I would like to know how this approach lends itself to adopting competencies in various content areas” (Sixth Grade Teacher Participant A).

● “I think the most valuable professional development is gained through observation of others, therefore, I would like to visit other schools who are farther along in the implementation process to gather new ideas and troubleshoot challenges” (Sixth Grade Teacher Participant B).

Summary

The purpose of this single case study in a rural elementary school in Northern New Hampshire was to investigate the impact that a standards-based approach to instruction, assessment, and reporting had on student motivation to reach mastery on a set of standards from the perspective of the student. All teachers in fifth and sixth grade at the research site, a rural, K-6 elementary school, had implemented a standards-based approach to instruction within the 2016-2017 school year and had employed a traditional approach to instruction, assessment, and reporting prior to that. Archival data of nine targeted items taken from the 2015-2016 and 2016-2017 Student School Experiences Questionnaire (SSEQ) taken by 74 students were reviewed and analyzed to determine how a standards-based approach to instruction, assessment, and reporting had on student motivation, student self-awareness, and student-centeredness of the classroom environment as compared to a traditional model in which number and letter grades were
distributed. In addition, qualitative data from fifth and sixth grade teachers who had implemented a standards-based approach was solicited through an electronic, open-ended survey about their experiences. Through the coding process, teacher responses were organized into the same three categories as the target items on the SSEQ; motivation, self-awareness, and student-centeredness; but responses also uncovered additional themes that included supportive classroom climate, student collaboration, and teacher experience.

Results indicated that a standards-based approach to instruction, assessment, and reporting had a positive impact on student motivation to reach mastery, a student’s self-awareness of their strengths and weaknesses, as well as on creating a student-centered classroom environment. Furthermore, based on the teachers’ perspectives, a standards-based approach yielded positive results in enhancing a supportive classroom climate and promoting student-to-student collaboration.

This single case study was designed to investigate the impact that a standards-based approach to instruction, assessment, and reporting had on student motivation to reach mastery on a set of standards in order to provide a case for the implementation of standards-based grading practices in the district under study. Although case studies are not usually generalizable (Merriam, 2009), the information gathered through this research assisted the decision-makers in the district as they moved forward and broadened this initiative. Moreover, this study took into account the perspective of the student, which was a unique addition to existing literature and research. The final chapter links each of these findings to the research questions presented through the interpretation of the quantitative and qualitative data collected.
CHAPTER 5
CONCLUSION

This single case study in a rural elementary school in Northern New Hampshire aimed to investigate the impact a standards-based approach to instruction, assessment, and reporting had on student motivation to reach mastery on a set of standards from the perspective of the student.

To determine the students’ perceived level of motivation to reach mastery on a set of standards under a standards-based approach, archived data from nine targeted items on the Student School Experiences Questionnaire (SSEQ) were analyzed in conjunction with open-ended, electronic surveys completed by classroom teachers.

Empirical data and qualitative data collected from the teacher surveys were compiled into three main categories (student motivation, self-awareness, and student-centeredness) and three sub-categories (supportive classroom climate, student collaboration, and teacher experiences), which provided findings to answer the research questions being investigated by this study. The overarching research question being investigated was: How did the implementation of a standards-based approach to instruction, assessment, and reporting impact a student’s perception of their level of motivation to work toward mastery on an identified standard? Related research questions included:

- How well did students understand their personal strengths and weaknesses when presented with a standards-based approach to instruction versus a traditional model?
- How did teachers view a standards-based approach to instruction, assessment and reporting as it related to student achievement?
The data collected was interpreted below to address the research questions. Additionally, the data collected was tied to existing literature and research on the topic to solidify the conclusions drawn from the results.

**Interpretation of Findings**

The overarching research question and the two related research questions can be answered based on the quantitative and qualitative data collected within the categories that developed in this study. These conclusions are considered reliable, as the collected qualitative data was reviewed through a member check-in procedure to ensure validity (Roberts, 2010). Quantitative data is considered reliable, as threats to external and internal reliability were reviewed and accounted for in the experimental design (Creswell, 2015). Due to identified limitations in the sample size of this study, the results are not truly generalizable (Merriam, 2009) but do provide a supportive rationale for moving forward with a standards-based initiative in the school district where the site under study is located.

**Overarching Research Question: How did the implementation of a standards-based approach to instruction, assessment, and reporting impact a student’s perception of their level of motivation to work toward mastery on an identified standard?**

This research question can be answered using both quantitative and qualitative measures. Quantitatively, archived data on four of the nine target items on the SSEQ administered to fifth and sixth graders in the 2015-2016 school year when a traditional model was employed in the classroom was compared to the same survey items administered to the same students in the 2016-2017 school year when a standards-based approach was initiated. On all four of the motivation target items on the SSEQ, students in both fifth and sixth grade indicated through their responses a statistically significant difference in the averages of their ratings from one year
to the next, which directly informed this research question. These findings support the notion that traditional grading practices do not motivate students to reach their goals, and may actually have the opposite effect (Johnson, 2011; Schinske & Tanner, 2014). Providing feedback to students regarding their progress towards mastery, without the distribution of a traditional grade, serves to increase motivation and achievement (Schinske & Tanner, 2014; Swinton, 2010).

On the first and second target items pertaining to motivation, students were asked how confident they were to keep trying even when the work was difficult for them and how hard they try to reach their academic goals, which indicates their perceived level of motivation toward reaching mastery. Current fifth and sixth grade students’ mean responses for school year 2015-2016 and 2016-2017 on both target items were similar and increased approximately the same amount, which indicates that on these particular items, the grade level in which the child was enrolled had little impact on their perceived level of motivation toward reaching mastery when things became challenging in the classroom.

The increase to perceived levels of motivation to reach mastery when a standards-based approach is implemented versus a traditional approach is illustrated quantitatively by the findings, but also qualitatively when teachers were asked to assess their students’ level of motivation under both conditions. All four of the teacher participants indicated that, although motivation was hard to measure, they felt that their students were more motivated when given a standards-based approach was utilized. Consistent with previous research on the topic, the findings show that the increase to student motivation was aimed at grasping material versus a summative grade, that mastery seemed intrinsically important to student success, and that students felt less pressure in their classrooms when a standards-based approach was offered (CEC 2012; Covington & Mueller, 2001; Eccles & Wigfield, 2002; Toshalis & Nakkula, 2012).
According to Dweck (2014), schools that send messages to promote effort, perseverance, and personal growth help all students succeed in the classroom. Additionally, a child’s experience in school can be transformed from disengaged to motivated and excited to learn when personal growth and progress towards goals is the focus of the instructional delivery model (Dean, Hubbell, Pitler & Stone, 2012; Dweck, 2014).

**Related Research Question One: How well did students understand their personal strengths and weaknesses when presented with a standards-based approach to instruction versus a traditional model?**

This research question about a student’s self-awareness was answered using both quantitative and qualitative measures. Quantitatively, archived data on three of the nine target items on the SSEQ from the 2015-2016 school year and pertaining to student self-awareness was compared to the same three target items on the same questionnaire administered in 2016-2017 when a standards-based approach was initiated. All three target items related to self-awareness showed a statistically significant increase over the two-year period of time, indicating that a standards-based approach to instruction, assessment, and reporting allows students to feel that they understand their strengths and weakness better than when provided a traditional model. To further iterate this point, on the target item that asked students to rate their level of understanding of their strengths and weakness in the classroom under a standards-based approach, the student ratings increased from one year to the next more than any other target item within the category of self-awareness. These findings support the beliefs rooted in theories of motivation that when students feel in control of their learning, they are more motivated to reach mastery (CEC, 2012; Deci & Ryan, 2000; Toshalis & Nakkula, 2012; Weimer, 2010).
Qualitatively, the same point holds true. The teachers surveyed felt strongly that their students appeared more self-aware under a standards-based approach as opposed to when a traditional model was executed. Regardless of the grade level of the students, it is the perception of the teachers surveyed that all students seem more academically self-aware. When schools respond to individual student needs by providing meaningful, personalized experiences, students feel more in control of their learning and developing the attitude that what they need may be different than the needs of their peers (Dweck, 2014).

Related Research Question Two: How did teachers view a standards-based approach to instruction, assessment and reporting as it related to student achievement?

This research question was answered primarily in a qualitative manner through the teacher’s responses on the open-ended, electronic surveys and encompasses many of the themes that emerged through the literature review process and through data collection. The categories of motivation and self-awareness have been previously addressed quantitatively and qualitatively in the overarching research question and in the first related research question. The categories of student-centeredness, supportive classroom climate, and student collaboration emerged after reviewing the literature pertaining to a standards-based approach and how it relates to student motivation and following the data collection process in this study. These themes were directly related to this research question and are directly related to increased student achievement.

Davis (2012) believes that when student-to-student collaboration is promoted in a student-centered classroom, student achievement increases and they are more prepared to utilize the interpersonal skills they have practiced to flourish in future educational settings. The teacher participants in this study indicated that a standards-based approach to instruction, assessment, and reporting promoted peer interactions and made their classrooms feel more supportive
overall. They noted that student groupings were more effective and targeted the learning objectives that teachers had intended them to, something that is sure to be more conducive to achievement than dysfunctional groupings. In summary, a supportive classroom environment that is student-centered effectively promoted academic motivation and engagement (Schaps, 2005), which answers the research question posed in this study.

**Link to Prior Research**

This study was grounded in underlying themes that were developed from previous literature and research. The findings in this study were aligned with the literature cited and address the gap in existing literature. Major research themes that were developed in the literature review were motivational theory including self-determination, self-regulation, and goal-achievement theories; teacher versus student centeredness; the need for grading reform; and best practices in implementing a standards-based approach.

**Motivational Theory**

Many previous studies have shown that traditional grades actually depress student achievement rather than act as a motivating factor for success (Johnson, 2011; Kohn, 2011; Wormeli, 2010). Moreover, studies have shown that students are more motivated to learn the content being taught when traditional grades are removed (Heflebower, Hoegh, & Warrick, 2014; Johnson, 2009; Matthews, 2012; Miller, 2013). This study relied heavily on the notion that a student-centered classroom environment promotes self-determined and self-regulated learners who generate their own knowledge rather than simply absorb content that is imposed upon them by the teacher (Levy, 2014; McCarthy, 2015). The results showed that a standards-based approach was catered more to the individual student’s needs and that the implementation of this approach increased students’ motivation to reach mastery.
A subset of motivational theory, self-determination theory posits that humans have three innate needs: competence, relatedness, and autonomy (Deci & Ryan, 2000). When these three needs are met, people function optimally. This study asked students how in control they were of their own learning when presented with a standards-based approach as opposed to a traditional approach. Results showed that in a standards-based environment, students were given the opportunity to control the outcome of their learning and reach mastery. Results also showed that from the teachers’ perspective, students experienced relatedness, as they were more successful working collaboratively with one another than when a traditional approach to instruction was employed. Similar to what Matthews (2012) found, this study found that student achievement motivation was enhanced when the student-centered classroom promoted self-determined learners under a standards-based approach.

On a similar thread, self-regulation theory suggests that in order to be engaged in the classroom, students must be goal-focused and demonstrate control over their effort towards learning the concept or skill (Toshalis & Nakkula, 2012). Additionally, these students are able to set goals, plan, self-monitor, and self-assess at various points in the learning process (Weimer, 2010). The results from this study showed that when presented a standards-based approach to instruction, students were aware of their individual strengths and weaknesses, were able to set goals for themselves, and were determined to continue to try to reach mastery even when the task became challenging for them.

According to Seifert (2004), achievement-goal theory suggests that academic motivation rests on the student’s desire to reach goals. Mastery goals, as outlined in this theory, require students to demonstrate understanding, skill, and content knowledge whereas performance goals require students to reach a predetermined performance level as compared to others (CEC, 2012).
As cited in previous research, students who exhibit a mindset that involves reaching mastery goals are more inclined to understand topics on a deeper level, generalize learned strategies more effectively, and are more adaptable to challenges (Brown, 2008; CEC 2012). This study found that a standards-based approach supported the use of mastery goals and that students exhibited a higher level of motivation to reach their goals than when they were presented with a traditional learning experience.

**The Student-Centered Classroom**

This study specifically asked students and teachers questions about how student-centered the classroom environment was under both a traditional approach and under a standards-based approach. Similar to previous literature on the topic of student versus teacher centeredness, results showed that under a standards-based approach teachers and students felt that their classrooms were more student-centered (CEC 2012; McCarthy, 2015; McCombs & Miller, 2009; McCombs & Whistler, 1997; Richmond, 2014a). When students were able to share in the decision-making process in their student-centered classrooms, they were more motivated to reach mastery and emphasize personal effort and investment in the learning process.

**The Need for Reform**

Many researchers believe that a traditional approach to grading lacks real meaning and is inconsistent, imprecise, and not aligned with content standards being taught (Guskey, 2011; Marzano, 2010; Oliver, 2011; Schmoker & Marzano, 1999). A vital component to the standards-based grading movement is the use of clear, measurable outcomes as well as the use of accurate assessments to determine where each student stands in relation to the standards being taught (Oliver, 2011; Schmoker & Marzano, 1999). This study found that when a standards-based approach was utilized in the classroom, not only did teachers know where their students stood in
terms of mastery on identified standards, but students knew and understood their own needs as well.

A specific goal area in the district’s Strategic Plan (2014) aims to establish a cohesive, comprehensive curriculum, instruction, and assessment system that meets the individual needs of the student population. An action step under this goal is to develop student-centered approaches to instruction and assessment that allow students to share their learning in a variety of ways (District Strategic Plan, 2014). This study uncovered the finding that, under a standards-based approach to instruction, assessment, and reporting, the classroom environment was more student-centered and supportive, learning was individualized, students were more collaborative, and motivation to reach mastery increased. Similar to what Miller (2013) found, results from this study showed that students felt less pressure in the classroom when they knew they were being assessed on their progress toward an identified standard versus when they were going to be given one, culminating grade. Listening to the students’ perspective is a necessary component to the implementation process of any change initiative (Guskey, 2011).

**Best Practices in Implementation**

Existing literature suggests several common themes when beginning the implementation process of a standards-based approach. First, the school or district must focus on creating consistency in methods, policies, procedures, and practice. Many authors support the notion that effective instruction is achieved when consistent expectations are shared among teachers and schools (Ainsworth & Viegut, 2006; Guskey, 2001; Wormeli, 2011). Additionally, research suggests that developing the teacher's capacity to implement this approach with consistency is key (Brookhart, 2011; Johnson, 2011; Stiggins, 2007). It is imperative that teachers are provided ample time to practice and participate in professional development on a standards-based
approach, as they are at the forefront of the change initiative (Tierney, Simon, and Charland, 2011). This notion was supported in the findings of this study when teachers articulated their need for more professional development around unexpected issues that arose in the implementation process.

**Implications**

**Stakeholder Benefits**

**Students.** This study aimed to understand how a standards-based approach to instruction, assessment, and reporting impacted students’ level of motivation to reach mastery on a standard versus when students were learning under a traditional model. Although the study focused on fifth and sixth graders at a rural elementary school, the findings from this study will benefit other students in other grade levels as well. Additionally, there is the potential for the findings in this study to impact other schools in the district in which the site is located as they move forward with the implementation of a standards-based approach. Lessons learned about the impact a standards-based approach has on motivation, student self-awareness, and student-centeredness promote a more supportive and collaborative classroom climate, will benefit the students directly. Students who are more motivated to reach mastery on a standard are more apt to achieve in the classroom, as intrinsic motivators are more potent than extrinsic motivators such as a traditional grade (Eccles & Wigfield, 2002). Likewise, students who understand their strengths and weaknesses and are able to set individual academic goals for their own unique needs, are more motivated to achieve in the classroom due to the enhancement of their own self-awareness (Matthews, 2012).

Based on the findings from this study, students in fifth and sixth grade at a rural elementary school in Northern New Hampshire were more self-aware and motivated to reach
mastery on identified standards when a standards-based approach is initiated versus a traditional model. It is the belief of this researcher that transforming the typical classroom into an environment where self-aware and motivated students are allowed to work collaboratively with one another on their own unique areas of need through the use of a standards-based approach, students will achieve at a higher, more student-specific attainment level of achievement.

**Parents.** Students will not be the only stakeholders who benefit from the findings in this study. Parents will also benefit from knowing that their children are more motivated to succeed academically and are learning the necessary self-awareness and collaboration skills for use later in life. Furthermore, a standards-based reporting tool, such as a report card, with letter and number grades removed, will more accurately communicate what their children have learned on identified standards being taught in the classroom. They would not receive a report card with a letter or number grade that does not necessarily indicate what a student has learned and is often a compilation of averages that incorporate behaviors as well as achievement markers (Wormeli, 2010). A standards-based report card, on the other hand, could include the set of standards set forth by local or state guidelines with ratings on each indicating how close a student is to mastery, which gives parents a much clearer picture of how their child is doing academically.

**The school community.** The findings in this study will not only benefit the students and the parents, but also the school community as a whole. Based on the findings from this study, classrooms that transform from a traditional model to that of a standards-based approach will enhance student voice and choice in decision-making aimed at increasing achievement.

**Teachers.** Although the teacher participants in this study believe that they have always tried to allow for student voice and participation in classroom decision-making, they note that this was often easier said than done (Fifth Grade Teacher Participant B, Sixth Grade Teacher
Moreover, some teacher participants noted trying to create effective instructional student groupings, but this was difficult when students felt that they were being compared to one another under a traditional model (Fifth Grade Teacher Participant B, Sixth Grade Teacher Participant B). These feelings were supported by the students’ responses to one of the student-centeredness target items on the SSEQ that asked them how much they are included in decision-making in their classrooms and on the open-ended teacher survey that asked teachers about characteristics of student-centeredness that they utilized in their classroom. Students noted that under a traditional approach, they felt less included in the decision-making process than when a standards-based approach was employed. On the same thread, teachers felt that instructional groupings were much more effective when the pressure of comparing themselves to one another was removed. Therefore, teachers benefited from this approach in that many of the instructional strategies they were attempting to use under a traditional model are more successfully implemented under a standards-based approach.

With that said, in order to implement a standards-based approach school-wide and with fidelity, teachers must engage in professional development for continuous improvement, which will benefit the school community as a whole. Being able to fine-tune their craft to individually address each student’s unique set of needs will hopefully instill a sense of satisfaction in the teachers’ work. Although change is not easy and is often challenging, pushing oneself beyond what is comfortable is personally and professionally satisfying if done thoughtfully (Heifetz, Grashow, & Linsky, 2009). When teachers learn new skills to enhance their tireless efforts, they feel refreshed and invigorated to help their students.

*A foundation for transformation.* Within the district this research site is located, administration has begun the initial steps necessary for the implementation of a standards-based
approach to instruction, assessment, and reporting. The school district prides itself on realizing the full potential of each and every student, and therefore a more individualized approach to instruction is essential (District Strategic Plan, 2014). The findings in this study provided strong rationale for the implementation of a standards-based approach in the elementary setting. In addition to the existing literature on the benefits of a standards-based approach to instruction, these findings took into account the perspective of the student, something that fits directly into the district's mission.

The state of New Hampshire is among the few states leading the charge in the area of educational redesign by replacing the typical Carnegie Unit of seat time with a competency-based system that focuses on personalization of learning, teacher and student relationships, and flexible supports to develop 21st century skills at the high school level (US Department of Education, n.d.). To develop the use of competencies at the elementary level, the district must first focus on deepening the teachers’ understanding of the standards and how they are interwoven with one another within core content areas and throughout the grades. Focusing on personalizing the learning for each individual student by looking at specific standards and a child’s individual progress towards mastery on each provides the teachers the opportunity to work with the standards themselves rather than simply covering the material and teaching to the group as a whole. After familiarity with the standards and individualization of content increases through the implementation of a standards-based approach, the teachers will be more prepared to move towards a competency-based system of instruction. This will allow the district to be more prepared to embrace the direction that the state is moving toward.
Recommendations for Action

In conjunction with existing literature, this case study adds to the rationale that promotes implementing a standards-based approach to instruction, assessment, and reporting for the district being examined. Information gleaned from data analysis and from teacher surveys supports the need for a standards-based approach in the classroom in order to ensure that students are reaching their highest potential as it relates to their level of motivation to achieve goals. For the implementation of such approach to be successful, extensive professional development needs to occur and a clear plan for communication needs to be developed (Avalos, 2011). Using the articulation of standards for student achievement as a starting point, educational institutions should implement a student-centered, differentiated, and personalized approach to instruction, assessment, and reporting in order to promote student motivation to reach mastery (Guskey, 2011).

Professional Development

Under a standards-based model, the role of the teacher changes from simply covering content knowledge to that of a coach in the facilitation of mastery learning (Bogdan, 2011; Levy, 2014; Weimer, 2013; Zophy, 1991). The teachers in this study articulated a need for more professional development around the implementation of a standards-based approach and their changing role. The teachers were ultimately responsible for this change initiative and needed to feel equipped with the knowledge and confidence necessary for its success. It is recommended that before this initiative is attempted on a larger scale, that the district engages teachers in conversations around their beliefs and philosophies on assessment and grading. Creating a shared vision will make the purpose for the change clearer for everyone and may uncover potential obstacles to the change initiative (Costa & Kallick, 1995; Senge, 2006). The district should
develop an implementation plan that spans over a multi-year period of time and communicate this plan to educators to ensure full transparency in the process so that everyone is aware of the timeline. Additionally, administration should determine how and when all steps will be communicated to all stakeholders and should be consistent in sharing research, rationale, and expectations for implementation.

Eventually, teachers will need professional development and time allotted to creating rubrics, managing instructional records, and developing assessment tools. The teachers in this study also indicated the importance of the already-existing Professional Learning Communities in which they collaborate, troubleshoot, and share student work with one another (DuFour, 2004). Continuing to foster this collaborative effort will be essential moving forward. All professional development should use data, student feedback, and ongoing analysis of progress towards full implementation to assess adjustments that need to be made throughout the process (Hanover Research, 2013).

**Communication Plan**

To avoid facing challenge after implementation, particularly with parents (Guskey & Jung, 2006), it is crucial that a clear plan for communication is established. The communication plan needs to include articulation of the purpose of the method, differentiated grading criteria for all learners including special education students, and the rationale behind changing from letter grades to standards (Guskey & Jung, 2006). When implementing a change as widespread as this type of reform, it is essential to remember that all stakeholders are approaching the change from various lenses and levels of understanding. The number one goal of establishing a communication plan that should be articulated to all stakeholders is to be as transparent as possible to ensure that people are educated on the topic and understand the rationale for reform.
Utilizing the existing Strategic Plan for the district as a catalyst for change will be important, as the community has rallied behind this effort. Additionally, decision-making entities in the district such as administration and the school board rely on the Strategic Plan to anchor new initiatives and decisions related to such. The plan for communication should be inclusive and involve all stakeholders, it should be viewed as a continual process that spans over a designated period of time, and should focus on results of the effort in order to determine areas for ongoing improvement (Institute for Educational Leadership & Coalition for Community Schools, 2005).

**Recommendations for Further Study**

This case study was the first step in transforming the rural school district being examined from their previously implemented traditional methods of instruction, assessment, and reporting to that of a standards-based approach. The sample in this study was small and only included the use of archived data on current fifth and sixth grade students who had remained in the school under study for all of the last three school years, a total of 74 student participants. Additionally, because of the small school size, only four teachers were included in the qualitative portion of the study, as that was the total number of fifth and sixth grade teachers. It is recommended that future studies look at a larger sample size of student data, however a different data sample would need to be examined, as the SSEQ used in this study is school-specific and not administered elsewhere. Perhaps seeking student perceptions on their level of motivation in the form of semi-structured interviews would elicit more specific anecdotal information and provide additional rationale for the initiative.

Due to the rural demographic nature of this district, replicating this study with a larger sample size in another demographic area such as an urban or suburban area would be interesting. This would allow investigators to generalize the results from this study to a broader
representation of students, or to determine if motivation is impacted by variables related solely to school demographics.

This study focused primarily on the student’s perception of their level of motivation when provided a standards-based approach in the classroom. With that said, however, additional themes emerged regarding self-awareness and student-centeredness. Further studies could include taking a deeper look at these areas specifically to determine if other benefits exist that are specific to these sub-areas. Additionally, this study focused on the student perspective but did not investigate the parents’ perception of their child’s level of motivation to reach mastery under this approach. Once a standards-based approach has been implemented for some time, analyzing the parents’ perspective may be helpful in understanding all views and opinions.

The findings of this study were specific to perceived levels of motivation to reach mastery; therefore, in the future, it is recommended that these findings be analyzed in conjunction with actual student achievement data. This would allow the researcher to determine the accuracy of the students’ and the teachers’ perceived view on motivation as it relates to achievement via raw student data. Simply because a standards-based approach increases perceived levels of motivation to reach mastery does not necessarily indicate that students are actually more successful in reaching success under this model. This would be a critical piece in determining the overall effectiveness of the initiative.

**Conclusion**

This single case study of a rural elementary school was conducted to ascertain the student’s perceived level of motivation to reach mastery on identified standards when a standards-based approach is utilized in the classroom as opposed to a traditional approach that distributes number and letter grades following assessment. This study relied heavily on
motivational theory including self-determination, self-regulation, and achievement-goal theory as the foundation for the conceptual framework that guided this research. Using quantitative and qualitative measures, this study found that under a standards-based approach, students were more motivated to reach mastery, were more self-aware of their academic strengths and weaknesses, and felt that the classroom environment was more student-centered than when a traditional approach was employed. Furthermore, teachers responsible for the implementation of a standards-based approach felt that their students were more motivated to achieve their goals, were more self-aware, were more supportive of each other’s learning, and that the classroom climate was more supportive overall.

As the school district in which the research site is located moves forward with the implementation of a standards-based approach to instruction, assessment, and reporting, this study will provide sound rationale for reform. This includes existing literature on the topic; the students’ and teachers’ voices on their feelings, perceptions, and needs; recommended next steps in the process; and suggested areas for further investigation.
REFERENCES


National Staff Development Council. (2009). *Professional learning in the learning profession: A status report on teacher development in the united states and abroad.* Stanford, CT:

Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S.


Appendix A

Student School Experience Questionnaire (SSEQ)

Purpose:

This survey will be used to help teachers, school counselors, and support staff understand your feelings toward your personal school experiences so that we can better support you and your needs. Please be honest and share comments if you would like to explain your answers further. Also, feel free to skip any question that you do not feel comfortable answering.

1. Grade ___________ School Year ___________

2. When I am at school, I feel safe.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

3. When I am at school, I am recognized for great work.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

4. I feel that students are treated fairly by their teachers.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

5. There are a lot of chances for me to talk to my teacher one-on-one about academics or other things.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

6. My teacher encourages me to try new things and explore new ideas.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

7. In my classroom I have a lot of chances to help decide things (for example: classroom rules, activities, ways to show what I have learned).
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

8. Adults in school have high expectations for student success.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

9. In my classroom, I feel that I have an understanding of what I am good at (strengths) and what I need to work on (weaknesses).
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

10. In my classroom I feel in control of my learning.
    - Strongly Disagree
    - Disagree
    - Neutral
    - Agree
    - Strongly Agree
11. I feel confident to keep trying even when the work gets challenging for me.

   Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

12. I feel that I am good at collaborating with other students on projects or in groups.

   Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

13. I’d rather work alone than in groups.

   Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

14. I try extra hard to reach academic goals.

   Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

15. I feel that my teachers understand what I need to learn even if it is different than my peers.

   Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

16. My teachers teach me to understand my own emotions.

   Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

17. My teachers teach me to work through my conflicts with peers.

   Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

18. In my school, I am provided with opportunities to be a leader.

   Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

19. The feedback I get from teachers (in my report card, notes on my work, or in conferences) helps me to improve my skills.

   Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

20. During academic times I feel excited and engaged to learn new things or reach my goals.

   Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

21. I believe that learning the information being taught is more important than my performance on a test.

   Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree
Appendix B
Recruitment Letter

April 2017

Dear Potential Study Participant:

As a doctoral student completing her dissertation study through the University of New England, I am inviting you to complete a survey to share your input on your current practices regarding the implementation of a standards-based approach to instruction, assessment, and reporting in your classroom. As a classroom teacher, you have significant experience and knowledge of working with the implementation of a traditional approach where students are assessed using number or letter grades, as well as a standards-based approach where students are assessed on their level of proficiency on a given standard. This study focuses primarily on how students’ level of motivation to reach mastery on a standard is impacted when a standards-based approach is implemented. I am seeking your perception on your students’ level of motivation and your thoughts and feelings regarding the implementation of such approach in general to assist the district in making decisions regarding this initiative. By completing this survey, which should take no longer than twenty minutes of your time, you are providing a valuable contribution to the potential reform of instructional practices within our school district.

By clicking the Survey Monkey link below, you will be directed to detailed information regarding your voluntary participation in this research study. If you choose to grant consent by clicking ‘Yes’ at the end of the Consent for Participation in Research document, you will then be directed to the online survey.

https://www.surveymonkey.com/r/PPCGJCG

If you have any questions or concerns regarding this study and your participation, you may contact me, the researcher, via e-mail at afrechette@une.edu or via my home phone personal line at (603) 986-6308. You also may contact Ella Benson, Faculty Advisor, University of New England, ebenson2@une.edu.

Thank you for your valuable insights and willingness to participate in this research study. Your contribution not only supports my dissertation study, but also future reforms our school district’s move towards a standards-based approach to instruction, assessment, and reporting.

Sincerely,

Aimee Frechette, Doctoral Student
University of New England’s Transformative Leadership Program
Appendix C
UNIVERSITY OF NEW ENGLAND
CONSENT FOR PARTICIPATION IN RESEARCH (document embedded in Survey Monkey link)

Project Title:
The Impact of a Standards-Based Approach to Grading and Reporting on Student Motivation and Self-Perceptions of Learning: A Case for the Implementation of Standards-Based Grading Practices

Principal Investigator(s): Aimee Frechette, Doctoral Student, University of New England, afrechette@une.edu. Ella Benson, Faculty Advisor, University of New England, ebenson2@une.edu.

Introduction:
Please read this form, you may also request that the form is read to you. The purpose of this form is to provide you with information about this research study, and if you choose to participate, document your decision.

You are encouraged to ask any questions that you may have about this study, now, during or after the project is complete. You can take as much time as you need to decide whether or not you want to participate. Your participation is voluntary.

Why is this study being done?
The proposed research is intended to answer the following questions: How does the implementation of a standards-based approach to instruction, assessment and reporting impact a student’s perception of their level of motivation to work toward mastery on an identified standard? Related research questions include:

- How well do students understand their personal strengths and weaknesses when presented with a standards-based approach to instruction versus a traditional model?
- How do teachers view a standards-based approach to instruction, assessment and reporting as it relates to student achievement?

The problem being studied here is the impact a standards-based approach to instruction, assessment, and reporting have on students’ perceptions of their skills and their motivation to master a given standard. This study will address the gap in existing research and strengthen the case for the implementation of a standards-based approach to instruction, assessment, and reporting in our school district. The findings will inform stakeholders in our district as we move forward with decisions associated with a standards-based initiative.

Who will be in this study?
You have been identified as a potential participant based on your teaching position at the school under study. As one of the four fifth and sixth grade teachers at this school, you have significant experience and knowledge about working under a traditional approach to instruction where students are assessed using number or letter grades, as well as under a standards-based approach where students are assessed on their level of proficiency on a given standard. This
study focuses primarily on how students’ level of motivation to reach mastery on a standard is impacted when a standards-based approach is implemented. Your thoughts and opinions on the implementation of a standards-based initiative as well as your perceptions of your students’ level of motivation using this approach is an essential component to the research. Your opinion is valued and will assist the district in decisions related to this initiative.

What will I be asked to do?

This study will be conducted over a one-month period of time using archival data from ten target items on the Student School Experiences Questionnaire (SSEQ, Appendix A) administered in January 2016 and January 2017 to all fifth and sixth grade students at the site, a total of 38 students. This case study will use quantitative measures to ascertain the students’ perspective on a standards-based approach to instruction as it relates to student motivation and self-awareness of skill acquisition.

Additionally, this study will use qualitative measures in the form of your responses to a brief, online survey using Survey Monkey regarding your experiences with implementing a standards-based approach in the classroom to provide supplementary anecdotal information to the school district under study. The survey should take no longer than 20 minutes of your time. All participation is completely voluntary and there will be no compensation offered for your input or your time. All identifiable personal information will be removed before aggregate survey data is analyzed and reported. Responses will be assigned labels to maintain your anonymity (i.e. Participant A, B, etc.). There will be no additional interaction that will take place within the school setting following your completion of the survey. The results of the research will be shared with you following the completion of the research.

What are the possible risks of taking part in this study?

There are no risks associated with participation in this study.

What are the possible benefits of taking part in this study?

There are no direct benefits to you for participating in this study. However, your thoughts and opinions may be a benefit to the school under study as well as district administration as they make decisions regarding the implementation of a standards-based initiative. In the future, you may benefit from the research findings and future decisions of the school district, in that you will be actively involved in the delivery of instructional models. You may also gain from the opportunity to learn from the experiences of fellow teachers regarding how they view a standards-based approach to instruction, assessment, and reporting.

What will it cost me?

You should not incur any costs associated with participation in this study.

How will my privacy be protected?

All identifiable personal information will be removed before aggregate survey data is analyzed and reported. Responses will be assigned labels to maintain your anonymity (i.e. Participant A, B, etc.). There will be no additional interaction that will take place within the school setting following your completion of the survey. You may choose to complete the survey
in a location that is private and convenient for you. The results of the research will be shared with you following the completion of the research.

How will my data be kept confidential?

The survey data will be transferred from the password-protected online Survey Monkey site to one password-protected personal home computer accessed only by the principal investigator, with a back-up hard-drive system on-site and off-site. Any identifiable personal information will be omitted from the dissertation report’s text. Results will be summarized based on the sample’s responses. Individual responses will be reported without your name or school. Identifying information will be removed from the investigator’s computer after the study’s completion and will not be accessible for future study uses. Please note that the Institutional Review Board may review the research records. A copy of your signed consent form will be maintained by the principal investigator for at least 3 years after the project is complete before it is destroyed. The consent forms will be stored in a secure location that only members of the research team will have access to and will not be affiliated with any data obtained during the project. The results of the research will be shared with you following the completion of the research.

What are my rights as a research participant?

Your participation is voluntary. Your decision to participate will have no impact on your current or future relations with the University or the school district. Your decision to participate will not impact your relationship with the researcher or your employer. You may skip or refuse to answer any question for any reason.

If you choose not to participate there is no penalty to you and you will not lose any benefits that you are otherwise entitled to receive. You are free to withdraw from this research study at any time, for any reason. If you choose to withdraw from the research there will be no penalty to you and you will not lose any benefits that you are otherwise entitled to receive.

What other options do I have?

You may choose not to participate.

Whom may I contact with questions?

The researcher conducting this study is Aimee Frechette, doctoral student, University of New England. For questions or more information concerning this research you may contact her at afrechette@une.edu or her faculty mentor, Ella Benson, at ebenson2@une.edu.

If you choose to participate in this research study and believe you may have suffered a research related injury, please contact Ella Benson, Faculty Mentor via email at ebenson2@une.edu or via phone 757.450.3628.

If you have any questions or concerns about your rights as a research subject, you may call Olgun Guvench, M.D. Ph.D., Chair of the UNE Institutional Review Board at (207) 221-4171 or irb@une.edu.

Will I receive a copy of this consent form?

Yes, you will be given a copy of this consent form.
PARTICIPANT’S STATEMENT
I understand the above description of this research and the risks and benefits associated with my participation as a research subject. I agree to take part in the research and do so voluntarily.

RESEARCHER’S STATEMENT
The participant named above had sufficient time to consider the information, had an opportunity to ask questions, and voluntarily agreed to be in this study.

Researcher’s signature:

Printed name: Aimee Frechette
Appendix D
Teacher Questionnaire (Administered through Survey Monkey link following consent)

School Year ____________________________ Grade Taught ____________________________

What is your experience with a traditional approach to instruction, assessment, and reporting? Please include descriptors and years of experience with a traditional model (A traditional approach is characterized by the practice of assigning an overall number or letter grade to a subject).

What is your experience with a standards-based approach to instruction, assessment, and reporting? Please include descriptors and years of experience with a standards-based approach (A standards-based approach is characterized as a system of instruction, assessment, grading, and reporting that is based on students demonstrating mastery in the knowledge and skills they are expected to learn on a given standard).

From your perspective, can you describe your students’ level of motivation to reach mastery on a given standard within a standards-based approach? How are you able to assess this within your classroom?

Are there behaviors that stand out or have students communicated their level of motivation to you in any way?

Can you describe your students’ level of self-awareness when presented a standards-based approach in comparison to a traditional model?

Can you give examples of a student-centered classroom? In your opinion, how student-centered is your classroom? Please explain with examples.

Can you identify successes in the implementation of a standards-based approach to instruction, assessment, and reporting? Explain.

Can you identify challenges in the implementation of a standards-based approach to instruction, assessment, and reporting? Explain.

If not already covered in previous responses, please explain your general feelings towards a standards-based approach to instruction, assessment, and reporting.

What additional professional development opportunities would you like to see provided by our school district?

Do you have any additional comments that may be helpful as we move forward with this initiative?
Should you be willing to participate in a follow-up interview if necessary to ensure the accurate interpretation of your responses, please provide contact information including phone number and email address below:

Should you be willing to participate in a follow-up interview if necessary to ensure the accurate interpretation of your responses, please provide potential days, times, and location that is convenient for you. The researcher will be in contact to schedule a follow-up interview if applicable.