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Standards-Based Reforms: Impact and Future

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STANDARDS-BASED REFORMS: IMPACT AND FUTURE

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Abstract

Standards-based reforms have brought about significant changes to the modern educational system. Standards-based reforms have been shown to have a positive impact on teachers' instruction by helping to focus teaching. Standards-based reforms have also been shown to increase fairness in the classroom by allowing teachers to only focus on student achievement. Additionally, standards-based reforms help to improve the accuracy of grades and student achievement. Also, standards-based reforms impact the curriculum and the assessment of students. The assessment and grading of students also is shifted to focus exclusively on student achievement under standards-based reforms. These reforms are not without challenges, as questions regarding how to hold every student to these standards and how to fairly assess students remain. The future of standards-based reform remains an area yet to be fully explored. However, there has been positive results shown as post-secondary institutions consider implementation of standards-based reforms. Finally, standards-based reforms have led to development of technologies to aid in the implementation of standards-based reforms. The current research shows that overall, standards-based grading can have a positive impact on the field of education.

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CHAPTER I: INTRODUCTION

The Context of Standards-Based Grading

The main idea in a standards-based grading system is that students are assessed or graded based only on the standards when learning has been completed. This means that the grades that students receive only reflects what the student can do and what the student has learned in relation to the standards. It also means giving feedback for formative assessment or practice and allowing for the majority of a student's final grade to be made up of summative assessments, given after the student has been given ample learning opportunities and feedback. Additionally, within a standards-based grading system, retesting, remediation, and relearning are very important. This supports the idea that students should only be graded on what they know and given more than one opportunity to prove that they have met the standards. As important as it is to understand what standards-based grading includes, it is also important to understand what it does not include. Standards-based grading does not include assessing non-academic aspects of a student. In a standards-based grading system, students are not assessed on their behavior, effort, class participation, or punctuality. Extra credit is also not given in a standards-based classroom. At its core, standards-based grading means that students are only assessed on the standards for that class.

Origins of the standards-based reform movement

The educational system is in constant change. This plays out through local, state, and national level initiatives. More recently, there has been a growing concern regarding the readiness of graduates of the education system who lack the preparation for college and careers. Because of this, 46 of the 50 states in the United States have adopted the Common

Core State Standards (Peters, Kruse, Buckmiller & Townsley, 2017). The creation of the Common Core State Standards emphasized specific learning goals, determined by each state, that students must meet. Standards are the learning objectives that students should know or be able to demonstrate. The idea of using standards-based grading is one of the most recent initiatives that has resulted in significant changes in the education system. The focus of standards-based reforms is that students would receive instruction to help them meet these standards, and that teachers would only assess students in relation to the standards.

Studies suggest that standards-based reforms are being implemented more frequently around the country as successes are reported. For example, students who had received instruction in a standards-based math class went on to receive higher scores on a standardized math test than their peers who had not received instruction in an standards-based math class (Peters et al., 2017). However, questions remain related to the implementation of standards-based grading systems. For example, colleges and universities require a singular grade in the traditional grading scale, A, B, C, D, or F, given for a course or class. The calculation of a score on each standard within a course is not accepted in the admissions process of these institutions (Hooper & Cowell, 2014), thus there needs to be reconciliation between the standards-based model and traditional model in some instances. Other issues, such no longer being able to penalize a student's grade because the student misbehaves in class, raise questions about how students can be held accountable for negative behaviors.

Perspectives on Standards-Based Grading

Presently, there are two viewpoints that dominate the topic of standards-based grading. Those who are in support of standards-based grading and those who advocate for a more

traditional grading system. In general, those who support standards-based grading argue that grades should only show and measure student achievement: what students know and are able to do in relation to the standards.

Those who advocate for traditional grading systems over standards-based grading typically support the inclusion of non-academic student behaviors, such as lowering a grade on an assignment because it was turned in late, lowering a student's grade because of disruptive classroom behavior, giving a student participation points for always being on time to class, or other non-academic factors in calculating grades.

Theoretical Framework

In order to understand standards-based reforms, there are several different educational theories that one should be familiar with. One theory is backward design. This is essentially the idea that planning instruction should always begin by considering what the goal is for a lesson, assessment, unit, or instruction. The goal should then inform instruction. The goal of each lesson, unit, or assessment should always be explicitly identified to students. These goals should be created using standards.

Another theory that must be understood is that grades should be a meaningful and accurate communication of student learning and achievement. One of the basic tenets of a standards-based grading system is that student grades are determined only by student achievement. Grades should only reflect what a student knows or can do in relation to the standards. This takes away discretionary impacts to a student's grade, such as lowering grades for poor behavior, turning in work late, or tardiness.

Rationale

The reason that standards-based grading is an important topic of study is that it relates to multiple current issues occurring in the education system. The pressing need for students to be prepared and have a basic set of skills and knowledge to be ready to enter the 21st century is one of the reasons for the implementation of standards-based reforms, with the idea that there are certain standards that all students must meet. Additionally, questions regarding the fairness and equity of education have emerged as the country grapples with the achievement gap and the struggle to grant all students a fair and equal chance at a high-quality education. Standards-based grading is considered by some to be one of the ways to ensure this occurs.

Definition of Terms

Standards-based reform: the process of changing from traditional grading based on both academic and non-academic factors to only student achievement related to what students know and can do in relation to the objectives.

Formative Assessment: the work completed by students to measure their progress regarding the standards. In a standards-based grading system, formative assessment is ungraded (or weighted less than summative assessment) with the idea that students should not be penalized during the process of learning something. Students receive feedback on formative assessment to help them understand their own learning. Formative assessment is done during the learning to prepare students for the summative assessment.

Summative assessment: the evaluation of what students know or what skills they can demonstrate in relation to the standards that occurs after students have completed the formative assessment at the end of learning. Summative assessments are varied and can occur in different forms.

Traditional Grading system: grading scale based on 0-100%, where students are given an overall grade based on what the instructor believes should be assessed. This is usually given as a single letter grade (typically A, B, C, D, or F) at the conclusion of a class.

Research Focus

There are many areas of educational reform that can be examined. The focus of this research was centered around the topics related to standards-based grading because it is one of the most widespread educational reform movements. Additionally, it is a reform that is still in the process of being implemented and considered, so the body of research focused on standards-based reforms is relatively new and continues to grow. In order to do more narrow research, the areas of focus were narrowed to focus on those who are impacted by standards-based reforms, as well as the processes and future impacts standards-based reforms may have.

This study will explore the questions: What impact does the implementation of standards-based reforms have on students? What impact does the implementation of an standards-based reforms have on teachers? What are the possible drawbacks of implementing standards-based reforms? What is the future of the standards-based reform movement?

CHAPTER II: LITERATURE REVIEW

Literature Search Procedures

Chapter two reviews the published literature on standards-based grading. In order to locate resources for this thesis, Academic Search Premier, Google Scholar, Eric, EBSCO MegaFile, PsycInfo, and Educational Journals were used. The search years were limited from 1995-2019. The list was narrowed by selecting only published studies that were peer-reviewed and focused on or related to standards-based grading or grading practices. Key search terms used in the included "standards-based grading," "standards-based reforms," "grading reforms," "traditional grading," "student motivation," "proficient," "proficiency," "standards-based grading implementation," standards-based grading impact," and "standards-based grading effects."

Impacts of Standards-based Grading on Students

Large-scale reform efforts, such as standards-based grading, have a significant and deep reaching impact on students when properly implemented. Because of the large shift involved in the educational paradigms, standards-based reforms can have a significant impact on student motivation and attitudes. Another result of standards-based reforms is the change in student involvement. Finally, as with many reforms, there is a change in student performance.

Standards-Based Reform's Impact on Student Motivation and Attitude

One of the continuously evaluated ideas within education is student motivation. As initiatives and reforms are implemented, one of the important factors to examine is the impact that these reforms have on student motivation. Meyer, McClure, Walkey, Weir, and McKenzie (2009) wanted to investigate how self-reported student motivation was impacted in a district

that had implemented standards-based reference assessments, known as the National Certificate of Educational Achievement (NCEA). They surveyed 3,569 students in their final years of high school across a wide geographic area in New Zealand, including urban, suburban, and rural schools of varying sizes, attended by individuals with a variety of income levels. The goal of the study was to clarify areas of motivation identified by students as referenced by a standards-based series of assessments and to identify how those variables impacted student achievement. Students were assessed with three questions and responded using a Likert-type scale with 4 points.

Meyer et al. (2009) found that students preferred to be assessed multiple times and be provided feedback throughout the length of a course instead of being given a final assessment that occurred at the ending of course. The survey found that students who selected their effort levels as “doing my best” correlated to higher grade averages and higher achievement, as well as higher scores on the NCEA. The students who identified this way also reported higher motivation. There were fewer students who identified “doing enough to pass” in the survey results than those who had selected “doing my best.”

The relationship between students who indicated they were doing just enough to pass correlated strongly with the group of students who had the lowest achievement (Meyer et al., 2009). The researchers concluded that specific situational support for these students for the particular standards that they struggle with supports the idea of continuing the system of standardized-grading reform and assessment in order to offer more targeted intervention to help this group of students, instead of creating general interventions that may not pinpoint a student’s areas of specific need.

Knight and Cooper (2019) also set out to investigate the relationships between teaching, grading practices, and student behavior. Seven teachers, who had been from both urban and rural settings were surveyed three times throughout one academic year. These teachers were from schools that had been using standards-based grading systems for at least one year. Each teacher was interviewed for 60-90 minutes, with a different focus for each of the three interviews. The first interview focused on the teacher's own experience in school as both a student and a teacher. The second interview centered around planning, instruction, assessment, and environmental changes since implementing standards-based reforms. The final interview focused on reflection on standards-based grading processes, including the benefits, challenges, and perceptions of how students' characteristics and behaviors had changed since the implementation. These teachers had between 1-20 years of prior teaching experience and taught a variety of classes in five different subject areas.

Through their study, Knight and Cooper (2019) found that standards-based reforms created changes in how students viewed learning in the perception of the teachers interviewed. Through implementation of standards-based reforms, students felt more comfortable with making mistakes because of the intellectual safety net provided in these reforms. Higher achieving students were found to dislike standards-based reforms because they removed the more traditional methods of grading, which allowed them to be compared to their peers. However, students in special education seemed to benefit most from classrooms where standards-based reforms were implemented, as their problem-solving skills increased.

The researchers also found that there were more feelings of classroom community because there was a decrease in competition due to the absence of student comparisons.

Student attitudes also shifted towards a growth mindset when in a standards-based classroom. This occurs because there is less of a focus on grading and more of a focus on learning. Students were more open to taking reasonable academic risks and more open to making errors, knowing that making mistakes would not jeopardize their future in the class. Though these changes are positive, it is important to note that as standards-based grading was implemented, there was an initial decrease in student credibility, as students were no longer penalized or rewarded for certain behaviors such as attendance, late assignments, or participation. However, as students began to see that standards-based grading gave them more ownership over their learning, improvements on such behavior did occur. The most common issue or behavior that teachers observed was the student struggle with timeliness and punctuality (Knight & Cooper, 2019).

Teachers and administrators are often the focus of studies regarding educational reforms. Many times, students are consulted last or not at all in educational reforms, despite being the group who is impacted most deeply. There is a lack of study of student voice and opinions on the topic of standards-based grading. It was for this reason that Peters, Kruse, Buckmiller, and Townsley (2017) decided to focus on student voices and perspectives. They set out to attempt to understand the difficulties that students would face during the implementation of a standards-based grading system. The high school implementing the system required teachers to implement a standards-based grading system using five guidelines: anything entered into the gradebook must be a standard for the course; no extra credit; students will be given multiple attempts to demonstrate learning; teachers will determine grades by taking into account multiple pieces of data and provide evidence to support their determination; and students will be given multiple attempts to practice standards through work

at home and in class, with feedback given regularly, but with practice work not included as part of final grades.

All 478 students at the surveyed high school were given the opportunity to participate in the study (Peters et al., 2017). Students were given two surveys. They were given one survey at the beginning of the school year, which resulted in 376 responses. Then they were given the same survey at the end of the school year, which resulted in 230 responses. The survey involved Likert-ranking styles of questions, as well as open-ended questions that focused on standards-based grading.

The data in the study revealed that students generally felt dissatisfied with at least one aspect of the standards-based grading system (Peters et al., 2017). This dissatisfaction could be sorted into five different themes. One of the themes was concern over implementation. This included student frustration that seemed to indicate vast areas of application inconsistency, with some teachers implementing none, some, or all five requirements throughout the year. Interestingly, the survey found that students like the ideas behind standards-based grading but were frustrated by the inconsistent application. Another concern voiced by students concerned the impact that standards-based grading would have on grades. More specifically, many students identified that practice work no longer counting towards grades made it more difficult to receive an “A” in classes, though many students acknowledged that the idea of doing homework for grade provided a boost or a “cushion.” Students also showed frustration regarding reassessment and how scores would be replaced even if reassessment scores were lower than initial scores. Other students expressed worry over the impact that standards-based grading had on their long-term goals and more specifically, the difference in college versus high

school classes. Certain students who were taking both college classes in a post-secondary program and classes at the high school remarked how their standards-based high school courses were nothing like their college courses, especially in regards to reassessment, and that standards-based grading was setting them up for failure because none of their college classes offered reassessment. Students addressed concerns regarding social issues that occurred because of standards-based grading. This included student concerns over the perceptions of peers if they needed to reassess, which could make them appear less intelligent and even impact their reputation. Finally, students voiced frustration regarding motivation and learning. More specifically, students felt that the abuse of assessment (how some students now attempted less work and reassessed until they passed) devalued their punctuality and good work habits.

Peters et al. (2017) surmised that the success of standards-based grading systems and their implementation may be linked to several factors. They determined that the communication processes before, during, and after plays a large part in the success of the system, as well as how people impacted by the system feel about standards-based grading. Additionally, implementation may be more successful if started at an earlier age and grade, which would create more uniformity in grading for students. The authors recognized that the data gathered lacked racial, and possibly economic diversity. They also noted that the administration of the school had extensive experience with standards-based grading systems before the implementation process began. However, they still concluded that the voice and opinions of students play a key role in the successful implementation of the standards-based grading system.

Standards-Based Grading Impact on Student Involvement

Standards-based grading will have a multifaceted impact on students. One aspect of standards-based reform that would change student's relationship with assessments would the extent to which students are involved and engaged. Melograno (2007) attempted to use a standards-based approach to teach physical education. He created a series of recommendations regarding student involvement in the standards-based grading process. Over the length of a single semester, Melograno changed his grading system to be completely standards-based. He found that student involvement in assessment itself was important to engagement. Students should be involved in self-assessment in relation to the standards. They also should be engaged in record-keeping and communication as well. Additionally, it was discovered that standards-based reforms should allow students to track their own progress regarding the standards they are being assessed. Students should also be given choices of how to show their achievement and learning (Knight & Cooper, 2019; Melograno, 2007).

Impact of Standards-Based Grading on Student Performance

Many of the reforms in standards-based grading involve shifts away from the traditional systems that have dominated education in the previous decades. These changes impact student performance in the classroom. Bouck, Kulkami, and Johnson (2010) wanted to gain a greater understanding of how a standards-based grading system would impact students with disabilities. They also wanted to gain a greater understanding of how disability, curriculum type (standards-based versus traditional), and assessment type (multiple choice versus open-ended) impacted student performance on assessments that were aligned to state standards.

Bouck et al. (2010) studied five school districts of sixth and seventh grade math students in one midwestern state in America. Three of the schools had been using standards-based grading from a range of six and twelve years, and two of the schools were using the traditional grading approach with no history of standards-based curriculum. The study was comprised of 146 sixth grade students. Twenty-eight of them had disabilities. Sixty-five sixth grade students received standards-based instruction. Of those 65 students, 13 were disabled. Eighty-one sixth grade students received standards-based instruction. Of those 81 students, 15 were disabled.

The seventh-grade group consisted of 149 students (Bouck et al., 2010). Of this group, 79 students received traditional curriculum. Ten of those 79 were disabled. Seventy students received standards-based curriculum. Twelve of these 79 were disabled. The disabilities included reading disabilities, speech-language disabilities, attention-deficit hyperactivity disorder, autism, and auditory disabilities. Students with mathematic learning disabilities were taught in a separate class created specifically for those students.

Bouck et al. (2010) found that the most significant factors that impacted student scores were the time of assessment during the school day, type of exam (multiple-choice or open-ended), and ability status. Curriculum had the smallest impact on student performance. However, students who were instructed using traditional curriculum, regardless of disability, were found to answer more questions correctly on a standardized multiple-choice test. Students, both disabled and not, who received the standards-based curriculum, answered more questions correctly on open-ended assessment. The lack of a clear difference in performance of disabled students based on the curriculum they were given refutes the idea that disabled students receive more negative consequences in a standards-based curriculum than in a

traditional one. Teachers who were interviewed as part of the study indicated that the students with disabilities work harder in a standards-based curriculum due to the amount of reading they are required to engage in to complete the open-ended type of assessments and problem solving. The study was not able to conclude that students with disabilities were vastly better off with one curriculum or another.

Additionally, students, both disabled and not, in both curriculums, were found to struggle more with word problems and the open-ended questions (Bouck et al., 2010). However, it is worth mentioning that the students who received standards-based instruction answered more open-ended questions correctly than those receiving traditional curriculum. The correlation may exist because students engaged in a standards-based curriculum spend greater amounts of time on problem solving, and more specifically, real-world type applications rather focusing more exclusively on computation alone, as with the traditional curriculum. These computational type problems were more like the questions found on the multiple-choice assessments, which may explain why students who received traditional curriculum answered more of the multiple-choice questions correctly. The concern raised here is that currently, the great majority of high-stakes tests are multiple-choice, which may put certain students who receive a standards-based curriculum at a disadvantage in high-stakes testing situations.

Lehman, De Jong, and Baron (2018) also wanted to explore the difference between grades in a traditional classroom and a standards-based classroom. To compare traditional versus standards-based classrooms, they used scores on a scholastic math inventory (SMI) assessment and the final grades of students. The SMI, which meets the highest marks for validity and reliability through the National Center for Response to Instruction, is a computer-

based test that assesses readiness towards algebra. The authors Investigated four middle schools in midwestern America that utilized traditional grading and one middle school that implemented standards-based grading. The school using standards-based grading was a title I school of 377 students, with minorities making up 79 percent of the population and 98 percent receiving free/reduced lunch. The four schools using traditional grading totaled 1,892 students and were less diverse and had fewer students receiving free/reduced lunch.

Lehman et al. (2018) found that the end of year letter grades and the scores on the SMI indicated a moderate correlative relationship in 6th, 7th, and 8th grade students being taught in traditional schools. When examining grade seven in the school using standards-based grading, the correlation between final grades and SMI score was moderate, but still slightly higher than in the schools using traditional grading. However, when examining grades six and eight in schools using standards-based grading, they found the correlation between final grades in the school using standards-based grading and the SMI to be stronger than the school using traditional grading. The study showed that standards-based grades correlated more strongly to the SMI score than did grades in a traditional system.

Shoen, Cebulla, Finn, and Fi (2003) wanted to clarify which teacher variables impacted student's achievement when changing to a standards-based grading system and curriculum. As other studies had explicitly compared traditional versus standards-based curriculums, they wanted to explicitly examine the interaction with the curriculum and how the teachers and students interacted with the curriculum. The authors investigated teachers' practices, preparation, and concerns as the district began to use a standards-based mathematics

curriculum. The study focused on 40 teachers in 26 different schools who taught 1,466 students.

Shoen et al. (2003) looked at student scores on the Iowa Test of Educational Development (ITED) to measure achievement. The ITED is a standardized assessment that measures students "interpretation of numerical data and charts or graphs that represent information related to business, social and political issues, medicine, and science. The ITED correlates highly with other well-known measures of mathematical achievement" (Shoen et al., 2007, p. 235). Scores from the beginning of the year were examined, and scores at the end of the year were examined after students were to have received one academic year of standards-based curriculum instruction. Class observations were also made, along with surveys given to teachers regarding concerns that they had about implementing standards-based grading.

Shoen et al. (2007) found that demographics did not seem to have an impact on student achievement. However, they did find that student achievement was higher for students who were taught by teachers who participated in a two-week workshop prior to the start of school as opposed to those who were taught by a teacher who did not attend the workshop. Also indicating greater student achievement were teachers who collaborated to implement and design new lessons for the standards-based curriculum. Observation of teachers using the standards-based curriculum found that student achievement in classroom activity was also higher than in classrooms not using standards-based curriculum. The study concluded that the highest indicator for student achievement hinged on the teacher completion of the standards-based training workshop—30 percent of the variation of achievement of students were seen by this one variable. This study indicates that standards-based curriculum, when used concurrently

with meaningful time dedicated to professional development and collaboration, can result in higher student achievement.

Pollio and Hochbein (2015) also wanted to investigate the scores on a standardized assessment and the overall grades of students, with part of the study focusing on minority and disadvantaged students, both in traditional grading systems and those in standards-based grading systems. They examined two groups, across 11 high schools in Kentucky who had completed the Algebra 2 course with the Kentucky Core Content Test (KCCT), a state-standardized math test required for 11th grade students. The entire group studied consisted 2,419 students. Sixty-two percent of the entire group received free and reduced lunch. Of the 2,419 students, 51 percent were white students, 37 percent were black students, and 12 percent of students were from racial background other than those listed. The first group, with 1,163 11th grade students, was taught using a traditional grading system. The second group, with 1,256 11th grade students, received standards-based instruction, with an emphasis on only grading student achievement as well as remediation and reassessment for students who did not show proficiency.

Pollio and Hochbein (2015) found that 46 percent of students in the traditional grading group received a final course grade of an “A” or “B.” However, only 26 percent received a grade of “A” or “B” on the KCCT. Forty percent of students in the group receiving standards-based instruction received an overall course grade of “A” or “B.” Forty-five percent of those in the standards-based grading group received a score of “A” or “B” on the KCCT. All groups, including minority groups, showed an increase in the correlation between their final course grade and their KCCT score. This is significant, as the standards-based grading system weakened the belief

that those in lower socioeconomic classes also achieve lower academically. This indicates that teachers evaluate minority and disadvantaged students less on achievement and more on non-academic factors. It also shows that even high achieving students benefit from standards-based grading, as the study also found that students who received high course grades had even higher KCCT scores.

Though limited to one subject with different sized test groups of varying diversity and socioeconomic status, the correlations should provide some encouragement to those considering the implementation of standards-based grading. Lehman et al. (2018) and Pollio and Hochbein (2015) aid in the understanding that standards-based grades are less subjective than grades in a traditional learning system, as the standards-based systems separates the academic and non-academic factors from grading. For example, a grade of "C" in a school or class using a traditional grading system may be completely different from teacher to teacher because of the subjectivity of this system, which shows ineffective communication. A standards-based system will more accurately inform shareholders of the academic progress and achievement of the students than a traditional system because a standards-based grading system is less subjective. Accurate communication has a significant impact on the future of students, such as the choice to take advanced placement classes or the requirement to take remedial classes. Ultimately, the idea of replacing traditional mathematical instruction with standards-based instruction is supported by the conclusions of the studies (Lehman et al., 2018; Pollio & Hochbein, 2015).

Ussery (2014) also wanted to investigate the relationship between final grades and assessment. The focus of this study was on students' final grades in classrooms using only

traditional grading methods. Studied were 48 randomly selected students from 7th and 8th grade classes in a Missouri school district. This studied group was comprised of 46 Caucasian and 2 Asian able-bodied students of varying economic backgrounds. The focus was on the student's final semester grades in their mathematics class and their scores on the Missouri Assessment Program (MAP), a test given at the conclusion of student's math courses from grades 3 to 8.

Final grades were broken down by percentage: 50 percent of students earned a B (80-89 percent), 20 percent of students earned a C (70-79 percent), 20 percent of students earned an A (90-100 percent), and only 6 percent earned a D (60-69 percent). For this study, a grade of D or above was considered proficient (Ussery, 2014). Therefore, 96 percent of students were deemed proficient according to their final grades. This was starkly contrasted by the student scores on the MAP test. These results found that only 60 percent of students were judged as proficient or more than proficient; the remaining 40 percent did not meet the standards. The study concluded that this 36 percent difference in proficiency shows that students should have been given lower final grades in their classrooms because of the differences shown between final grades and the MAP scores (Ussery, 2014).

This lack of accuracy and grading clarity in traditional grading systems is problematic as it shows that traditional grading does not accurately communicate what students know and are able to do (Lehman et al., 2018; Pollio & Hochbein, 2015; Ussery, 2014). Traditional grading has shown itself to be very subjective and often inaccurate and unreliable because of this subjectivity involving nonacademic factors and grade inflation.

Townsley and Vargas (2018) wanted to examine the differences in grade point averages (GPA) in students taught in schools using traditional grading and students taught in schools using standards-based grading. They also sought to investigate the correlation, if any, to students taught using standards-based grading and traditional grading, their GPA, and their scores on the American College Test (ACT). In their study, they examined 327 students across two midwestern high schools with less than 15 percent of students receiving free or reduced lunch and nine percent ethnic diversity. One school had been using standards-based grading for two years, and the other used traditional grading. They received information regarding every student's gender, GPA, grade for each mathematics and English course taken, ACT composite score, and ACT mathematics and English subtest scores.

Some of the results showed patterns regarding comparisons of students in standards-based grading versus traditional grading situations (Bouck et al., 2010; Townsley & Vargas, 2018). Schools with different grading practices did not show significant differences in GPA in Math and English courses. Additionally, schools with differing grading practices did not show a great difference between the cumulative GPA of the students from each school. Studies seemed to indicate that the students adjust to whatever system of grading is used, whether traditional or standards based.

Townsley and Vargas (2018) did reveal differences in the performance on ACT scores from each of the two schools. On average, students who were taught in the school using traditional grading scored higher on the ACT than students who were taught in a standards-based school. The authors hypothesized that this could be because of "Pavlovian Conditioning," in that students in a setting using traditional grading view the ACT test as a chance to produce a

positive result and/or avoid a negative consequence. They also added that students taught standards-based grading systems expect to have easy access to multiple opportunities to both relearn material if needed and to reassess if the initial attempt at assessment goes poorly. The ACT is a one-shot type of assessment, at odds with standards-based grading. However, further study could be warranted given the fact that students do have the option to retake the ACT at a later time, so a longer range study regarding all ACT results from students from both schools may produce a more accurate understanding if the standards-based mindset of reassessment permeated into the students willingness to retake the ACT in order to receive a higher score.

One of the most studied parts of education is the achievement of students in private schools versus that of students in public schools. As standards-based reforms have become implemented in more school districts, Carbonaro and Covay (2010) investigated the achievement of private and public-school mathematic students in this age of standards-based reform. The study investigated both secular and religious private schools and public schools in order to understand the sector differences. Also investigated were the level of mathematical skills being taught and course patterns of students. The data used was from the Educational Longitudinal Study, which was a sampling of students in grade 10 surveyed in 2002 and again in grade 12 in 2004. Questionnaires were given to students, administrators, parents, mathematics teachers, and librarians.

Carbonaro and Covay (2010) found that in the present age of standards-based reforms, private school students outgained public school students in mathematics from grade 10 to 12. Additionally, public school students took fewer mathematics courses than private school students.

> "Overall, the analysis of students Proficiency in math indicate that private school gains and achievement are largest for more advanced skills… this pattern may be well driven by the standards-based reforms in the public sector. Initiatives to increase the number of credits required for graduation along with the implementation of high school graduation exams may have directed more resources toward teaching basic math skills and minimize the gap with private schools for low-level skills" (Carbonaro & Covay, 2010, p. 171).

The study concluded that years of standards-based reform had not closed the gap regarding mathematical achievement between public and private schools, but that in the era of standards-based reforms, the differences in achievement between public and private school students has decreased. The study recognized that a selection bias exists between public and private schools and that there are different demographics of students being served in public schools and private schools. Finally, it revealed that the students in the lower half of the achievement distribution had made gains since the implementation of standards-based reforms when compared to previous studies of achievement.

Impacts of Standards-based reforms on Teachers and Administrators

The impact of the implementation of standards-based grading on teachers and administrators is extensive. This is because it involves reshaping paradigms regarding education. It will impact teacher instructional techniques, content delivery, and administration of curriculum. It will also impact assessment and feedback practices. Finally, it will impact grades and their communication.

Impact of Standards-Based Grading on Instruction

As standards-based reforms continue to be implemented, it has become evident that the instruction given by teachers must also be rethought. Desimone (2013) set out to investigate the responses that teachers and administrators would have to such reforms in relation to the instruction of mathematics. She conducted interviews from 32 schools across 10 districts in five different states. This survey included interviews with 60 math teachers, 32 principals, 13 district level administrators, and seven state officials.

Desimone (2013) found that standards-based grading caused more focus on struggling learners. After the implementation of standards-based reform, teachers began to focus more attention on all their students as opposed to only certain student populations or groups. This focus on all learners then fed into the expectations that teachers and administrators had for their students, which became higher for all students because of the reforms. The idea that all students should be held to the standards regardless of their background forced administrators and teachers to examine their techniques and intervention systems, resulting in the creation of more targeted and effective student interventions meant to help students who were not meeting the standards. In some cases, these reforms resulted in reinvestment in school funding to provide support for said intervention programs in order to close these gaps in achieving the standards.

The implementation of standards-based grading reforms also created extensive curriculum changes in order to meet standardized test goals (Desimone, 2013; Menken, Hudson, & Leung, 2014). Though there was concern that this would create an environment where “teaching to the test” would become the norm, it also caused the curriculum and instruction to become more focused. There should be a limited number of standards that are

assessed through a class. Those who make decisions regarding which standards should apply in each class should be thoughtful in this process, as the number of standards can become too specific and numerous when attempting to be thorough. There must be a balance that exists between standards being too specific and too broad, while focusing on keeping the standards relevant, realistic, achievable, and timely.

One reason for this was because teachers and administrators were able to view improvements of all students, as opposed to just certain groups of students, which helped in separating student backgrounds such as race, class, gender, or socioeconomic status from their own expectations or biases related to outcomes and achievement (Desimone, 2013). Teachers also indicated that the publication of test scores as well as the emphasis on a more targeted and narrower curriculum instilled a sense of accountability to make sure that they were covering essential curriculum that had not been present in other reforms. Teachers also reported that the standards-based curriculum reforms created more rigorous learning opportunities for all students than had previously existed. Standards-based reforms also resulted in more collaboration than had previously existed. Teachers from multiple grade levels in the mathematics content area began to collaborate more. The results of the standardized test scores allowed teachers to see data regarding student achievement in order to inform curriculum and instruction and create a curriculum that places emphasis on building on one another's teaching as students progressed through their educational journey as opposed to being uninformed regarding what students were learning at different grade levels. Nearly all respondents in the study reported that they felt more accountable for student learning under standards-based grading reforms.

Standards-based reforms also resulted in changes to teacher instruction regarding classroom management and behavior (Knight & Cooper, 2019). As non-academic factors are no longer allowed to impact a student's grade in class, standards-based reforms also resulted in teachers taking a more direct approach to teaching and explaining desirable classroom behaviors. This caused teachers to spend more time explaining the rationale of having desirable behaviors and how certain negative behaviors can create barriers to academic success.

Barlow (2012) also wanted to gain a greater understanding of how standards-based reforms would impact teachers. She investigated how viewing standards-based instruction could influence a teacher. She also wanted to understand what supports are needed for teachers in order to make the transition from an observer of standards-based grading to someone who implements standards-based grading in their own practice and classroom. In order to do this, she placed herself within a school in the Southeastern United States and essentially stepped into the role of a mathematics teacher at an elementary school. The teacher, Mrs. Mitchell (pseudonym) selected was a 40-year-old African American female with ten years of teaching experience, but in the second year of teaching at the school she was currently at, volunteered to be part of the candidate pool. Mrs. Mitchell was interviewed and surveyed to understand her beliefs regarding standards-based grading. Then, Mrs. Mitchell observed the professor modeling standards-based instruction. Mrs. Mitchell then implemented the standards-based instruction that she saw being modeled while having the professor observe her and take field notes. Finally, Mrs. Mitchell was interviewed and surveyed after attempting the implementation of standards-based grading herself.

The results of the first survey and interview given to Mrs. Mitchell explained how she felt about several different mathematic topics (Barlow, 2012). The survey was written in a way to reflect standards-based ideas of instruction in mathematics class and student learning. On her initial survey, before beginning the observation of the professor modeling, Mrs. Mitchell did not show proof of belief regarding the interconnectedness of mathematics. She did show proof regarding learning and knowing mathematics but did not provide any evidence that these beliefs supported student learning and engaging in mathematics. After this interview and survey, Mrs. Mitchell then observed the modeling of standards-based instruction in her mathematics class for one school year.

After observing the modeling of the professor and attempting to implement standards-based instruction herself, Mrs. Mitchell was surveyed again (Barlow, 2012). In the post-survey, Mrs. Mitchell provided extensive evidence of holding all beliefs on the survey, indicating a significant shift in Mrs. Mitchell's beliefs regarding standards-based instruction and student learning. For example, in the pre-survey, Mrs. Mitchell identified that she believed students could not solve problems if they had not been given proper procedures to do so. After the modeling and implementation process, she indicated that her belief regarding student's problem-solving had completely changed to allow for students to attempt to solve problems more independently. Mrs. Mitchell observed positive changes in student attitudes and confidence, as students shifted to believing they could solve problems more independently, which also caused a shift in her beliefs.

In all, the most common feature that allowed for the shift in beliefs for Mrs. Mitchell was time (Barlow, 2012). Time was given for her to understand her own beliefs, then to observe

someone modeling a different type of instruction antithetical to her own. After taking time to observe and reflect on said instruction, Mrs. Mitchell was given time to practice standards-based instruction herself. During this period, she was also given time to ask questions to the professor and receive feedback and advice. Though only one teacher teaching mathematics was examined in the study, and the study is not necessarily realistic in its approach of giving a teacher an entire academic year to observe standards-based implementation, this study does reveal several significant findings. If those in leadership desire a significant shift in the education system, such as standards-based reform, giving teachers the opportunity to understand their own beliefs, observe others and learn from experts modeling the reform, and then allowing the teachers time to implement their own changes with the opportunity to receive feedback and assistance, the processes shown in this study should be considered.

As standards-based reforms are implemented in more and more classrooms, impacts will be felt in a variety of areas. One such area is the preparation for teachers. Leko, Brownell, Sindelar, and Kiely (2015) highlighted such changes as they considered the future preparation of teachers entering the field of special education. As professors at universities in various teacher preparation programs across America, they are aware of the implementation of things such as the common core state standards (CCSS) and the impact they will have on special education instruction.

The implementation of CCSS and the drive for all students to be ready to compete in a globalized world increases the need for special education teachers to be well-versed in standards that they will be instructing or helping other general education teachers instruct (Leko et al., 2015). This means that collaboration with other teachers, both in special education

and general education, must be more focused than ever before. It should center around collecting the data based on assessment of standards, planning instruction, and if needed, intervention, based on the data, tracking student responses to intervention and instruction, and then implementing changes based on student responses. Utilizing standards-based reforms will allow for improvements in communication with students and other shareholders such as parents, guardians, or counselors regarding the academic achievement of students. The standards-based reform movement dictates the necessity in the changes in education in order to meet the higher expectations for students, including those with disabilities.

Impact of Standards-Based Grading on Assessment. The use of assessments by teachers in the era of standards-based reforms is significantly different than in a traditional grading system. Melograno (2007) explained that assessment must meet different requirements in order to be used in a standards-based grading system. One requirement is that all assessments should have a clear purpose. There should be a clear understanding of the reason the assessment is being conducted and how the results will be used. It should also be noted that assessments should fit in with a larger plan regarding the class as a whole and should fit the class as it progresses. Another requirement is that all assessments should have clear targets that are clearly connected to the standards. Students should know exactly what is being measured on all assessments. The assessments also being used should be tailored to the alignment of related classes as well, building on previous standards if appropriate. An additional requirement is the assessment design should also be sound, given what is being measured. Essentially, teachers must evaluate their assessments to be sure the method of assessment does not prevent the student from showing what they know or can do. Standards should be

broken into performance standards, where students can show that they can do something, and content standards, where students show what they know. Finally, the results of assessments should be communicated in a way that is friendly to students. The language should be student friendly in order to allow students to track their own learning and progress. Assessments also can involve more student choice in that the best way for students to communicate their learning may be for the student to pick the vehicle or way in which to do so. All of these put together make up what is known as "assessment literacy" (Knight & Cooper, 2019; Melograno, 2007; Menken et al., 2014).

Menken et al. (2014) came to similar conclusions in their review of assessment from the perspectives of teachers of English as a second language. In their symposium, they concluded that standards-based assessment should be consistently reevaluated. This includes making sure that the assessments are focusing on the knowledge and/or skills that they originally set out to assess. Additionally, the method of assessment should also be considered, and consideration should be made as to what behaviors, constructs, or products should reveal learning.

Impact of Standards-Based Reforms on the Grading Process

Reforms being implemented based around the standards-based grading have elicited a variety of responses from teachers. Tierney, Simon, and Charland (2011) studied how teacher's interpretations of standards-based reforms impact how they grade students. Surveyed were 77 tenth grade mathematics teachers with 1-31 years of experienced across school districts in Ontario, Canada. Standards-based reforms had begun to be implemented starting in 2001. These teachers were given a 47-question survey, which included a variety of response options,

such as Likert scales, checklist, and open-ended responses relating to grading practices and their awareness and use of grading principles and policies.

In terms of grading principles, respondents in the survey indicated that fair assessments, as well as considering the most recent evidence of learning to calculate grades, were significant (Tierney et al., 2011). However, it should be noted that there was a clear uncertainty that existed between grading policies and grading principals, which was seen in how they responded to questions regarding these two items in the survey. The survey indicated teachers agreed with statements regarding students receiving feedback for each standard they were assessed on, but that other factors, such as type of class, individual improvement, and the comparison/ranking of students for college admissions may have influenced their grading as well.

Cox (2011) set out to investigate a district engaged in grading reform that was directed at four specific grading processes related to standards-based grading: consistent grading in courses (making sure each course defined "what counts" towards a final grade), the elimination of the zero on a 100-point grading scale, allowing reassessment, and acceptance of late work without penalty. The purpose of the study was to learn more about the grading practices of individual teachers and to gain insight into their thoughts and concerns regarding these four reforms. This investigation was done through a series of interviews with two groups of high school teachers across multiple subject areas in a single school district with a high Hispanic population, high language diversity, and families facing socioeconomic challenges.

The first group interviewed consisted of seven teachers who were randomly selected from a larger group of teachers known as "high-implementers" of the four reforms mentioned

as identified by school and district leaders (Cox, 2011). The teachers, who ranged in experience from two to thirty years, voluntarily participated in the study. The group was asked about the four reform elements previously mentioned, and all seven were homogenous in their responses. The discussion of grading practices and the difficulties implementing them, especially amongst some of the teachers who had more experience in a traditional grading system, was discussed, but even those teachers had been able to make reforms, thus leading to similar answers to the interview questions. The first group agreed that common assessments and a shared grading policy played a key role in grading. Additionally, the group agreed that an "F" on the traditional grading scale would be equivalent to 50 percent, and that reassessment and late work submission would be permitted without penalty. The final important consensus reached in this group was that final grades should represent absolute achievement and not achievement related to ability or other non-academic factors (Cox, 2011; Melograno, 2007).

The second group of teachers was made up of nine different teachers, selected through a random number generator, across four different high schools in the district (Cox, 2011). These were made up of course leaders: teachers who be spearheading any grading reform efforts because of their role. The responses to the questions by this group elicited much more diverse responses. There seemed to be three common themes that dictated what the second group believed in terms of the four reforms: what a final grade communicates, the purpose of school, and common grading practices. The results are difficult to summarize, as the responses indicated a large amount of differences when it came to grading practices. For example, seven of the nine teachers were explicit in including evidence of effort as a part of a student's overall grade.

Cox (2011) identified some overlaps in group two in terms of their practice, as one teacher emphasized that he wanted the grades given to only reflect what students know or could do. Six of the nine members of group two were very concerned with two aspects of grading reform: the use of a 50 percent minimum score and acceptance of late work. Many of the teachers in the second group mentioned how they believed implementing some reforms would fail to prepare students for what life would be like after high school. Finally, this group expressed frustration with uniform grading agreements, with one teacher mentioning how he/she felt it removed their ability to use professional judgement and ignored their years of experience in the classroom. These concerns could be understood as a reflection of personal beliefs and values.

Cox (2011) recognized that the small sample sizes of the groups limited the diversity of responses. He also acknowledged that the interview processes were not uniform and that the interview processes for both groups could have produced inaccurate results. Still, he concluded definitively that the time was ideal to discuss grading policies, grades, and how they impact students for the district. The obvious differences that existed between the two groups surveyed show the urgent need for reform, as the questions regarding what a final grade may communicate vary greatly between the two groups. The wide variation calls into question the equity of the classes being taught, as well as the need for fairness amongst students taking similar classes, with the idea being a student's final grade in one teacher's course should not be wildly different than if that student had taken the same course with a different teacher. These differences could be lessened using standards-based grading reforms.

Tierney et al. (2011) also revealed similar findings in their surveys regarding grading. Most participants (93.5 percent) agreed that grades should reflect achievement, but many participants indicated they considered other factors. For example, 75 percent of teachers surveyed revealed that they considered student improvement over the entirety of a course when calculating a grade. Thirty-five percent calculated grades, at least in part, according to the bell curve. Twenty-seven percent calculated grades by means of comparing students with their peers.

Further, Tierney et al. (2011) found that many teachers (87 percent) believed that students' motivation, attitude, and participation should not play a part in the final grade they receive. This finding was also contradicted in multiple ways in the survey: 32 percent of teachers considered effort in grade calculation, including increasing a grade for high effort, 9 percent lowered grades for a lack of effort, 11 percent lowered grades for late work, 49 percent lowered grades for incomplete work, and 61 percent used zeros for missing or incomplete work. The Ontario, Canada school systems indicated that zeros were not to be used, but teachers indicated a direct disagreement with this specific policy through their answers in the survey. Essentially, the survey revealed that teachers indicated they agreed on the basics of standards-based reforms but felt that the reforms were implemented in a way that did not allow them to be able to effectively teach life skills or habits that they believed were important, such as punctuality, timeliness, or effort. Many teachers were concerned about the long-term consequences of overlooking nonacademic or non-achievement factors in calculating grades. These survey results indicate drastic departures from the principles described in standards-

based reforms and suggest there is more work to be done regarding helping teachers implement these reforms (Tierney et al., 2011).

A significant part of standards-based grading reform that also impacts grades includes how grades for each standard are calculated. The idea comes from an ongoing discussion in standards-based grading reforms and how to most accurately communicate learning. Hooper and Cowell (2014) set out to study the impact that the different types of ways that calculating grades could impact a student's final grade on a standard.

This study acknowledged the growing use of standards-based grading systems and the needs for these systems to be able to accurately assign a score to a standard based on multiple assessments over time. There is a general consensus that within standards-based grading systems the method of adding all scores together and calculating the simple overall average is not the most accurate way to communicate a final score on a standard, and other methods must be used to communicate final scores accurately (Hooper & Cowell, 2014).

Hooper and Cowell (2014) used five different methods to calculate a final score on a standard. The first method is using a simple average, which is calculating a final score by adding all scores together and calculating the arithmetic mean. The second was average of the most current "n" score method: a model to calculate a final score by taking the most recent assessment scores and calculating the average. In this method, "n" stands for any number. For example, replacing the "n" with a two, would mean the calculation of a final score would be done by taking the two most recent assessment scores and using the average from those two scores as the final score. The third calculation method was using mathematical models of growth over time. This is a model to calculate a final score that attempts to explain and predict

a final score using a linear, exponential, power, or logarithm-type of function. Fourth, they examined the method of mounting evidence, in which a teacher examines a student's history of scores and decides that there is mounting evidence that indicates a certain final score should be given. Finally, the history-adjusted true score model (HAT) was used. In this method, a final grade is calculated by using the lower of the two most recent scores as a baseline value and the highest of the two as the ceiling value. The past scores are then examined and compared to the median value of the most recent scores and assigned as either positive or negative value based on their comparison to the baseline. This calculation will then indicate whether the true score should be pulled above the baseline value, and if so, how far.

Hooper and Cowell (2014) worked within the assumption that students are assessed multiple times on each standard (the researchers chose five times) and that the assessment score would be given on a scale from 0-4, with half point intervals. The practice of making sure students have adequate numbers of learning opportunities is one of the key aspects of standards-based reforms (Tierney et al., 2011). Different theoretical growth curves were used when calculating the different scores with the five different methods. A theoretical growth curve is the concept that as time passes, an identified pattern of student proficiency emerges. For example, a student receives a score of 1, then a score of 2, then a score of 3, and finally a score of 3.5. This shows a consistent type of theoretical growth curve. The purpose in using a variety of theoretical growth curves was key in that it would help the researchers to understand how different theoretical growth curves could impact the accuracy of the five different methods that were being used in the simulations to calculate a final score. All pieces of data, including the five scores used in the calculation and the time of the scores being collected, were

randomly generated by a computer, which then ran a simulation using each of the five methods of calculation, allowing the researchers to interpret the data by viewing each of the five possible final score calculations from each of the five methods and compare them. This simulation was done 1,000 times.

The data was plotted on graphs and analyzed to find the difference between the predicted true-score and theoretical true-score. Hooper and Cowell (2014) concluded that the history-adjusted true score method was most accurate. However, in doing this, they also recognized that even within their analysis, they were working under generalized assumptions regarding growth curves, such as the idea that students will usually score higher at the end of an assessment period than in the beginning. They also caution those looking to implement any of the five methods of calculation studied, in that ultimately the communication of grades has such a high number of variables and non-measurable elements that it is impossible to say with absolute certainty that one method of calculation is always more accurate than the others in every circumstance or for every student (Hooper & Cowell, 2014).

These studies are significant in that they could help to alleviate the concern regarding teachers who feel as if standards-based grading reforms take away from their ability to use their professional judgement in grading students. Ultimately, it will be up to the teachers to select which method of standards-based grade calculation most accurately communicates student learning regarding the standards being assessed. Additionally, the study regarding the use of different methods of grading calculations can help increase the chance of equitable experiences across a single course taught by multiple instructors. An agreed upon contract of "what counts" for grade can be supplemented by an additional agreement between teachers as

to how it is counted and calculated to increase fairness for students (Cox, 2011; Hooper & Cowell, 2014).

As schools transition from traditional grading to standards-based grading, report cards and communication of grades will need to change as well. Swan, Guskey, and Jung (2014) wanted to investigate the reactions of parents and guardians who receive a standards-based report card and a traditional report card, as well as those teachers in districts considering such a report card. They also wanted to study the teachers who are faced with the implementation of a standards-based report card to find what advantages they see in doing so, as well as what concerns they have. Across the state of Kentucky, they surveyed 24 teachers piloting a standards-based report card at one school, 235 households receiving that report card, as well as 383 teachers from two nearby school districts that were considering the implementation of a standards-based report card.

Swan et al. (2014) found that the 24 teachers who piloted the standards-based report card reported more, better quality information than a traditional report card. However, as this group was made up of volunteers who wanted to try using a standards-based report card, it is not surprising that the reactions would be positive. Though these teachers also indicated that it took significantly more time to create a standards-based report card, they indicated that the clarity and ease of understanding was worth the additional time. Teachers in the district considering implementation were less certain of the benefits of using a standards-based report card.

Of the 253 households who received the report card and questionnaire, 135 households responded (Swan et al., 2014). The demographics of said households is unknown, as survey

participants were guaranteed anonymity. The study found that households did not understand certain characteristics of the report card; for example, not knowing what the term “exemplary” or “proficient” means. Despite this, the majority of those did indicate a positive reaction to the standards-based report card. Surprisingly, the households indicated a higher satisfaction with the clarity of information on the standards-based report card than the teachers did. Of note was that some households indicated that they still desired to see a traditional percentage grade attached to a letter. Further investigation of this group of respondents found that this group also had students who averaged 90 percent or above on a traditional report card, a trend seen in other studies. Though even this group indicated they saw the advantages of a standards-based report card (Knight & Cooper, 2019; Swan et al., 2014).

Overall, the increase in time to create a standards-based report card seems worth the investment of time and resources needed for implementation (Swan et al., 2014). Even considering the lack of experience that many households have with standards-based report cards, most households appear to have a positive perception of this change. In summary, both parents/guardians and teachers indicated they understand the advantages of this change, which should provide assurance for those in leadership who are considering this transition.

Drawbacks of Standards-Based Reforms

As with all reform, it is important to attempt to gain a full understanding of the effects it can have on education. This includes understanding some of the possibly negative outcomes or challenges that exist. In these specific reforms, there must be care taken with standards-based assessment. Additionally, teacher instruction in the age of standards-based reforms can have a negative impact that must be understood by shareholders.

Precautions with Standards-Based Assessment

Menken et al. (2014) cautioned that the standards-based reform movement is not a one-size-fits-all solution. For example, the growing numbers of students in America who are English language learners are not given a separate proficiency scale on high stakes standardized testing are graded in the same way the monolingual students are graded. “Far from being monolinguals in two languages, as it were, they carve out their own space as *bilinguals*. Thus, bilinguals’ distinctive qualities must be understood and evaluated independently of monolinguals or they will always be positioned as failures” (Menken et al., 2014, p. 206).

It is important to acknowledge assessment biases and that basing proficiency on a singular method of assessment, especially a standardized test, is questionable (Menken et al., 2014). This is even more true when there may be no agreed upon definition of proficiency. For example, 52 percent of emerging bilingual students passed the English Language proficiency test in California, but only 10 percent of bilingual students passed California’s English Language Arts test. Difficulty also arises in content level subject testing when assessments are not written in the student’s native language, given that language is not what is being assessed. These can have an impact on the integrity of a standards-based assessment. Standards-based grading, when paired with high-stakes testing, can end up harming student populations and have serious negative consequences given the power of testing on local, state, and national levels.

The results of standards-based assessment should be used with other information regarding learning and students when making decisions by shareholders (Menken et al., 2014). Often, within a standards-based reform system, educators become focused on score-boosting, regardless of whether the scores of assessments reflect learning or if the assessment is a

genuine, sound, and valid picture of student achievement. Focus purely on student scores by educators is made more challenging when, in some circumstances, the scores of students on high-stakes standardized testing is linked to greater decision making regarding the future of educators, funding, and the perceptions of schools as being “good” or “bad” based on these scores. In some cases, this causes a narrowing of curriculum to raise scores and leads to a more restrictive scope of education. Evaluation of schools, teachers, and students should be done using multiple sets of data in order to avoid such things.

In a similar study, Hammond (2014) wanted to investigate the impact of standards-based education on students whose second language was English. Though not specified in numbers, schools across Australia were investigated. The schools studied had school populations where at least 60 percent of the students were classified as English as an additional language (EAL). The focus was on students who were beyond the initial stages of learning English.

These students were given opportunities to be placed in high challenge and high standards general education courses (Hammond, 2014). This was paired with the notion regarding standards-based reform that each student should be held to high academic standards. However, this placement considered studies such as those by Menken et al. (2014), where the ability of students to meet standards was challenged because of their English language level and placed high levels of academic and language support within these classes. The study found that these students found success in these high challenge classes because of the high level of support. The conclusion reached was that the students were able to reach the standards of these classes because of the support given to them. This reinforces that standards-

based reforms can benefit all students. However, it is essential that these students receive adequate amounts of support in order to meet the standards, especially when the standards being assessed are not directly language related.

As standards-based reform and assessment and instruction is implemented more and more, it is something that is regularly considered in teacher preparation programs. Allard and Doecke (2014) investigated the impact that these reforms had on early career teachers. Examined were a group of teachers within their first four years of their teaching careers across 30 Australian schools, with the focus being interviews of four of these teachers. The precise number of teachers involved in the study was not revealed. These teachers were interviewed multiple times over the course of one academic school year with a goal of understanding how they navigate through the increased focus on holding teachers accountable, the move to standardize curriculum, standardized testing, and developing their own teacher identities.

Allard and Doecke (2014) found that these early year teachers struggled with the standardization of curriculum because of the strong emphasis placed on the National Assessment Program – Literacy and Numeracy (NAPLAN). They found that teachers struggled to create their own materials as they felt that each activity had to replicate the format used in the high-stakes NAPLAN tests, a standardized assessment given to students in grades three, five, seven, and nine that assesses spelling, grammar, reading, writing, and numeracy. Teachers also felt that the emphasis by educational leadership that students must do well on the NAPLAN tests has created an environment where discovery-based and collaborative learning has been replaced by unengaging instruction based around tested subjects, leaving little room for student interest, inquiry, and problem-solving. Teachers interviewed said they felt an obligation

to teach to the NAPLAN test because of the feelings that the results reflected on them as teachers. They felt that the standardized test data was being used as a judgement of their teaching instead of a tool to understand student achievement and progress.

Allard and Doecke (2014) concluded the standardization of curriculum also created issues, as teachers interviewed believed that the materials created were too far removed from the schools in which they were used, and thus, were not useful for instruction, as they did not take into account the different needs and situations of students. These teachers believed that the standards-based reforms being implemented essentially cast aside their knowledge and training they bring, in favor of the prescribed curriculum. They viewed this imposition as a result of emphasis placed on measuring student's cognitive development above all other possible measurements.

Allard and Doecke (2014) surmised that implementation of standards-based reforms, particularly those tied to the standardization of curriculum and the use of standardized high-stakes tests, can be problematic. A response repeated by many of the teachers interviewed was they felt the leadership in charge of making decisions regarding the testing and curriculum were disconnected from the students who would be learning from it and the teachers using it, thus making such reforms less effective. The reforms seen through the use of the NAPLAN tests and the standardization of the curriculum based on the test resulted in negating some of the original goals of standards-based reforms, such as developing problem solving skills, inquiry, and real-world skills such as collaboration.

Precautions with Standards-Based Instruction

One of the reasons for the implementation of standards-based reforms is because only academic achievement is measured. These reforms can expand opportunity and increase positive outcomes for students who have struggled in the traditional grading system. Harris (2012) aimed to investigate how standards-based reforms can be impacted by the perspective educators have of students and their families. Investigated were five middle schools in a mixed method study in urban areas of both the northern and southern United States. All five schools were part of the America's Choice program, which was a three-year plan designed by the Consortium for Policy Research, to implement standards-based reforms in the schools. The schools, ranging in size from 967 to 1,600 students, were made up of primarily black and Hispanic students, with 49 to 100 percent of students receiving free/reduced lunch. Researchers would visit these schools two times a year, interviewing 270 different teachers, along with administrators and counselors across the five schools.

Harris (2012) specifically focused on teachers' interpretation of social and academic behaviors of students and how this interpretation would impact the implementation of standards-based reforms. She also wanted to gain a greater understanding of how deficit beliefs of teachers can impact the application of standards. At the conclusion of the study, she found that around half the teachers in the schools believed that students were not capable of learning the curriculum they were supposed to teach, and that student achievement was out of their control. Though implementation of standards-based grading stopped the grouping and placement of students in high or low ability classes, a practice that negatively impacts student

achievement, the study found that the same negative outcomes can occur if teachers do not use the standards or do not hold all students accountable to the standards.

Harris (2014) concluded that the alignment of teachers' beliefs and practices with standards is necessary for learning outcomes to improve in a standards-based system. If teachers vary the application of the standards dependent on the expectations they have for certain students, then reforms become meaningless, as they are no longer holding all students to high standards. Changing this teacher mindset may only be possible through intervention programs that focus on changing negative expectations of teachers regarding their students and their abilities to reach high standards. This intervention must be long-term and sustained, as many of these beliefs are deeply held and have existed within teachers for significant amounts of time.

> "Teachers must begin to understand that beliefs they have can put limits on their expectations for student learning. Transforming these beliefs must occur before or at the same time that schools are implementing standards-based reform or any effort to promote change in schools" (Harris, 2014, p. 146).

The Future of Standards-Based Reform

As the reforms of standards-based grading become widely implemented, newer focus regarding these reforms have emerged. The focus on post-secondary education and the systems present in that level of education are at odds with much of the reforms taking places at the primary and secondary levels. Some within the post-secondary community have begun to utilize such reforms, but the practice is not yet widespread. Additionally, the logistics of reporting grades and achievement is another component that must be considered as standards-

based reforms are implemented. Technological and reporting changes may need to be considered in order to fully realize the benefits to these reforms.

Post-Secondary Education and Standards-Based Grading

As standards-based reforms continue to be implemented around the United States at the K-12 level, there is concern regarding discrepancies that students will face as they move from the K-12 education levels to postsecondary education, as traditional grading systems still permeate many post-secondary settings such as colleges and universities. This concern was addressed by Scarlett (2018) when he attempted to implement a standards-based grading system in a traditional college classroom. This involved taking two sections of an educational assessment course for students majoring in education at a small, private liberal arts college in the Midwest and modifying the course in order to use a standards-based grading system. The course was taught using a standards-based approach, which involved organizing the course by learning targets that were based on the standards. It also involved the creation of weighted grade categories, as well as reassessment for students.

Scarlett (2018) discovered that the implementation resulted in a positive reception from students, who appreciated the opportunities for reassessment along with the enhanced clarity of grades by receiving feedback regarding each standard. The implementation of standards-based format forced much clearer communication regarding students' mastery, achievement, and areas where improvement could be made in relation to the standards.

Though there was positive feedback from students, Scarlett (2019) concluded the use of standards-based grading in a postsecondary setting must be examined more deeply. Because there are multiple ways to implement a standards-based grading system, there are possibly

multiple iterations of standards-based grading that could be used, and further study is needed regarding which iterations work for certain content areas. This includes considering the differences of contexts, such as the implementation of standards-based grading in a writing course or language course versus a physics or biology course.

Scarlett (2019) also adds that the implementation in a post-secondary general education course with large numbers of students versus a more specialized course with a small number of students should also be examined. Additionally, the study found that though standards-based grading can be implemented in a post-secondary setting, the greater systems at play, such as the need to communicate a single, final letter grade at the conclusion of a course, still exists at both the secondary and post-secondary levels of education, and as such, a standards-based approach must ultimately conform to such parameters. Finally, the study also takes into account that putting a standards-based grading system into practice involves a significant amount of work, time, and effort to revise curriculum, which may or may not be feasible for certain instructors or courses in a post-secondary setting. Additionally, more comparison studies are needed to compare actual student learning from a traditional grading class setting to a standards-based setting to see if one actually results in more learning as opposed to just more success in terms of final grades (Scarlett, 2018).

Cox (2011) stressed that the future of standards-based grading will hold the need to continue to reform the learning process. He recommended focus on four different areas going forward. This included the creation and use of alternative assessment methods outside of multiple-choice tests. Second, he encouraged discussion and debate regarding reforms rather than to issue them as directives and mandates. Third, he recommended that schools recognize

that they must continue to build the knowledge base of teachers regarding assessment practices and prepare to put the traditional grading practices and the philosophies on the table for debate and discussion.

The Future of Reporting Grades in an Age of Standards-Based Reforms

As nonacademic factors are removed from the overall calculation of grades, some teachers indicate that they feel there is an even greater challenge in attempting to teach students certain life skills that they believe are essential. Many schools have been in the process of implementing academic standards into their curriculum and required practices, but behavior standards have had less emphasis placed on them. For this reason, Sailor, Stowe, Turnbull, and Kleinhammer-Tramill (2007) addressed this in their symposium regarding social-behavioral standards to standards-based reforms already in progress. Their concerns came out of what they viewed as the ignoring of desirable behaviors, especially with special education students, with the new emphasis on achievement in standards-based reforms. Because the overarching goal of standards-based reforms is greater success in the postsecondary lives of students, they argued that including social-behavioral standards not only helps with increasing instruction time, as there are less disciplinary issues regarding student conduct, but also increased the likelihood of helping students be more prepared for the various social environments they will find in their public and private lives.

Sailor et al. (2007) recommended the creation of a school wide positive behavior system (SWPBS). This involves engaging staff in professional development to teach not only academic standards but behavioral ones as well. Though initially focused on special education, a SWPBS would apply to all students. The idea of the system being “positive” means that behavior is

explicitly and proactively taught and explained to students. This contrasts with a “negative” or exclusionary behavioral intervention system, which involves referrals, detentions, suspensions, etc. These punishments often result in students spending less time in class, which lowers achievement. They argued that these exclusionary principals do not actually help because they do not teach a student positive behavior, rather, they just punish negative ones. Therefore, SWPBS is a powerful tool when preparing students to not only be ready academically for postsecondary life, but also socially ready as well. In accordance with standards-based reforms, these behavioral standards can be assessed as part of a social and behavioral rubric.

Many teachers struggle with the ideas that good work habits can be created without grading penalties. More efforts should be made to understand the relationships between non-achievement factors such as student behavior, student characteristics, and grading practices where the expectations are that achievement and work habits are to be reported separate from one another (Knight & Cooper, 2019; Sailor et al., 2007; Tierney et al. 2010).

One way to alleviate these concerns is to create separate ways of reporting non-academic or non-achievement factors in addition to reporting a student’s achievement in a class. Studies suggested a revision of report cards to not only include the traditional reporting of the final grade a student receives in each class, but the non-assessed items that do not impact a student’s grades in a standards-based grading system, such as behavior and participation. Research also acknowledges that the traditional methods of reporting final grades as single letters will also need to be revamped, as this method is essentially at odds with standards-based reforms (Cox, 2011; Knight & Cooper, 2019; Melograno, 2007; Sailor et al., 2007).

Knight and Cooper (2011) laid out recommendations based on their study for district level employees, administrators, and those who will be in leadership positions as standards-based reforms are implemented, such as implementation of a gradebook that allows for a standards-based grading system to be used if the current grading system does not allow for it. They should address concerns of teachers who are concerned about the implementation of standards-based reforms and set up schoolwide systems of support and staff development to answer their questions and assist them in their own practice. Also, those in leadership should develop schoolwide intervention systems for students who are not meeting standards (Knight & Cooper 2011; Peters et al., 2017).

Those in leadership must be on the front line explaining why standards-based reforms and grading is being implemented and how it impacts the students and the communities that they live in (Knight & Cooper, 2011; Swan et al., 2014). This clarity in explanation and communication is a significant need in the age of standards-based reforms, as households indicate a lack of understanding regarding standards-based language and reporting. In the United States, this process could be made more efficient and effective if procedures used to create a standards-based report card were created at the state-level, as it is the states who determine the standards being taught.

There are also recommendations for teachers who are implementing standards-based reforms and grading as well. This includes acknowledging that though grading is the focus of this reform, it essentially is a reform of the entire education system (Knight & Cooper, 2019). As such, teachers should work on one thing at a time. Teachers should also work together to create support systems as they change their practices. This should also include collaboration

and discussion regarding how to develop and teach valuable work habits or characteristics such as completion, timeliness, and preparation without punishing students academically who do not show them. This support system should also exist as teachers go through the initial "dip" in student behaviors as the punishments for late work, lack of participation, and tardiness are removed from impacting grades (Peters et al., 2017). Finally, all shareholders, including those in leadership and teachers, should realize that these reforms will result in pushback, cause friction, and will not produce immediate results. Because of this, the importance in understanding the why and how of standards-based reforms cannot be overstated (Knight & Cooper, 2019).

Students should also be considered in this conversation, as the impact of standards-based reforms will be felt most greatly by them (Peters et al., 2017). One way to improve future student responses to the implementation of standards-based reforms is to attempt to change students' understanding and paradigm regarding what learning is. This includes targeting misconceptions such as the ideas that learning essentially is a rote memorization of information, that all learning occurs in a linear process, or that incorrect answers and mistakes have no value. This shift in understanding of learning will only occur if there is an intentional effort made on the part of educators to help students shift the way that they view the process of learning.

Another future consideration is the use of technological grading tools and how they can be used. Sadik (2011) set out to design, develop, and evaluate a grading tool specifically for use in a standards-based grading system. A pool of 340 instructors in the Sultan Qaboos University system were asked through a randomly selected list to participate in a study evaluating the

usability of a standards-based grading technology tool. Ultimately, 116 instructors used this newly designed standards-based grading tool, called RealGrade, and completed the entire study to determine how usable it was. None of the participants were required to have a certain level of experience with specific grading applications, and most had moderate experience using spreadsheets to manage student grades.

Sadik (2011) concluded that competency in technology will be an important skill for educators to have going forward. Care should be taken in the implementation of new grading technologies, as the study found that those instructors who had less experience and were younger, found the usage of the new grading technology easier, more effective, and more satisfactory than those who had five to ten years or more of teaching experience. It also found that as standards-based reforms are being implemented, those who are more comfortable with these platforms will be more likely to use grading software more adeptly and take advantage of the efficiency offered through technology. They will find that certain aspects of standards-based grading will be easier to implement through this technology. Instructors who are given tools that they find to be useful and effective are more likely to implement these reforms over the long term because the technology makes it easier to maintain the reforms.

One important aspect that should be focused on in the future development of grading technology is the streamlining of communication to share grades and feedback with students (Sadik, 2011). Feedback plays a central role in standards-based reforms, so systems that focus on feedback should be developed. This makes it more likely that instructors will give more useful, accurate feedback to students in a timelier fashion than in previous grading systems

where logistical barriers were an obstacle to doing so. This includes the ability to use grading programs to print and report feedback quickly for students.

CHAPTER III: DISCUSSION AND SUMMARY

Summary of Literature

Standards-based reforms have been shown to increase student motivation and allow for more targeted intervention for struggling students (Knight & Cooper, 2019; Meyer et al., 2009). Additionally, students feel more ownership over their grades in a standards-based system (Knight & Cooper, 2019; Melograno, 2007; Peters et al., 2017). This is especially true as students become more involved in the learning process by doing things such as collaboration, goal setting, tracking their own progress, and choosing how they will be assessed (Knight & Cooper, 2019; Melograno, 2007). However, there is often student dissatisfaction regarding the implementation of standards-based reforms because of the inconsistency of application and the disconnect from what students see as differences between the intellectual safety nets that exist in a standards-based system and postsecondary life (Knight & Cooper, 2019; Melograno, 2007; Meyer et al., 2009; Peters et al., 2017).

Standards-based instruction has shown to improve students' (including those with disabilities) problem-solving ability, though there may be negative impacts on high-stakes multiple choice assessment performance because of the lack of focus on process and more focus on problem-solving in standards-based instruction (Bouck et al., 2010; Melograno, 2007; Townsley & Vargas, 2018). Standards-based grading also is a more accurate way to communicate student performance and achievement when compared to traditional grading (Lehman et al., 2018; Pollio & Hochbein, 2015; Townsley & Vargas, 2018; Ussery, 2014). Student performance and achievement improve when teachers are given professional development and trained to use standards-based instruction in the classroom, which can reduce teacher bias

(Pollio & Hochbein, 2015; Shoen et al., 2007). Additionally, standards-based instruction can help improve student achievement play a role to close the achievement gap (Carbonaro & Covay, 2010; Desimone, 2013; Pollo & Hochbein, 2015; Shoen et al., 2007).

Standards-based reforms caused teachers to focus more on students who struggle because of the expectation that all students should meet the same standards (Barlow, 2012; Desimone, 2013; Knight & Cooper, 2019). Additionally, Standards-based reforms supports the idea of more instructional collaboration between teachers and increased accountability (Barlow, 2012; Cox, 2011; Desimone, 2013; Leko et al., 2015). Standards-based instruction also leads to instructors more explicitly teaching positive academic behaviors to students and explaining how certain negative behaviors can lower a student's achievement (Knight & Cooper, 2019; Sailor et al., 2007). Implementing standards-based reforms through modeling can have a large impact on a teacher's paradigm regarding instruction and lead them to change their own instructional practices (Barlow, 2012; Desimone, 2013; Knight & Cooper, 2019; Leko et al., 2015; Menken et al., 2014).

In a standards-based setting, all assessment should be clear and have a purpose tied to the learning objective. These objectives are derived from the standards (Cox, 2011; Melograno, 2007; Menken et al., 2014). Students should have a voice in how they will be assessed and know how the results will be used (Melograno, 2007). Assessments should be consistently reevaluated by teachers to ensure that the method of assessment is not a barrier for students to show their learning (Knight & Cooper, 2019; Melograno, 2007; Menken et al., 2014; Tierney et al., 2011).

Grades will be affected by standards-based reforms. Clarification is very important when leadership determines grading policies when implementing standards-based reform, as inconsistent implementation can negatively impact student grades (Cox, 2011; Tierney et al., 2011). Teachers should agree as to what a final grade conveys, including the discussion of what assessments count towards the final grade and the weighting of grade categories (Cox; 2011; Hooper & Cowell; Tierney et al., 2011). There should also be careful consideration made as to how final grades are calculated mathematically, as different methods of grade calculation can communicate different ideas regarding student learning and achievement (Cox, 2011; Hooper & Cowell, 2014; Tierney et al., 2011). Efforts can be made to clarify standards-based grading language to students and parents/guardians so that these shareholders have a clear understanding of student achievement, which increase the chance that parents/guardians will view standards-based reforms positively (Swan et al., 2014).

Standards-based reform is not without drawbacks. The use of the same standards and proficiency scales to judge every learner in the same way takes away the ability to recognize the differences between student populations (Hammond, 2014; Harris, 2012; Menken et al., 2014). Holding every single student to high standards may only be realistic with the highest levels of academic support, which may not always be available (Hammond, 2014; Harris; 2012). Additionally, there may be differing perspectives on what proficient means, which can cause inaccurate communication regarding student achievement (Menken et al., 2014; Swan et al., 2014). Standards-based grading can also result in educators “teaching to the test” and limiting the classroom experience to only what is assessed (Allard & Doecke, 2014; Hammond, 2014; Menken et al., 2014). Teachers’ beliefs and practices must match up with the philosophy

behind standards-based reform or they risk unequal implementation, which defeats the purpose of standards-based reform (Harris, 2012). This may only be possible through long-term interventions and professional development (Allard & Doecke, 2014; Hammond, 2014; Harris, 2012; Menken et al., 2014).

As it is still being implemented, the future of standards-based reform is still being examined. One area of focus is the use of standards-based reforms in the postsecondary level (Sadik, 2011; Scarlett, 2018). Postsecondary students had positive reactions to the ability to reassess, as well as the clearer communication regarding their achievement (Scarlett; 2018). Assessment of students should be examined and methods outside of multiple-choice tests should be considered (Melograno, 2007; Scarlett, 2019). Additionally, students, teachers, parents, and administrators should be engaged in discussion and debate as standards-based reforms become more widespread (Cox, 2011; Harris, 2014; Scarlett, 2019). Teachers should continue to receive professional development regarding the proper implementation of and be involved in debates and discussion regarding standards-based reforms instead of merely receiving the information as a directive or mandate (Cox, 2011; Harris, 2014; Peters et al., 2017; Scarlett, 2019). As academic consequences are no longer used to punish behavior, schools should consider moving towards teaching positive behaviors in a more schoolwide fashion instead of enacting negative punishments, such as suspensions, that exclude students from class and can have negative academic consequences (Knight & Cooper, 2019; Peters et al., 2017; Sailor et al., 2007). In order to create accountability for student behavior and inform shareholders, schools should consider revising report cards to explicitly identify students' academic performance and behaviors (Knight & Cooper, 2019; Sailor et al., 2007; Tierney et al.,

2010). Efforts will need to be made to help shift students' view of what learning is (Knight & Cooper, 2019; Peters et al., 2017). New grading tools and technology will need to be developed in order to make implementation of standards-based reforms more streamlined and easier in order to make these reforms more sustainable for teachers (Knight & Cooper; Sadik, 2011).

Limitations of the Research

The research was limited by topic to focus on standards-based grading and traditional grading in order to avoid research unrelated to this reform, as the study of grading and assessment is vast. The range of years from 1995-2019 was intended to allow only more recent studies that would still be applicable to education in the present day. The emphasis was on using "standards-based" as a search term in order eliminate other reforms in education.

The body of research was limited by a lack of subject diversity. For example, there were no studies that examined standards-based reform in the subject areas of social studies or music. Many of the studies seemed to be focused exclusively on mathematics courses or overall student achievement in all courses. Additionally, there was a lack of specificity in the studies that would often not explicitly identify teaching practices, which is a major component of standards-based grading. The success of standards-based reforms is dependent on individual teacher implementation, and there was often a lack of specifics regarding exactly what parts of standards-based grading and instruction were implemented and used by teachers. There is also a lack of research regarding the use standards-based grading in postsecondary settings. There were no studies found regarding postsecondary success of students after receiving standards-based instruction in secondary levels of education. This is a significant gap in research, as one of the ways to understand the impact of standards-based grading would be long-term studies to

examine the students who received standards-based instruction in secondary levels of education and how successful they were in their postsecondary education. One of the most significant limitations is the lack of long-term studies to gain a greater understanding of how standards-based grading could impact a student whose entire K-12 education was standards-based.

Implications for Future Research

Future research regarding standards-based grading should focus on several areas. More research should be done in content areas that have not yet been examined to see how standards-based grading impacts students in those subjects, such as social studies or music. Additional areas of study also include a greater examination of specific standards-based grading practices, such as attempting to study what types of evidence, assessments, and calculation most accurately shows student achievement for each content area, and what types of calculations should be used to calculate grades in different content areas to give shareholders the clearest communication of achievement.

There could be further research done on the usage of standards-based grading at the postsecondary level. This should include the feasibility of implementation of standards-based grading in courses with large amounts of students, such as general education courses that could have 100 or more students and only one instructor. Additional studies regarding student behavior before and after implementing behavioral standards into a standards-based report card are also a possible focus for future studies.

Perhaps one of the most significant studies that could be done would involve a long-term multi-decade study to examine the outcomes and long-term impacts that students who

have their entire K-12 education in a standards-based setting. These students could be compared to more recent students, who have experienced a mix of both traditional and standards-based systems. The results could also be compared to the success of students who experienced only traditional grading.

Professional Application

The age of standards-based reforms has an enormous impact on teaching professionals. I find that the usage of standards-based grading has brought about significant changes to my own teaching practices. These changes have resulted in both positive and negative outcomes for myself and my students.

One of the more challenging aspects of standards-based grading has been the lack of urgency that I see in students, both my own, and my colleagues'. Many of our students no longer see punctuality, due dates, or deadlines as important. I have had many discussions with colleagues at the end of a school day regarding the struggle with turn-in rates and punctuality of student work. Often, these discussions are comparative, with teachers asking one another how many students bothered to turn in a project on time, with the number usually being less than half. Occasionally, a student will turn in no or few assessments until the last week of a course, where they will then rush to complete just enough to pass, which frustrates me. This is a topic that arises frequently, as my district has implemented standards-based reforms for academics, but not behavior.

One of the next steps that many districts, including my own, must take is the implementation of behavioral standards and ways to communicate not just student achievement, but also student behavior. I believe that this will increase student accountability,

and to help parents/guardians understand that student behavior and academics are both important. Logistically, I see this being implemented through revising the student report card to include an area to give feedback regarding student behavior for each class. I feel that this is one of the biggest areas that could increase the amount of teachers implementing standards-based reforms, as I know of many teachers in my building and district who feel that they have no way to communicate the importance of student behavior other than through academic penalties because there is no clear procedure to report and give feedback for student behavior.

By not having a clear procedure for communicating behavior, such as showing it on a report card, school districts are indirectly dismissing behaviors, both positive and negative, as unimportant. I feel that behavioral interventions for students who do not complete work are nearly nonexistent in my school. There is a lack of intervention systems in place for students who refuse to do complete work, such as not allowing them to participate in various other activities until they have completed missing assessments. There should be behavioral consequences for behavioral issues, such as tardiness, or refusing to complete work.

Despite these challenges, I have found that implementing standards-based reforms in my own classroom has taken enormous pressure off me as a teacher and resulted in many positives. Giving students the ability to reassess has been a positive experience. In our school, we have broken assessments down into standards, so students see feedback for how they performed for each individual standard, which clarifies their areas of success and struggle. Being able to show students success, even on an assessment where they may have struggled overall, is a good way for students to build confidence. It also allows for targeted reassessment on single standards instead of forcing students to complete large projects or retake entire tests.

Another positive experience in standards-based grading has resulted from not penalizing students for negative academic behaviors. I feel that I have better relationships with students because I am not forced to attempt to keep track all student behavior and try to grade student behavior. Also, this places the student as the sole responsible party for their own learning, and thus their own grades and achievement. I have found that conferences with parents and guardians are significantly less confrontational and much more students centered, as the conversations revolves around the standards, and the results of the assessments, but also how student behavior in class impacts student achievement. Often, parents/guardians discover that their students can reassess and push them to do better. Eventually, the hope is that students will push themselves to reassess because they know they always can show they can achieve; they must choose to take advantage of the opportunity.

Conclusion

Standard-based reforms are clearly not going away. The research suggests that standards-based reforms have a positive impact on students. The next step for educators is implementation. Educators should seriously consider the costs and benefits of standards-based reform. As with all reforms, standards-based grading is not perfect, but those serving in the field of education have a responsibility focus on students and to work for their benefit. As teachers encourage students to attempt to do their best with what they have, educators should use this emerging research to give students the best possible chance to succeed.

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