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The Nature of Feedback Provided to Elementary Students in Classrooms where Grading and Reporting are Standards-Based

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ACCEPTANCE

This dissertation, THE NATURE OF FEEDBACK PROVIDED TO ELEMENTARY STUDENTS BY TEACHERS IN SCHOOLS WHERE GRADING AND REPORTING ARE STANDARDS-BASED, by DAWN HOPKINS SOUTER, was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree Doctor of Philosophy in the College of Education, Georgia State University.

The Dissertation Advisory Committee and the student's Department Chair, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty. The Dean of the College of Education concurs.

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ABSTRACT

THE NATURE OF FEEDBACK PROVIDED TO ELEMENTARY STUDENTS BY TEACHERS IN SCHOOLS WHERE GRADING AND REPORTING ARE STANDARDS-BASED

by

Dawn H. Souter

Feedback is one of the most powerful influences on learning and achievement. Hattie (2002) found that the giving of quality feedback to students is one of the top five strategies teachers can use to improve student achievement. Research has confirmed that the right kind of feedback is essential for effective teaching and learning (McMillan, 2007). The University of Queensland (Australia) notes that feedback is the entity that brings assessment into the learning process (1998). The evidence also shows, however, that how feedback is given and the types of feedback given can provide disparate results with both achievement and student motivation. One mitigating factor to the giving and receiving of feedback in classrooms is a climate of evaluation, competition, rewards, punishments, winners and losers. In fact, research shows that while the giving of descriptive feedback enhances learning and motivation, the giving of norm-referenced grades has a negative impact on students (Bandura, 1993; Black & Wiliam, 1998; Butler & Nisan, 1986; Butler, 1987). This qualitative study used interviews, teacher observations, and document analysis to seek out the nature of feedback provided to students in a standards-based school district, where grading is standards-based rather than norm-referenced. The literature review suggests particular properties and circumstances that make feedback effective, and the researcher has used this research to analyze the oral

and written feedback that teachers provide students. The analysis describes the use of feedback and feedback loops in these classrooms and the findings add to the current knowledge-base about the giving and receiving of feedback in standards-based schools and suggests areas for teacher improvement and development.

THE NATURE OF FEEDBACK PROVIDED TO ELEMENTARY STUDENTS BY TEACHERS IN SCHOOLS WHERE GRADING AND REPORTING ARE STANDARDS-BASED

by
Dawn H. Souter

A Dissertation

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CHAPTER 1

THE PROBLEM

Introduction

When studying effective teaching practice, researchers have noted that feedback to students is essential. In fact, experts such as Butler and Nisan (1986), Butler (1987), Deci (1995), Hattie (2002a,b, 2003), Hattie and Timperley (2007), Marzano (2004), Sadler (1989), and Wiggins (1993, 1996, Wiggins & McTighe, 1998) argued that feedback is the single-most important strategy in teaching. Without feedback, students do not know how far away they are from their goals and may withdraw their attention and energy from learning (Pepper & Pathak, 2008). Researchers have found that effective feedback from teachers improved student achievement by at least one standard deviation (Black & Wiliam, 1998; Hattie & Timperley, 2007; Marzano, 2004). Researchers have also noted that feedback improves student self-efficacy and motivation (Butler & Nisan, 1986; Butler, 1987; Elawar & Corno, 1985). Hattie (2002b) stated that "If there is one systematic thing we can do in schools that makes a difference to kids (sic) learning, it's this notion of feedback. It is the most significant thing we can do that singularly changes achievement" (presentation given at the New Zealand Principal's Federation Conference).

The research indicates that some types of feedback are more effective and/or appropriate than others. Smith (2008) writes that the best comments are specific. Brookhart (2008), Butler and Winne (1995), Cleary and Zimmerman (1990, 2004), and

Hattie and Timperley (2007), specifically provide evidence and suggestions as to the type of feedback that teachers can and should provide students. McMillan (2007) states that when feedback is provided as information that can direct a student's construction of knowledge and understanding; intrinsic motivation and achievement are enhanced. Research confirms that learners are more effective when they attend to externally provided feedback, undeterred (Butler & Winne, 1995). The informative aspect of teacher feedback is necessary for purposes of achieving mastery and for maintaining student interest (Butler & Nisan, 1986; Ames & Ames, 1984; Narciss, 1999).

In contrast, a number of current policies, procedures and practices are inconsistent with teachers giving appropriate feedback to students. Report cards and norm referenced grading are especially misaligned with the giving of effective feedback (Black, Harrison, Lee, Marshall, & Wiliam, 2003; Butler & Nisan, 1986; Butler, 1987). Specifically, traditional grading practices impede the delivery of quality feedback between teachers and students; feedback that can dramatically improve students' learning and motivation (Black & Wiliam, 1998, Black, Harrison, Lee, Marshall, & Wiliam, 2004; Brookhart, 2008; Butler & Nisan, 1986; Butler, 1987; Deci, 1995). In addition, traditional classroom assessment is inconsistent with teachers providing and students understanding of effective feedback. Guskey (2009) writes, "The most carefully articulated curriculum, best-aligned assessments and most thoughtful standards-based grading and reporting system would make little difference if organizations, policies stand in the way of their implementation" (p. 10). This case study explored how teachers in schools where grading is standards-based rather than norm-referenced provide students with oral and written feedback. By using a qualitative case study, I was able to describe and analyze

interviews, observations, and document analysis will allow me to determine the nature of feedback provided by teachers who use standards-based grading and reporting.

Hattie and Timperley (2007) note that feedback is an among the top five to ten influences on achievement and one of the top influences when you discount factors uncontrolled by teachers, such as students' prior cognitive ability and socioeconomic status. Within their study of feedback, giving "cues" had the largest effect on students. Additionally, Hattie (2002a) asserts that "feedback is only as effective to the degree that it directs students to reconsider the task and causes them to revisit the task and in this way, enhances self-efficacy by helping the student recognize ways to self-assess and improve " (p. 6).

The Questions

The purpose of this dissertation is to characterize the feedback that teachers provide students in a standards-based setting. The data collection will include interviews, observations and document analysis to determine the nature of the feedback that teachers provide students. The key research question asks; to what degree does feedback in a standards-based classroom convey judgments about student performance in relationship to the learning standards? Other sub-questions that will guide this research include the following:

1. What types of feedback do teachers provide students?
2. How do teachers provide specific feedback to students?
3. To what degree do teachers create feedback loops in their classrooms?

Moreover, Do teachers provide students with feedback that answers Hattie's (2003) feedback questions:

1. Where am I going?
2. How am I going?
3. Where to next?

This case study investigates the claim that removing norm-referenced grading can provide teachers the culture and opportunity to better provide descriptive feedback to students (Black & Wiliam, 1998 Butler & Nisan, 1986; Butler, 1987; Deci, 1995, Kohn, 1999).

The Problem

According to Brookhart (2008), Hattie and Timperley (2007), Sadler (1989), Thomas (1993) and Wiggins (1996), there is a lack of quality feedback in classrooms. Thomas (1993) found that only 25% of teachers provide specific feedback on the learning of individual concepts when grading assessments and assignments. Quality feedback helps students understand the expectations, where they are in relation to the expectations, and how to bridge the gap between where they are and where they need to be (Brookhart, 2008; Hattie, 2002a,b; Hattie & Timperley, 2007; Sadler, 1989; Wiggins, 1993, 1996). Research from Brookhart (2008) and Hattie and Timperley (2007) provides specific criteria for effective feedback. Additionally, research from Black and Wiliam (1998), Butler and Nisan (1986), Butler (1987), Kohn (1999) and Sadler (1989) describe grades and report cards as ineffective feedback that provides negative consequences to students. Frequently, however, the only forms of actual feedback that many students receive about their progress and achievement are grades and report cards (Guskey & Bailiey, 2001; Marzano, 2006; Reeves, 2007).

What is feedback?

Feedback is conceptualized as information provided by a teacher regarding given aspects of a student's performance or understanding (Hattie & Timperley, 2007). Sadler defines feedback as information about how successfully something has been or is being done. Feedback is communication about the gap between where the student is in regards to the learning goal and where he or she should be (Hattie & Timperley, 2007; Ramaprasad, 1983; Sadler, 1989). Feedback helps teachers in regards to making instructional decisions based upon student progress and helps students monitor their own strengths and weaknesses (Sadler, 1989). Teacher feedback is a communication device that informs students on how to improve their performance in relationship to specific learning criteria.

Within actual feedback messages, the teacher can provide the student with useful information; corrections, alternative strategies, new activities that could be more relevant to the student, information about what they did well, and other suggestions for improvement (Black & Wiliam, 1998; Black et al., 2004; Hattie & Timperley, 2007; Sadler, 1989). To be instructional, feedback needs to provide the student with information specific to the task that fills the gap between what the student understands and what is supposed to be understood (Hattie & Timperley, 2007; Butler & Winne, 1995). As Gipps (1994) notes, for students to improve, they must have an understanding of the desired standard and compare their performance with the desired performance.

Students in a Butler and Nisan (1986) study who received commentary and feedback from the teacher made tremendous gains in achievement, while those who received either grades, grades with feedback or no feedback experienced declines in both

achievement and interest. This is a compelling indication that specific feedback, instead of grades, can improve student performance (Butler & Nisan, 1986; Butler, 1987). John Hattie (2003) describes the benefits for feedback as follows:

> It (feedback) can lead to increased effort, motivation or engagement to reduce the discrepancy between current status and the goal, it can lead to alternative strategies to understand the material, it confirms to the student that they are correct or incorrect, it can indicate more information is available or needed, it can point to directions that the students could pursue, and it can lead to restructuring understandings. (p. 7)

Specific feedback can improve student performance by making students more aware of their abilities in relationship to the standards, by providing students cues and hints on how to improve, and by helping them understand that they are capable of learning. Kluger and DeNisi found in their 1996 meta-analysis that the most effective feedback focuses on specific learning goals and when it is focused upon what students did correctly rather than on incorrect responses. Elawar and Corno (1985) specifically found that when students receive informative feedback explaining both strengths and weaknesses, they are more likely to demonstrate higher levels of intrinsic motivation towards the task at hand than those receiving just a grade.

Frequent feedback contributes to student success when the students adhere to the feedback (Stiggins & Popham, 2008). If classroom assessment works the way it should, teachers will select instructional tasks which coincide well with most students' achievement levels; students will be likely to learn successfully; on-going assessments will indicate to students a growing level of success with suggestions on how to improve further; and unsuccessful students will receive appropriate and individual guidance as to how to adjust their learning tactics so they will become successful (Bloom, 1984; Stiggins & Popham, 2008).

According to Brookhart (2008) and Sadler (1989), for students to improve, they must develop the capacity to monitor the quality of their own work while they are doing it. In order to do this, students need to have a clear understanding of the learning goals and of their own abilities in regards to the goals. Teacher feedback that combines the specific information about the student's work combined with feedback about the processes or strategies used to do the work are most helpful (Brookhart, 2008; Butler & Winne, 1995). Feedback that draws students' attention to their own abilities as learners can be extremely helpful to students if they perceive that they will improve with more effort and attention (Bandura, 1993; Brookhart, 2008; Butler & Nisan, 1986; Butler, 1987; Deci, 1995).

The reality is students receive very little quality feedback (Black & Wiliam, 1998; Black et al., 2004; Butler & Nisan, 1986; Butler, 1987; Hattie & Timperley, 2007; Hattie, 2002a,b; Wiggins, 1993, 1996). This could be related to the lack of teacher training (Crooks, 1988; Hattie & Timperley, 2007; Kluger & DiNisi, 1996; Wiggins, 1993) and/or the use of low-quality assessments which do not provide opportunities to give students quality feedback (Hattie & Timperley, 2007). Additionally, norm-referenced grading impedes the giving of quality feedback (Black & Wiliam, 1998 and 2004: Brookhart, 1997; Butler & Nisan, 1986; Butler, 1987;Guskey, 2007; O'Connor, 2002 and 2007). Some researchers find that reality cannot live up to the premise of research (Airasian & Jones, 1993; GrAmberam, 2005; Orwell, 2003). Students frequently claim that there is a lack of adequate and timely feedback and teachers claim that students fail to heed the advice given in feedback (Orwell, 2003). MacDonald (1991) concluded that teachers'

feedback often lacks thought or depth and that students often misunderstand their teachers' feedback.

Ineffective Feedback

Feedback can have a negative effect on students. Frequently, presentation of feedback is poor (Hattie & Timperley, 2007); the feedback provided does not relate to specific elements of the learning goal (Hattie & Timperley, 2007); the pattern of how teachers give and use feedback in class is incorrect or inconsistent (Berglas & Jones, 1978); and some efforts to improve feedback in schools backfire when the focus is more on student ability (Mueller & Dweck, 1998). When questioned in a study from Holmes and Smith (2003), students stated that instructors gave minimal or no feedback and no explanation of the grade; when students did receive feedback, it was negative and critical; teachers did not tell students how to improve; and the teachers did not explain the points or grading system. Sadler (1989) cites the lack of teacher knowledge in the subject area as a mitigating factor in providing quality feedback.

Hattie and Timperley (2007) found that the least effective forms of feedback include programmed instruction, praise, punishment and extrinsic rewards. They also found that there is a negative correlation between extrinsic rewards and task performance and that tangible rewards significantly undermined intrinsic motivation. Deci (1995) concluded that extrinsic rewards work negatively because they remove people's taking responsibility for motivating and regulating themselves. Kluger and DeNisi (1996) wrote that feedback that is focused on incorrect answers rather than details on correct answers and how to build from past performance is less effective.

Howie, Sy, Ford and Vicente (2000) found that the usual cause for negative or no student response to feedback has more to do with teacher presentation than students' faulty knowledge. Hattie and Timperley (2007) discovered that when feedback was administered by teachers in a manner that was controlling and forceful rather than instructive and helpful, the effects were significant in a negative manner (p.78).

Teachers need to know how to create and use feedback loops in the classroom. This requires a significant amount of knowledge about the learning targets (Butler & Winne, 1995; Sadler, 1989; Stiggins, 2008); about types of feedback (Hattie & Timperley, 2007; Sadler, 1989) and the development of ways and means for assisting students to bridge learning gaps (Hattie & Timperley, 2007; Sadler, 1989).

Grading

Report cards tend to be a key communication device used in schools; however, the expectation that one type of report can serve the purposes of all stakeholders is naive as is the premise that some calculated figure can accurately represent the net result of student work, effort, knowledge and understanding (Guskey & Bailey, 2001; Kohn, 1999; Marzano, 2000, 2006). Traditional report card grades where teachers have discretion to average both formative and summative assessments of any format, type or quality are flawed representations of student learning; are not aligned with research on effective classroom assessment and instruction; involve unfair qualities; are ineffective in encouraging more learning; disengage students from the act of learning; and impede the giving and receiving of descriptive feedback (Guskey & Bailey, 2001; Kohn, 1999; Marzano, 2000 and 2006; Reeves, 2004).

From a practical point of view, the grading practices that occur in most classrooms today are dated, stemming from practice established in the early 1900's when schooling became a reality for more students and teachers needed an efficient method of communicating achievement to parents (Guskey & Bailey 2001, Marzano, 2000). These classroom traditions carried on without the support of research and with the acknowledgment of many educators that the grades given most students were inaccurate representations of actual learning; lacked a criterion base; involved unfair practices; were not effective in promoting learning; pitted students against each other in competition; and did not align with standards-based teaching and learning practices (Guskey & Bailey, 2001; Marzano 2000, 2006; O'Connor, 2002; Reeves, 2007). Grading serves minimal if any function in communication and feedback in the classroom. In fact, research states that grading interrupts important feedback loops in classrooms (Black & Wiliam, 1998; Butler & Nisan, 1986; Butler, 1987).

Feedback Loops

There are multiple models for how feedback works in a classroom communication system. Wiggins' (2004) model for a feedback loop has four elements: standards, feedback, elements of evaluation, and elements of guidance. Rogers and Agarwala-Rogers (1976) have a similar model stating that the four elements of the communication process is source, channel, receiver, and feedback. Nicol and Macfarlane-Dick (2004) propose a more complex model for the creation of a feedback loop based upon the work of Black and Wiliam (1998), Butler and Winne (1995), Sadler (1989); Yorke (2003), and Torrance and Pryor (1998). This particular model shows how feedback can move back and forth between the teacher and student where the teacher provides instruction or a

task, the student completes the task or asks questions, the teacher responds with feedback, the student responds with a performance, and the teacher can respond again with feedback about the performance.

A feedback loop is the free-flow of information back and forth and the use of specific language by the teacher that leads the students to improve their performances. The important elements of this loop for teachers to consider is the quality of the assignment or assessment and how it aligns with the learning goal and the quality of the feedback to the student as it connects the student performance to the learning goal. If the teacher fails to provide students with information (that they can understand and use) on how to improve based upon prior performance, the feedback loop becomes broken.

Quality Assessment

Quality classroom assessment produces information that is used to maximize student learning (Stiggins, Arter, Chappuis & Chappuis, 2004). Quality assessment is a system of assessing what students know and are able to do in a manner that garners accurate information from students for the purpose of improving learning (Stiggins, 2008). Assessment formats and questions should align with the standards. The design of the assessment should be fair to students so that students are not intimidated by the assignment but are encouraged to demonstrate their proficiency at a goal with which they are familiar (Reeves, 2007; Stiggins, 2008; Wiggins, 1993, 1996). As Wiggins (1993) notes, “Learning cannot take place without criterion-referenced assessment, no matter how good the teaching” (p. 12). Results of assessments should be communicated in a timely manner and should be in language that students understand and can use to better their future performances. Quality assessment is a tool in a feedback loop between

students and teachers where the teacher uses the assessment information to guide next steps and to give the students feedback on where they are, where they are going and how to bridge any gaps (Hattie, 2003; Hattie & Timperley, 2007). Further, it affords students the opportunity to demonstrate their accomplishments and progress (Stiggins, 2008). Successful learning warrants teacher adjustment in response to feedback and effective teaching warrants accurate performance information via quality assessments. Wiggins (1993) states, "Assessment done properly should *begin* conversations about performance, not end them" (p. 13). The purpose of assessment is to assist and inform the teacher and the learner.

One particular element of classroom assessment that is of significant assistance to student achievement is the nuance that frequent assessment illuminates miscues and misunderstandings that can be corrected early in the learning process (Bloom, 1984; Hattie, 2003; Stiggins, 2004) When students attempt to move forward in their studies with misunderstandings, they mis-learn new topics lacking the foundational understanding needed to progress. Quality assessment is an opportunity for teachers to provide students quality feedback information that answers Hattie's (2003) three feedback questions: "Where am I going?" "How am I going?" And "Where to next?" (p. 14). Classroom assessment activities in this vein help learning by providing information to be used by teachers in order to plan future lessons and interventions and by students in assessing themselves. Frequent classroom assessments provide the continuous feedback that teachers and students need to propel learning forward, "fixing" misunderstandings as they occur instead of allowing the mistakes in understanding to continue until they are more difficult to correct (Hattie, 2003). Marzano (2006) states, "Major reviews of

research on the effects of formative assessment indicate that it might be one of the more powerful weapons in a teacher's arsenal" (p. 13).

In 1968, Block and Anderson provided insight into Bloom's Mastery Learning approach in their book, *Mastery Learning in Classroom Instruction*. This book highlights the teacher practices that are paramount to Mastery Learning, including the use of formative assessment to inform instruction. Specifically, it highlights how teachers use formative assessment to provide differentiated instructional activities to various students based upon the needs illuminated by the formative assessments. In 1984, Benjamin Bloom provided some research on the effectiveness of two models of instruction: mastery learning and one-on-one tutoring of individual students. The common and compelling element of both of these modes of delivery involves the extensive use of classroom assessment for learning and the use of specific and immediate teacher feedback as pivotal parts of the instructional practice. The analysis provides evidence that these delivery models provide differences in student achievement ranging from one to two standard deviations (Stiggins, 2004).

If we view assessment as a means to improve learning and a practice with consequences for students lives (Brookhart, 2004), then it is of paramount importance that educators align teaching practice, assessment techniques, and grading procedures. If the purpose of schooling is to support learning and knowing and the purpose of grading is to communicate what has been learned and achieved, then paradoxes and dilemmas exist with grading that should be addressed by school districts. Delandshere (2002) asks, "Can assessment whose function is to support learning coexist with assessment whose function is to reward or penalize learners, teachers or schools?" (p. 146).

Feedback, Assessment and Grading

While traditional grades are recognized by scholars and some practitioners as inherently inaccurate, unfair and ineffective (Guskey & Bailey, 2001; Kohn, 1999; Marzano, 2006; Reeves, 2006), they are the preferred method of reporting by many parents and students (Brookhart, 1997; Cross & Frary, 2000). The norm-referenced system is so prolific, some parents and students have accepted that getting A's is the point of school (Kohn, 1999). For some people, inaccurate grades (that is, grades which do not reflect what was learned) are acceptable if they are in a format that they like and/or are familiar (Cross & Frary, 2000). However, when grading is considered simultaneously with improving the instruction and assessment in classrooms, that which is familiar and comfortable for some is a mismatch for the success of teachers and students (O'Connor, 2002; Reeves, 2006). While researchers and leaders encourage teachers to use multiple assessment methods and measures (Black & Wiliam, 1998; Stiggins, 2008), schools fail to provide teachers a grading procedure which honors engaging classroom practice that encourages student thinking (Seeley, 1994). Kohn (1999) concludes that students given traditional numerical grades are less creative than those who receive feedback and no grades. Reeves (2007) concurs, writing that traditional grading "…promotes a culture of point accumulation instead of learning, encourages competition rather than collaboration, and often focuses on activities instead of results" (p. 83).

Traditional grading is norm-referenced. An alternative to norm-referenced grading is standards-based or criterion-referenced grading. The standards-based system of grading is based on learning goals and performance standards and one grade is given for each learning goal (Reeves, 2007). Teachers in a standards-based system keep records of how well students are doing based upon individual learning goals or standards (Marzano, 2006; O'Connor, 2007; Reeves, 2007). Criteria and targets are known to teachers, students and parents alike (Marzano, 2006; Stiggins, 2004). To arrive at the grades on each standard, teachers use judgment based upon predetermined criteria for meeting the standard as well as honoring the most recent assessment evidence (Marzano, 2006; O'Connor, 2007; Reeves, 2007;) rather than averaging and number-crunching. In this way, there is no average to cloud the fact that while the children could have struggled early in the learning process, they ultimately met the standard or learning goal. Teachers measure achievement only and include only individual evidence and summative assessments (Reeves, 2007). Thus, the grade received reflects the standards achieved and is an indication of where the student is after the learning unit or grading period is complete.

McMillan (2009) writes, "Getting teachers together to develop and implement consistent grading practices that are based primarily on student achievement could be the most important impact of standards-based grading" (p. 107). Teacher accountability for the teaching and learning of the standards is supported by the record-keeping and reporting methods that align with the standards (Marzano, 2006). Standards-based grading can result in more consistency in how grades are delivered as well as what the grades mean (McMillan, 2009). Given that the grade is based upon descriptive criteria,

many quality assessment methods can be used to garner evidence about student achievement of the standards (Reeves, 2007) and teachers can provide specific feedback to students about their performances. Standards-based grading holds the promise of greater consistency between classroom grades and state assessments (McMillan, 2009).

Conclusion

Research indicates that teachers should provide students with descriptive and specific feedback to improve student performance, and yet as also indicated there are structures in schools that impede the giving and receiving of meaningful feedback. One such structure is traditional grading and reporting. Change in the areas of grading and reporting has been difficult for many school systems (Guskey, 2009; Marzano, 2006; Seeley, 1984). Changes in grading and reporting policies and procedures can achieve many things: create more accurate grades that better communicate student achievement (Marzano, 2006; O'Connor, 2002, 2007; Reeves, 2007); provide more support for classroom assessment practices that are linked to improved student achievement and motivation (Black & Wiliam, 1998; O'Connor, 2002; Reeves, 2007); better align assessment and grading (Reeves, 2006 and 2007); and can create the proper context for teachers to give descriptive feedback (Hattie & Timperley, 2007). McMillan (2009) writes, "The fundamental purpose of standards-based grading is to compare student performance to established levels of proficiency in knowledge, understanding and skills" (p. 108). In classrooms where grading is standards-based, the teacher is focused on assessing students' abilities to achieve the standards and uses that assessment evidence to guide further instruction. In this way, feedback is easier for teachers to provide given that the teacher is not required to count or generate a certain number of grades and rarely (if

ever) need to generate numeric grades or averages. The teacher and the student can focus on learning and improvement and the standards-based context is conducive to giving descriptive feedback to students.

While the research indicates that standards-based grading has implications for the nature of feedback teachers provide students (McMillan, 2009), it is unclear if teachers in standards-based classrooms actually provide quality feedback to students and if they use feedback loops to improve student performance. Crooks (1988) writes that "…feedback is most effective if it focuses students' attention on their progress in mastering educational tasks. Such emphasis on personal progress enhances self-efficacy, encourages effort attributions, and reduces attention to social comparison" (p. 461). The purpose of this case study is to use the research on feedback and grading to study the feedback teachers actually provide to students in a school district where grading is standards-based; where there is the infrastructure to provide students with informative feedback without having to use comparative grading.

CHAPTER 2

LITERATURE REVIEW

Introduction

The purpose of this literature review is to provide a research-based foundation about the nature of feedback and its relationship with assessment and grading. Research indicates that while the giving of feedback is an effective means to improve student achievement and motivation, the actual implementation of feedback loops and the giving of quality feedback by teachers are in reality, rare and complicated. In addition to the research on the positive impact feedback can have on students and teachers, this paper will also spend significant time and space illuminating what quality feedback is and what researchers of feedback should study. Providing students with quality feedback can improve student motivation and achievement and changing grading and reporting policies and/or procedures can improve the ability of teachers to provide quality, descriptive feedback to students. As McMillan (2009) notes, “Standards-based grading has clear implications for the nature of feedback students receive” (p. 117).

Feedback Practice

There is considerable evidence that providing feedback in the form of written comments is more effective than providing grades (Black & Wiliam, 1998; Butler, 1987, 1988; Butler and Nisan, 1986; Crooks, 1988; Hattie & Timperley, 2007). Page (1958) found that feedback in the form of short written comments rather than grades alone

significantly improved the test performance of children. Sadler (1989) emphasized the necessity of feedback and self-monitoring. The use of quality feedback in the classroom assists the teacher in making instructional decisions (Hattie & Timperley, 2007; Stiggins, 2008); assists the students in knowing how they are doing and what they have to do to improve (Brown & Epstein, 1977; Black & Wiliam, 1998; Butler & Nisan, 1986; Butler, 1997, 1998; Zimmerman, 1990); and helps parents better understand their students' performances and achievement (O'Connor, 2007). Additionally, some of these researchers have found that traditional grades of letters or numbers can have a negative effect on students (Black & Wiliam, 1998; Butler & Nisan, 1986; Butler, 1986, 1987). Black et al. (2003) state that while student learning can be advanced by feedback through comments; the giving of numerical scores or grades has a negative effect. Students ignore comments when marks are also given. Thus, the literature indicates a need to provide students with quality feedback that is not in the form of numeric grades. Further, McMillan (2009) notes that the nature the feedback is important as is the frequency of the feedback.

Hattie and Timperley (2007) created a conceptual analysis of the topic of *feedback* in order to define the term and they created a model for implementing feedback in the classroom. Hattie and Timperley (2007) conclude that "It is the feedback information and interpretations from assessments, not the numbers or grades that matter" (p. 104) and that using feedback intervention are likely to yield "impressive" gains in student performance.

In 1985, Elawar and Corno argued that informative feedback enhances student motivation and performance. In their study, they divided 504 sixth grade students into

three groups and each group was provided a different form of feedback. One group received specific informative feedback that included suggestions on how to approach future work. The second group received information on the correctness of their work only. In the third group, half the class received the informative feedback while the other half received correctness information only. The authors found that enjoyment and attitudes toward mathematics improved when students were given informative feedback. Additionally, student achievement also improved in the feedback-only group. Students in the correctness-only group showed limited growth in achievement and attitudes. However, the researchers found that while 95% of the teachers saw the value in using informative feedback, 70% thought it took too much time.

In 1998, researchers Paul Black and Dylan Wiliam authored a meta-analysis that provides conclusive evidence that improving classroom assessment practices by giving specific and descriptive feedback improves student achievement. Further, Stiggins' (2004) findings indicate that classroom teachers have the power to use classroom assessment to trigger large achievement gains through deep student involvement in daily assessment, record-keeping based on standards attainment, and communication.

The Black et al. follow-up article in 2004 describes several programs which drew on the ideas in the original article and describes teacher classroom practices. This research led the authors to claim, "Research experiments have established that, while student learning can be advanced by feedback through comments, the giving of numerical scores or grades has a negative effect, in that students ignore comments when marks are also given" (Black et al., 2004, p. 13). In 2003, this same team wrote that giving numerical marks to students removes the opportunity for students to learn from their

work and takes away any impact a teacher can give through feedback. The teachers in the 2004 studies found ways to give students descriptive feedback. The authors also discuss in detail the type of classroom culture that is necessary and nurtured when assessment *for* learning defines the teacher/student relationship. According to Hattie and Timperley (2007), assessment can and should be considered to be activities that provide teachers and students with feedback that can lead to connecting where students are currently with where they need to be.

Experimental studies link the feedback given to students to their motivation to achieve. Butler and Nisan (1986) found that students who received task-related comments instead of grades or no feedback had higher levels of motivation and achievement than other students who had grades or no feedback. They further found that grades may create a focus on the quantitative aspects of learning, stifle creativity, foster fear of failure, and undermine student interest in learning (Butler & Nisan, 1986). They also found that grades undermine future interest in achievement. In a similar study, Butler (1987) found that "…individual comments (feedback) yielded higher task-involved perceptions and lower ego-involved ones than either grades or praise" (p. 476). Butler concluded that students who received feedback (task-involving information) had higher interest, performance and effort towards the task than other students. Butler concluded that both interest and performance will be maintained or enhanced by individualized comments that focus the students' attention towards the task demands and mastery. In 1988, Butler called into question "…the whole classroom culture of marks, grades, gold stars, merit awards, competition rather than personal involvement" (p. 12) stating that the use of extrinsic rewards does not support higher student achievement. She found that students

who received both comments and grades were more likely to recall the grade rather than the comments they had received. Similarly, Brown and Epstein (1997) also compared types of feedback such as in the Butler studies and found that low-performing students responded better to feedback and viewed grades as negative reinforcement.

Zimmerman's (1990) research points to the importance of schools having a systematic way of developing students' abilities to self-regulate their own learning and indicates that student self-regulation depends on their receiving continuing feedback of learning effectiveness. Zimmerman's (1990) research also concludes that student awareness of learning outcomes is critical to their success and that children should be trained to *use* the feedback that teachers give them. He describes how feedback should provide students hints and guidance as to specific strategies to try in order to improve, not only on the given task or concept, but strategies that will help them regulate their own learning in the future. He says, "…students who display initiative, intrinsic motivation and personal responsibility achieve particular academic success" (p.14). As noted in the research above, feedback is only effective to the degree it provides students needed information that supports effort and commitment and improvement of performance.

Cleary and Zimmerman (2004) used a graphing technique to teach students self-regulation strategies. They concluded that teaching students specific strategies to intervene in their own learning has strong implications for student achievement and that the feedback students receive from teachers influences the students' ability to reflect on performance outcomes. They note, "If a teacher simply marked the number of incorrect items and wrote a student's grade on the test, the student would be left to figure out the specific reasons for the failure and the strategies needed to employ for future tests" (p.

548). This study has implications not only for teaching self-regulation strategies but also for what a process of providing student feedback should entail.

According to Bandura (1993) efficacy beliefs influence cognitive, motivational, and affective processes. He says that the comparative information (norm-referenced rather than criterion-referenced feedback) provided for children in schools can have a tremendous impact on self-efficacy. He notes, "….learning environments that construe ability as an acquirable skill, that deemphasize competitive social comparison, and highlight self-comparison of progress and personal accomplishments are well suited for building a sense of efficacy that promotes academic achievement" (p. 125). Further, Butler and Nisan (1986) found that students who received traditional grades showed anxiety towards each task and worked more for the purpose of avoiding failure and experienced drops in achievement and interest. Thus, self-efficacy is strengthened when grading is standards-based (McMillan, 2009). Thomas (1993) wrote that while grades can be informative in respect to a student's standing in the course, they do not help students to know how to study more and how to improve. In addition, Deci (1995) argues that student motivation should be developed in schools and classrooms where the culture is such that children learn to motivate themselves. He refers to the ills of using grades as extrinsic rewards as well as having a "testing" culture where kids are controlled by the teacher knowing something they do not. Deci (1995) contends, "Those (students) who learned the material without expecting to be tested displayed superior conceptual understanding relative to those who were expecting to be tested" (p. 48). He concludes that, "… it seems pretty clear that learning will be greater when prompted by intrinsic motivation rather than external controls" (p.49). Further, he cautions against the use of

grades, praise, extrinsic rewards and competitions. McMillan (2009) concurs, “Standards-based grading can lead to more of a mastery goal orientation with intrinsic motivation” (p. 116).

When describing the results of classroom trials, Black et al. (2003) cite specific cases where students who believe they are unlikely to succeed on a task tend to give up easily on the task to protect their self-esteem. The authors further state that “…those who repeatedly receive low marks or grades therefore come to believe that they cannot succeed and tend to disengage from learning” (p. 76). The research on the importance of providing students with descriptive feedback and the research on the impact of grades guides the current movement of grading systems that support teachers to provide specific feedback to students instead of numeric grades (Black & Wiliam, 1998, Black et al. 2003, 2004; Butler, 1987, 1988; Butler & Nisan, 1986; Hattie & Timperley, 2007; Wiggins, 1993).

The Role of Assessment in Providing Feedback

When teachers improve their classroom assessment practices they increase student achievement (Black & Wiliam, 1998; Black et al., 2003, 2004; Hattie & Timperley, 2007; Marzano, 2000; Stiggins, 2008) and they help increase student self-efficacy (Butler & Nisan, 1986; Butler, 1987, 1988). By helping students recognize ways to improve, they help students understand that achievement is not hopeless (Bandura, 1993; Butler & Nisan, 1986; Butler, 1987 and 1988; Deci, 1995; Guskey & Bailey, 2001; Stiggins, 2008) and ensure that the learning targets are clear and understandable (Stiggins, 2008; Wiggins & McTighe, 1998). Improved classroom assessment informs the instruction that the teacher should provide students (Black & Wiliam, 1998; Block &

Burns, 1976) and provides every student with a fair and valid opportunity to learn (Reeves, 2007; Stiggins, 2008).

Otero (2006) proposed a “theory-enhanced” model to explain formative assessment. Using Vygotsky’s theory of concept formation, Otero explained that students’ knowledge consists of experience-based concepts and formal academic concepts. She argued that learning takes place when formal concepts presented by teachers are transformed and connected by the learner to his or her own experiences. To her, “recognizing, describing, and using students’ prior knowledge in instruction is the formative assessment process” (p. 250).

Stiggins’ (2004) work focuses on assessment where the evidence collected by the teacher from the student is used to plan and guide further instruction. He writes that teachers can make a significant difference in both the personal and academic success of students if they create a classroom culture where assessment is a natural blend with instruction. Stiggins’ (2008) *Assessment Manifesto: A Call for the Development of Balanced Assessment Systems* provides policy-makers the information they need to support change. He writes, “We have in hand a new vision of excellence in assessment that will tap the wellspring of confidence, motivation, and learning potential that resides within every student. The time has come to embrace it” (p. 11). Black, et al. (2004) chronicle the work of teachers experimenting with assessment for learning and comments-only grading and state that when the teachers focused their feedback on improvement rather than comparing students, excellence became based upon improvement and achievement. These authors link assessment for learning, grading, feedback with student motivation and achievement.

Feedback Loops

Wiggins (2004) states student motivation and achievement results when teachers use a feedback loop where they communicate with students using quality feedback (2004). Further, Senge (2006) writes that feedback is actually a "…reciprocal flow of influence" in systems, suggesting that in education, a learning system is based upon the flow of information back and forth between students and teachers about performances.

Wiggins' (2004) quasi model for a feedback loop has four elements: standards, feedback, elements of evaluation, and elements of guidance. Rogers and Agarwala-Rogers (1976), as noted in Chance and Chance (2002), proposed a similar model in their work with organizational communication, stating that the four elements of a communication process is source, channel, receiver, and feedback. In the Rogers and Agarwala-Rogers model, feedback is considered the response of the receiver, stating that the receiver is the most important element of the loop and that the receiver requires quality feedback in order to respond. It is up to the source to care about the performance of the receiver. In education, this model could apply as the teacher provides the task, the student completes the task, the teacher assesses student performance and then provides feedback.

Nicol and Macfarlane-Dick (2004) propose a more complex model for the creation of a feedback loop based upon the work of Sadler (1989); Black and Wiliam (1998); Yorke (2003); Torrance and Pryor (1998); and Butler and Winne (1995). This particular model shows how feedback can move back and forth between the teacher and student and how elements of the information can be both internalized and utilized. In this model, an academic task provided by the teacher is the starting point for the feedback

loop. From there, the student compares the information from the teacher both with what they already know and their motivational beliefs. The student then creates his or her own goals, selects tactics and strategies for attacking the task, uses any self-monitoring techniques they know, and then completes the task. The teacher or other assessors then view the performance and provide external feedback. Nicol and Macfarlane-Dick (2004) describe the steps of the feedback loop as follows:

Figure 1: Steps of the Feedback Loop

Step A: Teacher sets task (goals/criteria/standards)

Step B: Domain knowledge, strategy knowledge, motivational beliefs

Step C: Student goals

Step D: Tactics and strategies

Step E: Internal learning outcomes

Step F: Externally observable outcomes

Step G: External feedback (teacher/peers/employers)

Return to Step B.

While complicated, this model indicates the internal processing of tasks and feedback by the student and suggests that teachers and schools should not only be about the teaching of content, but of processes for students use to assess and monitor their own work (Nicol & Macfarlane-Dick, 2004). A diagram is provided in Appendix E.

Quality Feedback

Narciss (1999) found that the degree of detail of feedback influences student motivation. Hattie writes that detailed feedback provides students answers to the questions “Where am I going, How am I going? And Where to next?” (Hattie, 2003; Hattie & Timperley, 2007) and they recommend teachers design assessments that garner the information to help answer these questions. The main purpose of feedback is to reduce discrepancies between the current performances of students and the intended goal. When feedback is designed to answer the key three questions in language targeted for students, it has great potential to be an effective link between achievement and motivation.

McMillan (2007) provides eight characteristics of feedback. He writes that feedback is helpful when it relates performance to standards, relates performance to strategies, indicates progress and indicates corrective procedures. Additionally, McMillan (2007) says that feedback should be provided frequently and immediately, should be specific and descriptive, should focus on the key errors, and should focus on effort attributions.

Hattie and Timperley (2007) refer to the four levels of feedback: feedback about the task; feedback about the processes involved in doing the task; feedback about self-regulation; and feedback about the self as a person. These authors state that feedback about the self as a person is the least effective, whereas feedback about self-regulation and processes are powerful in regards to mastery of goals and feedback about the task is powerful when learning about a task has implications for improving processing and/or self-regulation.

Task feedback is included within corrective feedback (Hattie & Timperley, 2007). This type of feedback is most common and relates to correctness and criterion related to task accomplishment (Butler & Winne, 1995; Hattie & Timperley, 2007). The work of Butler and Nisan (1986) and Butler (1987) specifically exposes the impact of task feedback on student achievement and motivation. It is most powerful when it addresses misconceptions and when it is focused on helping move students from the given task to self-regulation strategies (Hattie & Timperley, 2007; Butler, 1987). Feedback about the task has great potential to benefit students by helping them reject mistaken hypotheses and by providing cues for improvement. In this way, it provides students the message that the problem is not personal and is surmountable (Bandura, 1993; Butler & Nisan, 1986; Butler, 1987; Deci, 1995; Hattie & Timperley, 2007). Thus, there is compelling evidence that providing task-based comments is more effective than providing grades (Black & Wiliam, 1998; Butler, 1987; Crooks, 1988; Hattie & Timperley, 2007).

The benefits of task feedback depend heavily on learners' being attentive to the cues provided, having a good memory of the task when the feedback is provided, and internalizing the feedback (Butler & Winne, 1995). Research from Schommer (1990) and Chinn and Brewer (1993) suggest that feedback's effectiveness is often mediated by a learner's knowledge and beliefs. In order to better guide learning, feedback should provide information about performance on the task but should also provide students cues on how to use the feedback to improve (feedback on the processes) (Butler & Winne, 1995).

Feedback that is more specific to the processes used in problem solving and task mastery is called process feedback. Feedback on the processes has more to do with

learning how to learn, construct meaning, seek out relationships and transfer knowledge to more difficult or novel tasks (Hattie & Timperley, 2007). Forms of process feedback help students become self-assessors and help them know how to detect errors and to provide internal feedback. Cues on how to improve using specific processes help students understand that with further effort or modified plans, they can achieve their goals (Butler & Winne, 1995). In this way, feedback at the process feedback level is more effective than task feedback for enhancing deeper learning (Hattie & Timperley, 2007).

Students with self-regulating feedback learn how to assess themselves and they learn how to identify times when they need additional help. Feedback is most effective to the degree that it directs information to enhanced self-efficacy and effective self-regulation, when attention is then redirected back to the task at hand and if it causes students to invest more effort to the task (Hattie & Timperley, 2007; Kluger & DeNisi, 1996). In this way, feedback on self-regulation combined with task feedback is extremely effective and is likely to "…yield impressive gains in performance, possibly exceeding 1 SD" (Kluger & DeNisi, p. 278). Therefore, there is considerable evidence that feedback (task, process, and/or self-regulation) helps students to attribute performance to something that is controllable such as effort and engagement (Bandura, 1993; Butler & Nisan, 1986; Butler, 1987; Hattie & Timperley, 2007).

Feedback about the student is often provided by teachers. Frequently, feedback about self is provided in the form of praise and includes little information about doing the task, achieving the goal, or improving processes. As Hattie and Timperley (2007) note, "The effects at the self level are too diluted, too often uninformative about performing the task, and too influenced by students' self-concept to be effective" (p. 103). Feedback

about self information has little value to produce learning gains (Butler & Nisan, 1986; Butler, 1987; Deci, 1995; Hattie & Timperley, 2007) and yet is the most prolific type of feedback in classrooms (Hattie & Timperley, 2007).

Teachers not only need to understand types of quality feedback and the appropriate time to provide each, there are other elements of feedback and communication to consider. Experiments by Schroth (1992) and Andre and Theiman (1998) state that most feedback studies investigate the amount of information in the feedback message rather than the actual content or classroom context, however, there are some exceptions. Brookhart (2008) discusses elements of feedback practice that are important for teachers to consider, such as timing, amount, mode and audience and highlights “good” and “bad” practices associated with each. Teachers need to time their feedback so that students are still mindful of the learning target and can still act upon it (Brookhart). Brookhart suggests that teachers return tests to students the next day and provide immediate oral answers when facts are involved. Additionally, Brookhart suggests that teachers give immediate responses to student misconceptions and help students use self-checking methods when there are right/wrong answers. In addition, Kulik and Kulik (1988) found that immediate feedback generally enhances learning of content whereas delayed feedback seems to improve achievement when the purpose of the instruction is both content and process strategies. Effects of feedback timing have been investigated in applied studies (classroom quizzes and programmed assignments); in experiments on test content; and experiments on list learning (Kulik & Kulik, 1988). In applied studies, immediate feedback was usually superior to delayed feedback. In experiments on test content, immediate feedback was almost always inferior to delayed

feedback; and in list-learning experiments, the timing of feedback was variable (Kulik & Kulik, 1988). Schroth (1992) found that content feedback only enhanced learning in the initial stages of learning. Clarianna, Wagner, and Murphy (2000) found that immediate feedback is more vital for task feedback and delayed feedback more powerful for process feedback, stating that more complicated tasks require more processing time. Therefore, research indicates that the quality of feedback is not only dependent upon the content, but on the timing, content and context.

Regarding the appropriate amount of feedback, Brookhart (2008) cautions that students should get "enough" so they understand what to do but not so much that the student isn't required to do any thinking and reflection. She suggests two or three main points be made per paper and limiting comments to the most important learning targets. She also suggests that teachers provide as many strength statements as weakness statements and cautions against voluminous comments that can overwhelm the student. The purpose is to encourage students to think and become good self-assessors as well as to benefit from the feedback that is provided (Brookhart).

Feedback can be delivered in many ways. Different types of assignments naturally lend themselves to different types of feedback (Brookhart, 2008). Some assignments are a fit for written, descriptive feedback; some to oral feedback; and some to demonstrations (Brookhart). Many assignments and assessments are a good fit for teacher-student conversation. The key is for teachers to use the appropriate mode of feedback, such as written comments for when students should read and ponder the information or oral feedback when students are poor readers or when there are too many comments for the students to read and comprehend (Brookhart). Teachers can use demonstrations when the

student needs to see how to do something. The mode is important to consider in regards to what has to be learned and what type of assignment is provided.

Effective feedback is provided by teachers when they have a strong sense of audience (Brookhart, 2008). It is especially effective when the teacher makes comments in terms that are understandable by the student and that are personal about individual student growth. There are moments when feedback can be provided to a group of students, when all or most members of the group have the same misconceptions. The purpose is for students to get descriptive and relevant feedback and for the teacher to clearly communicate that student learning is valued (Brookhart).

Additionally, a classroom culture that focuses more on learning and less on the evaluative nature of testing and grading allows student engagement to be enhanced by quality feedback (Hattie & Timperley, 2007; Kohn, 1999). Kluger and DiNisi (1996) found that negative feedback is more powerful at the self level and both negative and positive can be effective at the task level but differential effects of positive and negative feedback at the self-regulation level. The dependent variable in regards to when and how to use this feedback has a lot to do with whether students have formed a commitment to the task or not. Positive feedback can increase the likelihood that students will persist in an activity and exhibit more interest in the activity (Deci, 1995; Hattie & Timperley, 2007).

Feedback and Feedback Loops

The aim of quality feedback and feedback loops is to facilitate the development of student self-reflection in learning (Black & Wiliam, 1998; Butler & Nisan, 1986; Butler, 1987; Butler & Winne, 1995; Nicol & Macfarlane-Dick, 2004); to encourage teacher and

peer dialog about learning (Nicol & Macfarlane-Dick, 2004); to help clarify what good performance is (Hattie & Timperley, 2007; Nicol & Macfarlane-Dick, 2004; Sadler, 1989); to provide opportunities to close the gap between current and desired performance (Nicol & Macfarlane-Dick, 2004; Hattie & Timperley, 2007; Sadler, 1989); to deliver high quality information to students (Nicol & Macfarlane-Dick, 2004); to encourage positive motivational beliefs (Black & Wiliam, 1998; Butler & Nisan, 1986; Butler, 1987; Hattie & Timperley, 2007; Nicol & Macfarlane-Dick, 2004;) and to provide information to teachers that can be used to design further instruction (Hattie & Timperley, 2007; Nicole & Macfarlane, 2004; Wiggins, 2004). While the content of feedback is absolutely vital, teachers need to learn strategies for implementing the use of quality feedback. Feedback is more valuable when used well by the teacher and student.

Black et al. (2003) found that implementing a change in classroom assessment is closely linked with teacher pedagogy and self-perception. These authors discuss the patterns in classroom practice that they witnessed in their study schools such as higher-order questioning, giving of descriptive feedback, sharing criteria with learners, and self-assessment. Their book discusses how some teachers' efforts to implement assessment for learning were hampered by grading practices that were incompatible and that the exemplary implementation of assessment for learning and strong pedagogy occurred in places where the giving of feedback was not impeded by the need to create traditional grades. The researchers found that some teachers specifically stated early that comment-only marking is what was needed to fully implement the giving and receiving of feedback in an effective manner. Black et al. had several conclusions including the following:

> What is new is that formative assessment provides ways for teachers to create classrooms that are more consistent with the research on learning. A

> focus on formative assessment does not just add on a few techniques here and there—it organizes the whole teaching and learning venture around learning and supports teachers in organizing the learning experiences of their students more productively. (p. 79)

When feedback is combined with effective instruction in classrooms, it can be very powerful in enhancing learning (Black et al. 2003; Brookhart, 2008; Hattie & Timperley, 2007).

Negative Effects and Considerations

Feedback can have a negative effect on students. Hattie and Timperley (2007) state that poor presentation of feedback is usually the cause of feedback having little, no or a negative effect on students. Ineffective feedback is that which does not relate to achieving clear or specific elements of the learning goal (Hattie & Timperley, 2007). Inconsistent or "chaotic" feedback (Berglas & Jones, 1978) does not assist students in being able to repeatedly use feedback effectively and therefore can derail schools or teachers who have long-term goals of improving feedback and student feedback response. Mueller and Dweck (1998) found that some efforts to improve feedback in schools backfire when the focus is more on student ability and thus the teachers reported poorer student performance and lower enjoyment of tasks.

Classroom climates are critical. In locations where teachers and administrators stress that the purpose of assessment and feedback is to improve learning, students respond to feedback that addresses the three feedback questions with more success (Hattie & Timperley, 2007; Kluger & DeNisi, 1996). Student engagement is more likely to improve or remain positive when the nature of the classroom is on learning, rather than on competition and evaluative information (Hattie & Timperley, 2007). One goal of improving feedback to students is to improve their self-efficacy, and yet when the

classroom culture does not support risk taking towards more learning there are mixed and unpredictable messages provided students; messages which mitigate the effectiveness of feedback (Hattie & Timperley, 2007). Hattie and Timperley (2007) state, “Teachers need to view feedback from the perspective of the individuals engaged in the learning and become proactive in providing information addressing the three feedback questions and developing ways for students to ask these questions of themselves” (p. 101). Creating a climate for the giving and receiving of feedback is vital.

Students with low self-efficacy can have a variety of reactions to positive feedback (Bandura, 1993), and they could become satisfied with early success rather than seek further effort and achievements (Hattie & Timplerley, 2007). How students attribute the causes of deficits can affect the effectiveness of feedback (Bandura, 1993) and the impact of feedback in general can depend upon the classroom circumstances (Hattie & Timperley, 2007). Howie, Sy, Ford and Vicente (2000) found that the usual cause for negative or no student response to feedback has more to do with presentation than students’ faulty knowledge, however both Schommer (1990) and Chinn and Brewer (1993) find that feedback is mitigated by student knowledge and belief systems. Bangert-Drowns, Kulik, Kulik and Morgan (1991) concluded that feedback is effective to the extent that it “…empowers active learners with strategically useful information” (p. 214).

The reality is students receive very little quality feedback (Black & Wiliam, 1998 and 2004; Butler & Nisan, 1986; Butler, 1987; Hattie & Timperley, 2007; Hattie, 2002; Wiggins, 1993, 1996;). This could be related to the lack of teacher training (Crooks, 1988; Hattie & Timperley, 2007; Kluger & DiNisi, 1996; Wiggins, 1993) and/or the use of low-quality assessments which do not provide opportunities to address the three

questions (Hattie & Timperley, 2007). For teachers, this final issue can be addressed by devising activities and questions that provide feedback to them about both the students' learning and the teachers' own teaching (Hattie & Timperley, 2007; Stiggins, 2008). Teachers need to seek and learn from feedback as well as students.

Teachers need to know how to create and use feedback loops in their classroom. This requires a significant amount of knowledge about the learning targets (Butler & Winne, 1995; Sadler, 1989; Stiggins, 2008); about types of feedback (Hattie & Timperley, 2007; Sadler, 1989) and the development of ways and means for assisting students to bridge learning gaps (Hattie & Timperley, 2007; Sadler, 1989). In addition, creating a climate for learning rather than a climate of competition and rewards is an important task for which teachers need knowledge, skill, and ability (Black & Wiliam, 1998; Butler & Nisan, 1986; Butler, 1987; Sadler, 1989). Sadler (1989) states, "The transition from teacher-supplied feedback to learner self-monitoring is not something that comes about automatically" (p. 143). Wiggins (2004) also states that in his many years of observing schools and workplaces, he has rarely seen ideal feedback systems.

Students frequently claim that there is a lack of adequate and timely feedback, and teachers claim that students fail to heed the advice given in feedback (Orwell, 2003). Holmes and Smith (2003) found that students report that instructors provide minimal or no feedback and no explanation for the grade, and feedback that is negative and critical without hints or cues to improvement. Pre-service teachers have significant concerns over many issues related to grading and giving feedback, especially how to grade fairly, how to motivate students, and the time required to assess students (GrAmberam, 2005). Researchers are often dismissed by teachers as unrealistic, impractical or irrelevant

because they do not address the complexity and competing pressures in their classrooms (Airasian & Jones, 1993). This perhaps foreshadows the results of this case study.

Traditional grading can provide a climate that is not conducive to the giving and receiving of feedback by setting the teacher up as evaluator (Brookhart, 1997), supporting the use of sub-quality assessment (Wiggins, 1993) and lowering students' interest in learning (Black & Wiliam, 1998; Black et al. 2004; Butler & Nisan, 1986; Butler, 1987; Kohn, 1999). Kohn (1999) states that traditional grades tend to lower students' interest in learning, reduce students' interest in challenging tasks, and decrease the quality of students' thinking. He writes that research has repeatedly shown that students show less interest in learning as a result of being graded and that a focus on grading shifts students' to thinking about how to get the grade rather than on learning. Black and Wiliam (2004) add that traditional grading practices tend to promote competition rather than personal improvement and that test scores or grades tend to have a negative impact on student achievement. Further, Deci (1995) notes that, "For the type of engagement that promotes optimal problem solving and performance, people need to be intrinsically motivated" (p. 10) and yet argues that traditional grading is considered an extrinsic reward. The usual grading and testing atmosphere of schools (Wiggins, 1993) does not provide the necessary conduits to providing powerful feedback (Black & Wiliam, 1998; Black et al. 2004; Butler & Nisan, 1986; Butler, 1987; Sadler, 1989).

Further Problems with Traditional Grades

Students are more motivated if grades are provided in relationship to mastery goals (McMillan, 2009). If the meaning of the grade is mostly about getting a good score rather than demonstrating understanding, motivation becomes related to the "reward"

rather than related to learning. McMillan (2009) states, “When grades indicate feedback related to learning, intrinsic motivation results” (p. 365). Butler (1987) found that feedback is less likely to be effective if it is accompanied by a grade, given that students are more likely to ignore the feedback. Students attribute achievement to their abilities when quality feedback is the focus of teacher communication (Bandura, 1993; Black & Wiliam, 1998; Black et al. 2004; Deci, 1995; Butler & Nisan, 1986; Butler, 1987; McMillan, 2009). In 2009, Guskey wrote that in any educational setting where the purpose is to encourage learning, grading and reporting should always be done in relationship to specific learning criteria.

There are several important books that support changing the grading procedures and/or policies in schools. Trumball and Farr (2001) begin with an analysis of dueling paradigms and highlight why dated methods of grading and reporting prevent other reforms from occurring in schools. They say, “…but the problem in this case is that grading and reporting practices have not generally made the same shift, and thus schools have been operating with dual, competing paradigms within their accountability systems” (p. 2). They continue, saying, “School and district educators have become aware that the goal of building a coherent accountability system cannot be accomplished if one of the primary methods for reporting the results of student learning is not aligned with the other parts of the system” (p.2). Reeves (2006) also highlights the problems with grades for practicing school leaders and says, “When grading systems are mathematically flawed, unfair, and ineffective, then legitimate boundaries established by leaders have been violated.” (p.79).

Guskey (2009) states that the format used to report student achievement to students and parents should follow its purpose. As in architecture, the form should follow function. Bateson (1994) states that in reality, function follows format. In other words, the traditions associated with grading came about because the reporting formats were efficient and convenient and therefore, the assessments and grading practices used were developed to align with the reporting method. This accounts for how the research suggests an overhaul of grading but rarely does it happen (Bateson, 1994). Some schools or districts will not attempt to change grading while others have made efforts but the level of change was not as great as hoped (McMunn, Schenk & McColskey, 2003).

These selected articles and books introduce research into the complex picture of assessment, feedback, grading and reporting. Searches on the topic of standards-based grading show no empirical proof that changing a grading system can directly improve student achievement or teacher practice, however, the research on using feedback is significant and compelling. Specifically, Black and Wiliam (1998); Black et al. (2003, 2004); Brookhart (2008); Butler and Nisan (1986); Butler (1987); Butler and Winne (1995); Hattie and Timperley (2007); Kluger and DeNisi (1996) and Wiggins (1993, 1996) provide qualitative and quantitative evidence that using quality feedback can significantly improve student achievement and motivation to learn. While changing a grading system is difficult, the research indicates that assessment and grading practices aimed at improving teacher-use of student assessment data and feedback and student involvement in the assessment process do have significant impacts on their achievement. McMillan (2009) adds to this argument when he writes that effective standards-based grades are more than an indication about what was learned; they are also an indication of

what further action is needed. Additionally, McMillan (2009) makes a link between standards-based grading and feedback when he writes that standards-based grades have clear implications for the giving of quality feedback. Hattie and Timperley (2007) conclude "It is the feedback information and interpretations from assessments, not the numbers or grades that matter" (p. 109).

Classroom assessment, evaluation and grading policies and procedures must support the development of "…an educational system that ensures that all students acquire the knowledge, skills, dispositions, and habits needed for future learning and productive lives" (Seeley, 1984, p. 5). In 2004 Stiggins wrote, "Let us fundamentally rethink how assessment is used in our classrooms, eliminate its negative effects on students and act collaboratively to ensure that our classroom practices maximize, not just measure, our students' achievement" (p. 14). It should be noted that providing and receiving feedback requires skill and understanding by students and teachers and yet research indicates clearly that feedback is one of the most powerful influences on learning, achievement and motivation. Given that McMillan (2009) specifically states that standards-based grading has implications for the nature of feedback teachers provide students, this case study describes the characteristics of the feedback that teachers who implement standards-based grading and reporting provide their students.

CHAPTER 3

METHODOLOGY

Case Study Research

The purpose of this study is to investigate and describe the nature of feedback provided to students in a system that implements standards-based grading and reporting. The literature indicates that implementing a standards-based grading and reporting system could have implications in regards to how teachers prepare for teaching (Marzano, 2006; O'Connor, 2002, 2007; Reeves, 2007), how they design lessons and assessments (Stiggins, 2008; Wiggins & McTighe, 1998), how they weave assessment into their daily instruction (Stiggins, 2008; Guskey, 2009), how they attempt to engage and motivate students (Guskey, 2009; Reeves, 2007; Stiggins, 2008) and how they provide students with descriptive feedback (Brookhart, 2004, 2008; McMillan, 2009). Additionally, standards-based reporting has implications for how teachers communicate with students and parents (Guskey & Bailey, 2001). Given that this study has the potential to illuminate what types of feedback teachers provide in this standards-based school district (Hattie & Timperley, 2007), the most appropriate methodology is a holistic qualitative case study where interviews with teachers, observations of teachers and document analysis of student work are used to describe the feedback frequently provided students and how teachers use assessment information as feedback.

Study Questions

The key research question is to what degree does feedback in a standards-based classroom convey judgments about student performance in relationship to the learning standards. Other sub-questions that will guide this research include:

1. What types of feedback do teachers provide students?
2. How do teachers provide specific feedback to students?
3. To what degree do teachers create feedback loops in their classrooms?

Moreover, do teachers provide students with feedback that answers Hattie's (2003) three feedback questions: (a) Where am I going? (b) How am I going? and (c) Where to next?

The complicated process of changing grading and reporting procedures can potentially have far-reaching effects on the use of feedback (Black & Wiliam, 1998; Butler & Nisan, 1986; Butler, 1987; Hattie & Timperley, 2007). Exploring the topic of teacher feedback through a qualitative perspective, using interviews, observations and document analysis captured teachers making sense of how changing grading and reporting practices has influenced how and when they employ certain thinking and reasoning about the feedback that they give. Yin (2003, 2009) states that a case study investigates contemporary phenomenon in its real life context and is an appropriate methodology when the boundaries between the context and the phenomenon are blurred. Yin (2003, 2009) also states that case study research is especially appropriate when there are multiple data points that can converge when multiple sources of data are triangulated to find common intersections; intersections that clearly support or refute theoretical propositions made prior to the study.

Case Study Research

I implemented a holistic, qualitative case study of the Lea County School teachers and classrooms to examine the nature of the feedback provided by teachers to students when grading is standards-based. Yin (2009) suggests the use of a case study when the research question is why or how, when the investigator has no control over behavioral events, and when the focus is on contemporary events. While the overarching research question in this case is not 'how' or 'why'; the data collection includes this line of questioning in order to describe the nature of feedback. Case study is preferred when examining current events when the researcher cannot manipulate the behaviors (Yin). Direct observation and interviews of persons involved along with document analysis was used to complete this research. Yin writes, "…the case study's unique strength is its ability to deal with a full variety of evidence—documents, artifacts, interviews, and observations" (p. 11). This case study investigated the practices of teachers in Lea County Schools where grading is standards-based. The phenomenon of changing a grading system and the location of this study may or may not influence the findings, however, in a case study, it is natural for the boundaries between phenomenon and context to be blurred (Yin). Yin (2009) writes that case study inquiry benefits from the prior development of theoretical propositions and/or models to guide data collection. The purpose of this research was to study, in-depth, the nature of feedback provided by teachers in this context and time period and to describe the feedback in terms of the literature, predominantly from Hattie and Timperley (2007) and Brookhart (2008).

I conducted a multi-faceted study where the results of interviews of teachers as well as classroom observations, document analysis and follow-up interviews provide insight into how teachers provide and use feedback in their classrooms to communicate with students. The purpose of using multiple sources of information was to seek out overlaps or diparities in what teachers state about their practices and their actual practices and to compare their use of both written and oral feedback. Multiple sources of evidence and the establishment of a chain of evidence improve a study's construct validity (Yin, 2009). The findings of this study describe how teachers in two schools within the district provide students with feedback and the quality of that feedback in comparison to the research on effective feedback. This process presents the reader with stories, themes, and patterns of teacher behavior and/or language in providing students with descriptive feedback.

The methods used in this case study included responsive interviews, classroom observations, and document analysis. Responsive interviews, conducted via the methods of Rubin and Rubin (2005) and Merriam (1998), were conducted with six elementary teachers to discuss the feedback they provide students. Classroom observations, conducted via the methods of DeWalt and DeWalt, (2002) and Merriam (1998), of the participant teachers followed the interviews. I used a research-based observation framework (Hattie & Timperley, 2007) to characterize and analyze the feedback teachers orally provide students in the classroom. Following the interview and observation, I collected anonymous samples of student work that teachers had assessed and provided back to students in order to analyze the written feedback provided to the students by the teacher. A feedback framework based upon the research of Hattie & Timperley (2007)

was used in analyzing the oral and written feedback that these teachers provide their students.

Research Method: Responsive Interviews

Responsive interviews were the first line of inquiry into the content of the feedback that teachers who implement a standards-based report card provide to students. I interviewed six teachers who have been using standards-based grading and reporting for over a year. An interview protocol was used to guide the interview of the teachers. As necessary, probes were used to clarify anything that the teachers said that was unclear or to provide more vivid description. Rubin and Rubin (2005) state that responsive interviews occur in their natural setting, deeply explore themes and concepts, and point out subtle as well as explicit phenomenon. “Because responsive interviewing is about learning what people think about their experiences, and rules they operate under, the model implies finding people who have had particular experiences or are members of specific groups whose rules, traditions, and values are of interest” (Rubin & Rubin, p. 37). The questions I posed were broad and yet relevant to teachers with the purpose in mind that respondents would provide rich, deep, “thick” description in response. The interviewees had the opportunity to answer from their own experiences and were able to suggest topics, concerns and meanings as if in a conversation rather than in a panel or focus group or job interview. The goal of these interviews was to obtain a depth of understanding of the nature of feedback teachers provide students specifically by posing questions on the topic of the feedback they provide as well as about their thought processes when providing feedback. I asked specifically if implementing standards-based

report cards has impacted the feedback they provide students. The interview protocol is found in Appendix D.

How people view phenomenon is vital (Rubin & Rubin, 2005), and my probes and follow-ups did not only include questions about teacher feedback but also about what teachers think when they give descriptive feedback. Rubin and Rubin caution that if overused, interview probes can "backfire". An important point made by Rubin and Rubin is that,

> Researchers work to figure out what the shared meanings are in some particular group, recognizing that though each person interprets the events he or she encounters in some distinct manner, he or she is likely, at the same time, to bring to bear the understandings held by peers, family, friends, coreligionists, or members of other groups to which he or she belongs. (p. 29)

The ultimate purpose of this level of inquiry was to analyze the nature of feedback provided to students by teachers and to gain insight to the thought processes of teachers when they provide feedback.

Research Method: Observations

As suggested by Merriam (1998), the unstructured interviews conducted in this study were used in conjunction with participant observation. The rationale behind using participant observation was to cross-check the data that has already been collected through interviews and to note specific information about actual teacher feedback. DeWalt and DeWalt (2002) say that it is much harder to critically examine a phenomenon unless you experience it first hand. I spent one hour observing the classes of each participant, seeking out and recording examples of the verbal feedback that teachers provided students. The ultimate analysis of this record was conducted using a framework (found in Appendix F) created from the research of Hattie and Timperley (2007).

Participant observation facilitates the on-going collection of evidence and the continual reassessment of the research questions and problems. It was important to determine if teacher actions and reactions in the classroom align with the views they expressed in their interviews. I observed each participant's classroom for at least one hour, keeping a running record of events and listening for the types of feedback that the teachers provide students.

Research Method: Document Analysis

Prior (2003) points out that documents are not merely manufactured---they are consumed and have effects. Hattie & Timperley (2007) describe the content of feedback in two ways; one being how the feedback answers three key questions for students (where are we going, how am I going, and where to next) and the other being if the feedback is regarding the task, process, self-regulation or praise. We know from research that both the written and oral feedback provided students can have impact (Bandura, 1993; Black & Wiliam, 1998; Butler & Nisan, 1986; Butler, 1987; Deci, 1995; Hattie & Timperley, 2007). It is important to analyze the written feedback that teachers put on student work in response to the student performance on the assignment/assessment.

Content analysis was used to explore the comments that teachers write on student work. This analysis involved first noting if the teacher answers one or more of Hattie's (2003) three feedback questions, noting if the teacher provides information about the goal, how the student performed in relationship to the goal, and what needs to happen to better achieve the goal. Secondly, using Hattie and Timperley's (2007) definitions of feedback about the task, feedback about the process, feedback about self-regulation and feedback about self, I characterized the feedback provided by the teacher as one of these

four types of feedback. Finally, I analyzed some of the combinations of feedback forms and types.

The participant teachers were asked to provide a portfolio of student work that they consider formative in nature and on which the teacher provided students feedback. This portfolio from each participant was to include the work of at least 10 students, span both mathematics and language arts, and should be copies that can be kept for at least a month by the researcher. This entailed the teacher making copies of the work so that students can have their personal copies back. The teacher was instructed to eradicate student names on the work for the purpose of confidentiality.

Propositions

Given the research on how quality feedback provided to students by teachers improves student achievement (Black & Wiliam, 1998; Brookhart, 2008; Hattie & Timperley, 2007); student motivation (Butler & Nisan, 1986; Butler, 1987; Hattie & Timperley, 2007; that there are documented qualities of effective and ineffective feedback (Hattie & Timperley, 2007; Kluger & DeNisi, 1996; Brookhart, 2008); and a possible link between standards-based grading and the quality of teacher feedback (Black et al., 2003; McMillan, 2009), it is imperative to study the feedback provided by teachers in a setting where grading is standards-based. The proposition is that teachers in a standards-based setting provide students with oral and written feedback that utilizes the qualities of feedback found in research from Hattie (2003), Hattie and Timperley (2007), and Brookhart (2008).

Unit of Analysis

I used a feedback framework based upon the research of Hattie (2003) and Hattie and Timperley (2007) to record both the oral and written feedback and to note the nature of this feedback (See Appendix F). This data will be taken from the transcripts of the teacher interviews, the transcripts of the observations, and from the actual written comments on student work. Using multiple sources of data collection as a form of triangulation helped me not rely upon one single data collection method and helped neutralize any bias inherent in one particular data source (Anfara, Brown & Mangione, 2002) as well as controlling for construct validity (Yin, 2009). The framework designed from research was a valuable tool for indexing and coding the data in a rigorous and unbiased manner (Prior, 2003). In analysis, I noted the context for the feedback, the content of the feedback, and the nature of the feedback. The source of the data (interview, observation, document analysis) was important given that the source of the information indicates whether the feedback was written or oral and if it was actual feedback or teacher perception of feedback. I provide insights on the patterns that I can note on how and when teachers give certain types of feedback. Three teachers sent me follow-up emails with more insights on their responses to my interview questions. Some of what they provided in the emails are used in this report, where appropriate.

Study Location

Lea County Schools is a medium-sized school district located forty miles north of Atlanta, Georgia in Russell, Georgia. Prior to the 1990's the county of Lea was considered agrarian, specializing in poultry farming and processing. During the 1990's, however, a housing boom brought many families to the county, raising its population

from just 101,000 in 1990 to over 200,000 in 2000.The growth in population, brought about the growth of business, retail ventures, restaurants, recreation, and subsequently, traffic and a higher demand for quality schools. At the time of this printing, the school district has over 31,000 students housed in sixteen elementary schools, eight middle schools, four traditional high schools, one alternative high school and one charter non-traditional high school. Five new schools are scheduled to open in 2009 with more scheduled to open in subsequent years. The demographic make-up of the school district has changed since the early 1990's with the Lea housing boom, however, over 85% of the student population in Lea County Schools is white, 3% Asian; 2% black; 9% Hispanic; and 1% multiracial, as well as 12% with disabilities, 14% on free or reduced meals, 6% limited-English speaking, 15% eligible for gifted services and 89% graduating with a college-prep diploma. (Chart provided in Appendix A.) Currently, there are no students who qualify as children of migrant workers but there are over 300 students registered as "homeless".

Lea County Schools began implementing standards-based report cards in 2001. Prior to that, they began developing and implementing their own set of academic standards and benchmarks in 1998 as a result of the 1995 community-based strategic plan. From 1998 to 2000, district and school leaders found that the classroom implementation of those standards was "spotty" at best, meaning that some teachers used the standards and others did not. Some teachers used the textbooks as their guide; some used the state objectives; and others taught what they wanted to teach. District leaders assembled a team of teachers and administrators to seek out how they could improve implementation of the new district standards and the team came back with several

professional learning ideas and one major policy consideration—grading and reporting. While professional learning that involved creating units of study, curriculum maps, formative and summative assessments and high leverage instructional strategies were deemed important to improve standards-based teaching practices, another consideration was the grading and reporting practices which actually stand as road-blocks to high-fidelity implementation of all of these methods. Providing teachers with high quality professional learning would be a high quality failure if there were too many mixed messages and impediments to actually implementing what they had learned in real and practical ways. Therefore, the Grading and Reporting Task Force was developed in the spring of 2001 to begin exploring how to initiate a change in how teachers communicate student achievement in Lea County Schools. This committee created the Lea County Schools Grading and Reporting Guidelines and Principles (2002).

The school district also moved towards implementing a comprehensive professional learning plan with the goal to provide all teachers, in a three-year time span, year-long trainings in Understanding by Design (based upon the work of Wiggins & McTighe, 1998), Assessment For Learning (based upon the work of Rick Stiggins, 2002; Anne Davies, 2000) and High-Leverage Instructional Strategies (based upon the work of Marzano, 2001). While the delivery model of the training has changed from 2001 to the present, the basic content of the training has not changed during that time.

In the summer of 2003, two groups of representative teachers gathered to explore changing the kindergarten and first grade report cards. Both of these report cards were in the form of checklists and teacher surveys and conversations indicated that teachers were unhappy with the format and content on the report cards. Specifically, the content on the

report cards were not up-to-date with the content in the standards. The teacher committees conducted some on-line research of report cards from around the country, revisited the Grading and Reporting Guidelines and Principles, and decided to move forward with changing the kindergarten and first grade report cards to being more standards-based. The teacher committees came to consensus on what standards to put on the report card, quarterly rubrics that describe what evidence of student learning should include, and sample assessments for teachers to use to implement the report cards. The kindergarten teachers lobbied the Teaching and Learning division to use the new report cards throughout the district during the 2003 – 2004 school year, stating that the changes to their report card were not a drastic departure from the previous report card. First grade teachers were fearful of how many teachers would perceive the new first grade report card, and therefore all of the teachers from two schools volunteered to pilot the new card while teachers at the other schools would use the same unchanged report card from the previous school year. Since then, standards-based report cards have been fully implemented in grades kindergarten through third grade and have been piloted in over 50 fourth grade classrooms. Future plans include using standards-based report cards in fourth and fifth grade and to implement standards-based grading in all middle schools.

The standards-based report card designed by Lea County Schools teachers reports student progress on specific Georgia Performance Standards. The teachers use a key that indicates meeting the standard, progressing toward meeting the standard and not meeting the standard. Teachers have rubrics, or scoring guides that define what each of these performance levels are specific to each standard. Teachers keep records of student progress towards the standards and use the rubric to report to students in person and on

their actual work how well they are doing towards meeting the standard. The final determination of report card grades is not computed in any way. The teacher keeps records of student progress on each standard as well as samples of student work and he/she ultimately decides based upon the evidence and the rubric how well each child has achieved each of the standards that are reported. Teachers do not use percentage grades or letter grades on student work. They use the rubric scores of 3, 2 or 1 and are encouraged to give other feedback. Report card "grades" (3, 2 or 1) are not affected by early failures; only the most recent evidence enters into consideration for end-of-the-grading-period evaluation. Student behaviors that are important to the learning process, such as class participation, returning homework, working independently, listening and following directions, following school rules, and others are on the report card, but are reported in separate categories from the academic standards. The Lea County standards-based report cards follow O'Connor's tenants (2002) for fair and accurate grading and teacher training involves instruction on grading methods as well as assessment practices and procedures.

During this entire history of standards-based grading and reporting in Lea County, the State of Georgia changed its academic standards (which are the basis for state assessment and accountability programs) to become the Georgia Performance Standards. Lea County revised its standards, report cards, and rubrics accordingly. Also, there are now many school districts in the state that are exploring and beginning to implement standards-based report cards. Several neighboring school districts use the Lea report cards and rubrics verbatim.

The Case

This case study explored the nature of the feedback that teachers provide students in Lea County Schools; specifically in grades three and four. Given that the paradigm shift from traditional to standards-based report cards was relatively minor for most kindergarten through second grade teachers, third and fourth grades is the focus on this case study. This case study employed the use of interviews, participant observation, and document analysis to gather information about the oral and written feedback provided to students by six teachers from two schools in Lea County.

Participants

I selected two schools for the study whose test scores are close to the averages for the school district. My logic in selecting these schools is that the distribution of student abilities and intelligences are more likely to be diverse and representative of all types of students in the district. The teachers at these schools teach the spectrum of highly gifted, high socio-economic status children to those who are intellectually disabled and/or those living below the poverty level and virtually all combinations of student and family situations and qualities. See Appendices B and C for individual school characteristics and data.

The criteria to be a participant are that they must have taught using the standards-based report card for at least one school year in the grade level they currently teach. I emailed the principals and counselors of each school, asking them to identify teachers who fit my criteria and who have the potential to participate without thinking that this study will influence their job status with the district or school. From the lists provided by the counselors, I sent an email inviting them to participate with a brief description of the

study. Once I had six volunteers, three from each school, I sent them the official paperwork giving them the opportunity to back-out should they have any doubts or fears. A small monetary gift will be provided to the participants upon completion of the study. The participants agreed to one initial, one-hour interview, a one-hour classroom observation, and a one-half hour review of student work.

Subjectivities and Bias

Changing a paradigm such as grading can be a contentious, political, and painful endeavor for educators, and it is important for someone to ask and pursue the answers to key questions for other educators. My subjectivities regarding the issue of grading are most influenced by my role as former leader of the grading project for Lea County Schools. I left this project to focus on other job responsibilities as well as to remove myself from this project for the purpose of writing this dissertation. I no longer direct the standards-based grading and reporting project and I do not have supervisory duties related to any of the participants. I have no influence on any human resources decisions. Given that this project looks at the actual feedback that teachers provide students rather than the grading and reporting project itself, it is unlikely that my former role will be involved in the research or analysis.

In order to keep my biases in-check, I engaged in four activities specifically to address the trustworthiness of my accounts and analysis. I disclosed my purpose and my role in the district to the participants in a pre-written statement, and I gave them the opportunity to remove themselves from the study (Johnson-Bailey, 2004; Lincoln & Guba, 1990). I used member checks and to allow participants to review the transcripts of their interviews and allow them to correct anything I may have transcribed incorrectly or

clarify something they did not communicate to their liking (Merriam, 1998). In addition to disclosure and member checks, I used triangulation whenever possible to confirm the findings (Anfara, Brown & Mangione, 2002; Merriam, 1998 and 2009; Yin, 2009) by using interviews in conjunction with observations and document analysis. Finally, I maintained an audit trail of recordings, transcripts, field notes, coding copies, photos, and other documents to fully disclose the evidence gathered in this study (Anfara, Brown & Mangione, 2002; Lincoln & Guba, 1990; Yin, 2009). Anfara, Brown and Mangione (2002) state "The qualitative ethic calls for researchers to substantiate their interpretations and findings with a public accounting of themselves and the processes of their research" (p. 35).

I do not have supervisory responsibilities for any of the teachers I interviewed and observed, however, it is likely that many will perceive me of having that quality given my title. I assured all participants both in writing and in person that the interviews and observations will be held in the strictest confidence from their superiors and that their personal identities and their school identity will be protected by pseudonyms. I also stressed that my purpose was to take the realities and to describe them. I repeated to teachers that they could remove themselves from the study at any time.

Conclusion

This study explored the nature of feedback that teachers provide students in classrooms where grading is standards-based rather than norm-referenced. Interviews, observations, and document analysis shed light on what actually happens in classrooms when grading and record-keeping aligns with research on quality feedback practices. These methods have the potential to illuminate practices of teachers; practices which may or may not be

in the consciousness of the teachers. The case study's strength is allowing the use of multiple sources of information to provide explanations and descriptions of current practice and events (Yin, 2009). Thick description can help readers determine if standards-based grading provides a context where teachers give descriptive feedback that aligns with the research on the nature and quality of feedback provided students.

CHAPTER 4

RESULTS

Introduction

Upon IRB approval in March, 2009, I conducted six teacher observations, six teacher interviews and six document reviews. All six teachers teach in Lea County Schools in either grade three or four and all six teachers implement standards-based grading. These teachers were selected by the principal and counselors in their respective schools as being candidates who fit my criteria of teaching grade three or four and having taught using standards-based grading for over one year. The six teachers come from two schools in Lea County; Guffin Elementary and Hopkins Elementary. The principals of these schools signed consent forms as did all of the teachers and all were promised confidentiality as per Georgia State IRB policies and procedures. All of the interviews were recorded using a digital recording device; all observations were documented using an observation protocol for feedback designed from the research of Hattie and Timperley (2007). Additionally, the student work was analyzed using the protocol for feedback, again from the research of Hattie and Timperley. The use of feedback loops in the classroom was explored using the model provided by Nicol and Macfarlane-Dick (2004).

Participants/Setting

The six participants are all full time teachers certified by the State of Georgia and are highly qualified (by federal definition) to teach their respective grade levels. They

will be referred to as Amber, Kathy, Sharon, Sheryl, Helen, and Keri; with Amber, Kathy and Sharon teaching at Hopkins Elementary and Sheryl, Helen and Keri teaching at Guffin. All six signed consent forms and were provided multiple opportunities to change their minds about participating in this research study. All six were also sent copies of their transcripts and were provided an opportunity to modify their responses and answers. Aside from correcting typographical errors, none of the teachers requested changes to their responses.

Amber received a bachelor's degree in education and a master's in reading in the state of Virginia. She taught 5th grade and Title 1 in the state of Virginia. After moving to Georgia, she taught 5th grade and 3rd grade. All of her years of experience, which includes 2 years of teaching preschool, add up to about 20 years of teaching.

Kathy teaches 3rd grade. She has been a teacher for 9 years; two in 2nd grade and 7 in 3rd grade. Eight of her nine years of teaching have been with inclusion special education. On the day of my observation, there was a special education parapro present who worked with two students from a mild/moderately handicapped classroom. Kathy came to Hopkins right out of college and has been there her entire teaching career.

Sharon graduated from Auburn and worked as a fourth grade teacher for about a year and a half. She was married during that time and had a baby and stayed home with her children for ten years. When her son went to first grade she decided to come back to work. This is her third year teaching at Hopkins Elementary; all three in third grade. In total, she has four and one half years of teaching experience.

Teaching is Sheryl's second career. She was a computer programmer for about eight years and then she got her masters to teach. She taught middle school math and

science and then fourth and fifth grade. She went back to computer programming for a few years, working at home for a former employer. She got “claustrophobic” so she went back to teaching. She has been teaching for a total of fourteen years and has been the department chairperson of the fourth grade at Guffin Elementary for four years. Sheryl is leaving Guffin to teach fourth grade at a new elementary school in Lea County for the 2009 – 2010 school year. She will be the fourth grade department chair person at her new school.

Keri graduated from college in 1990. She worked for a year in preschool. She went back and got her teaching certificate and then worked only in preschool for 11 or 12 years. Prior to coming to Guffin, she was the director of a private preschool for 7 years. After she quit there, she substitute-taught at Guffin for several years and then was hired as a third grade teacher four years ago. For the 2009 – 2010 school year, she will teach fourth grade.

Helen has been a teacher for twenty one years; sixteen of those years in third grade. She went to Georgia Southern College and received a bachelor’s degree in Business Administration in Management. She later received her teaching certificate and has taught third, sixth and fourth grades. She has been at Guffin Elementary school for six years.

Lea County Schools and its history with standards-based grading are described in detail in Chapter 3. Demographics and test scores of the school district plus demographics and test scores from Guffin Elementary and Hopkins Elementary Schools are also provided in Appendices A, B and C.

Research Questions

Do Teachers Provide Students with Feedback that answers Hattie's three questions?

The classroom observations indicate that most oral feedback answers the questions "How am I going?" and "Where to next?" while the document analysis indicates that most written feedback answers the questions "Where am I going?" and "How am I going?". Many feedback examples answered more than one of Hattie's questions and on several occasions, a combination of feedback answered all three of Hattie's questions.

Oral Feedback

The results of the classroom observations provide information about the content of feedback teachers provide orally to students. A data collection protocol based upon the research of Hattie and Timperley (2007) was used to tally teacher feedback live in the classroom based upon whether each piece of teacher feedback answered one or more of Hattie's (2003) three questions. Each example of teacher feedback was noted verbatim and classified. Field notes contain the observation notes and feedback quotes. Table 1 indicates the raw findings. The total represents the number of feedback elements provided by the teacher with one element having the possibility of being classified by more than one of the three questions. Most of the observations lasted for approximately for 60 minutes, however, each teacher's schedule and lesson varied slightly. It is important to look at the trend of providing oral feedback rather than compare overall numbers from participant to participant.

Table 1

Oral Feedback

Name	Where am I going?	How am I going?	Where to Next?	Where and How?	All three	Total
Sheryl	9	7	35	3	2	50
Keri	2	15	6	0	1	23
Helen	0	15	17	9	0	29
Amber	12	9	7	3	0	43
Kathy	10	18	13	4	5	36
Sharon	0	10	4	0	0	23

Participant Amber is the only teacher whose oral feedback answered question one more than the other questions. Both Sheryl and Helen addressed question three more than the other two questions. Kathy had the most even spread among all three questions and also had the most examples of one unit of feedback that answered all three of Hattie's questions simultaneously. The aggregate totals indicate that the oral feedback that teachers provide students mostly answers the questions "How am I going?" and "Where to next?"

One interview particularly revealed which questions teachers address in their oral feedback. Helen said, "Giving them positive feedback on what they already know and then telling them 'oh you are great at this and the next step we are going to build on that and take the next step'." In the same interview, Helen also said, "(I focus on) individual growth, saying 'you are doing good at this and you have to go to the next level and this is how you do this and how to make it better." In these examples, Helen indicates that orally, she provides the answers to questions 2 and 3. Kathy said something similar, "When learning a new process, it tends to be more 'you are on this step, great job, now you need to get to the next step.'" Again, this comment states that she addresses Hattie's

questions 2 and 3. This is confirmed by the information provided in Table 1, particularly for Helen.

Written Feedback

The written feedback that teachers provide was gathered by asking teachers to provide ten samples of student work on which they had provided feedback. Their directions were to provide work from multiple subject areas and multiple students. Using the same protocol as used for oral feedback, I tallied the questions answered by the written feedback provided by the teachers. The findings are found in the table 2.

Table 2

Written Feedback

Name	Where am I going?	How am I going?	Where to next?	Where and How?	All Three	Total
Sheryl	15	19	5	10	2	30
Keri	14	7	6	3	1	25
Helen	13	20	2	6	0	34
Amber	12	14	9	6	5	32
Kathy	5	8	7	3	2	11
Sharon	1	12	4	0	1	17

It is noted that in the case of written feedback provided to students on their work, most of the feedback answered Hattie's questions one or two. This is in contrast to the findings about oral feedback (to be discussed further in chapter 5). Sheryl, Helen, Kathy, and Sharon all answered Hattie's second question about how am I going the most while Keri more heavily answered Hattie's first question about where am I going. All of the teachers except for Sharon attached and marked the school district's rubric that indicates what the standard for performance is (where am I going) and how well the student achieved the standard (how am I going). For example, Amber used the district rubric on

fact and opinion on a reading assignment. For one given student, she circled a 2, which reads, “Identifies fact and opinion”. The rubric indicates what it takes to make the highest score of 3, “Distinguishes fact from opinion with supporting evidence”. On this assignment she added the following comment to the score of 2, “You did not give evidence to support your answer. Just because something is stated doesn’t make it a fact. How can you prove it?” The district rubric lacks the answer to question three, where to next. Sharon did not use the school district rubric often and instead, used one that indicated how well the student had performed but did not answer the questions where am I going or where to next. When the teachers attached and marked rubrics, they sometimes included additional feedback statements. Sharon is the only teacher to provide students with a grade without further feedback, writing simply “3” at the top of a page. A lone grade does not answer any of Hattie’s three questions.

How do teachers provide specific feedback to students?

As evidenced by the observations, interviews, and document analysis, teachers provide students feedback in writing and orally; formally and informally; consciously and unconsciously. They provide feedback to students in writing, on their work about how they performed a task; the processes they used to achieve the task; how to self regulate themselves, and to give praise on their achievements. Teachers remind students of the expectations, how they are doing in regards to the expectations, and what they have to do to bridge the gap between where they are and where they need to be. Teachers write notes to students on their work. When asked about these notes, Sheryl specifically stated that frequently, she will write “see me” on student work so the student knows the teacher will explain orally and individually how well they did and what they need to do to improve.

Her concern is about students understanding the written feedback and about their actually reading it. As evidenced in the document analysis, all of the participant teachers use rubrics to identify how well students performed on a specific task; some rubrics were more detailed than others. Some of the teachers used rubrics in conjunction with additional written feedback.

To what degree do teachers create feedback loops in their classrooms?

During the interview process, teachers responded to questions about using a feedback loop in their classrooms. I intentionally did not mention the words ‘feedback loop’, thinking that teachers may infer that I was looking for a specific answer whereas I wanted honest and vivid description. None of the teachers specifically mentioned a feedback loop by name, but they answered questions about using assessment to guide instruction and re-teaching; creating and recreating lesson plans based upon assessment evidence; allowing students an open opportunity to communicate; and using feedback to improve teaching and student achievement—all elements of the feedback loop in the Nicol and Macfarlane-Dick (2004) model, shown in the diagram provided in Appendix E.

While my study did not explore the internal processes or external responses of students, the Nicol and Macfarlane-Dick model applies because it shows what teachers should attend to while considering usable feedback: standards, what students initially know and can do, student goals, and learning styles. The line of questions in the interview involve all of the teacher-directed elements of the feedback loop, including their responses and reactions to students.

When asked how they know what students know and are able to do, teachers in this study stated that they give pretests; they ask students on a one-on-one basis; use self-

assessments; use slate assessments; and study previous test scores and old standards-based report cards to determine what students know and are able to do before a unit of study begins. Sheryl stated,

> As we start each unit, we give pre-assessments. Some of them are written but more often, especially in math, we give them slates and I give them problems and get that immediate feedback. I gave them a couple of voter quizzes and I have even taken some of the summatives to some of the kids who we think can do it, not necessarily to all of the kids but to some of the higher kids to see if we need to even do the unit we had planned for them. If they can do it, we skip the unit we had planned for them.

The teachers in this study differed in some of their methods of assessing students up-front of instruction; however, all possessed a strategy for determining what students already understood.

When the participants were asked what they do with assessment evidence, many responded that they created differentiated lessons for various groups of students, designed new lessons, designed one-on-one teaching opportunities, and redesigned plans and lessons. Helen stated that "The example of a pre-test, I can see what the kids have mastered and that helps me plan remediation, who has the standard mastered, who needs enrichment. I provide enrichment for those who have already mastered the standard and provide help to those who still haven't mastered the standard." Keri said, "Also, you can't forget that you also learn who you need to push on. Because I am not going to go back and review multiplication with 20 students if you have 18 who understand it or 2 that don't. So, from the feedback you can do to help those kids you can push on." Kathy stated that she uses assessment evidence to determine groups, saying "I do flexible grouping, so I place them where I think they are but then they may show me they are OK

there but might need extra help somewhere else, so my groups are constantly changing… I just move them wherever they need to be moved."

All of the teachers referred to changing lessons plans as a result of assessing students. Kathy gave an example, telling me that

> Today, for example, I totally redid my math lesson because yesterday I assessed them on division and I said I want you to do it all by yourself because we have been working on the beginnings of long division where you divide, multiply, bring down, subtract, and go through that multiple times. I assessed them yesterday. I told them to do the best they can. Well they had all of their subtraction lines drawn in the right spot but weren't necessarily subtracting correctly, but I had 5 students who totally had it. So today, I gave those 5 more challenging problems, but with everyone else, instead of going on to the next lesson which was 3 x 3 digit multiplication, I totally re-taught division. My lesson book has arrows going here and there because if they need it, I will do a lesson again or redesign it.

Kathy was not the only one who told a story about changing plans. Amber told me that she changed plans when working on a grammar unit. She said

> Teaching possessive nouns. I can remember teaching and teaching and teaching it and getting pretty much literal feedback from them, but the application just wasn't there. I went back and taught the unit in a more applicable setting where we used role model, peer teaching and lots of practice to get the mastery.

One last example of how teachers use assessment evidence is from Sharon who recounted a story about students' computational understanding.

> At the beginning of the year, we were starting subtraction and we were doing some fact test things. I thought from the fact tests that we were ready to go on to multiple re-grouping/carrying but after that very first day I had them to do slates and had them do one problem and I realized 'no, no, no—we can't go there yet' because their lack of knowledge that I learned just from that lesson made me change. I had to back up and regroup and do more group work and individual time with the kids.

The feedback loop begins with teachers knowing what they have to teach and knowing what students can already do and how they learn. Teachers use assessment evidence to

determine what they know and how they learn and then design lessons accordingly. Helen stressed that at this point, it is good to have colleagues who can help provide alternative ideas for lessons. She said, “Well, collaboration helps a lot because when you have tried everything you know to try. So I have a great team, I go to them. For example, the (teacher) next door helped me with the method for (teaching) time. So having my team to work with and getting ideas from them helps so you don’t feel like you don’t have anything else to try.” The loop continues in a back and forth dialogue between students and teachers. Helen described this communication in this way,

> Well, from the pre-assessment, you find out what they know, their foundation. And then from that, you reinforce that and encourage what they are doing from there. Giving them positive feedback on what they already know and then telling them ‘oh you are great at this and the next step we are going to build on that and take the next step’. Just moving them to the next level, challenging them and reinforcing that they know what they know.

Sheryl also described a loop of communication back and forth, saying,

> Number one, I am really big on identifying specifically what they did wrong. In fact, I make them write, what I did wrong. Even down to the math, they can’t say that I multiplied wrong but what exactly did they multiply wrong and we kind of step through it together in class. Even if we are using slates, they have to tell me because I won’t let them erase their slates until I make them tell me what they multiplied wrong because I feel as if they can identify specifically what their mistake is then they are less apt to make that mistake again the next time. That is how I tell them they can improve to pay attention and practice and keep trying. And I try to make them really comfortable with slates because they aren’t graded and I tell them this is where you can mess up. You learn from it and practice.

In this particular case, Sheryl specifically noted that the non-graded element of classroom discourse has an impact on instruction. This is similar to what was stated in chapter 2 from Butler and Nisan’s (1986) research and Black and Wiliam’s (1989) research on the usefulness of non-graded, formative assessment.

The interviews provided insights into how teachers assess students and how they use assessment evidence to influence instruction. Additionally, the teachers pointed out how they respond to student performance and how they redirect student understanding. This is the feedback loop referred to in literature from Nicol-Macfarlane-Dick (2004), Wiggins (1993) and Bloom (1968).

What types of feedback do teachers provide students?

Using the information from Hattie and Timperley's 2007 profile of feedback, I created a protocol to record the types of feedback provided by teachers both orally and in writing. Observations and document analysis allowed me the opportunity to collect this data. The interviews enhanced my understanding of teacher feedback by supporting what was observed in the observations and document analysis and by allowing me insight into the intentions of the teachers.

Oral Feedback

Classroom observations allowed me to use the protocol to tally the types of feedback teachers provided students. This protocol included the use of feedback about the task, feedback about the process, feedback on how to self-regulate and praise. While the teacher taught a lesson, I noted each piece of teacher feedback verbatim and classified it using the protocol. The findings are in Table 3. Sheryl, Amber, Kathy and Sharon used more feedback about the processes students used than any other type of feedback. Keri and Helen used more feedback about the task the students completed. All six of the participant teachers used feedback on self-regulation the least in their oral feedback. Sharon's feedback was more difficult to categorize given that her style of delivery was to respond to student responses with questions rather than direct feedback.

Table 3

Oral Feedback Categorized by Type

Name	Feedback on Task	Feedback on Process	Feedback on Self-Regulation	Feedback on Self (Praise)	Total
Sheryl	23	35	4	11	50
Keri	8	5	3	9	23
Helen	19	17	0	10	29
Amber	9	21	4	17	43
Kathy	15	24	1	8	36
Sharon	9	13	0	5	23

In all but two cases, praise was provided in conjunction with some other type of feedback. Keri's lesson included small group work. When the teacher worked with a small group instead of the entire class, I moved myself physically to be in close proximity of the teacher in order to record the feedback she provided to groups and individuals.

Written Feedback

The tally of feedback provided by teachers on student work was completed using the feedback protocol and the work samples provided by the teacher. The findings are in

Table 4

Written Feedback Categorized by Type

Name	Feedback on Task	Feedback on Process	Feedback on Self-Regulation	Feedback on Self (Praise)	Total
Sheryl	19	14	3	3	30
Keri	18	9	1	4	25
Heleh	18	20	2	8	34
Amber	13	15	5	2	32
Kathy	9	9	1	5	11
Sharon	6	10	0	2	17

In written feedback, similar to that with oral feedback, teachers use more feedback about task and process than other types of feedback. Sheryl and Keri used more feedback about task than all others while Helen, Amber and Sharon used more feedback about process. Kathy used task and process feedback equally as often. While feedback about self-regulation was still the least used type of feedback in writing as it was with oral feedback, less praise was provided in writing than orally. In fact, all six participants used fewer statements of praise in writing than when they provided oral feedback.

Teachers used written comments to provide feedback to students. On one writing assignment, Kathy combined types of feedback to communicate with students in writing. For a student named Mattison, she wrote, “Please watch your handwriting and capital letters. This assignment is being assessed for complete sentences. Do you have punctuation?”. This is an example of feedback on task and process. For a student named Megan, she wrote, “ Wonderful ideas! Your spelling and punctuation are coming along nicely. I am proud of your progress!” This is an example of feedback on task as well as praise. And finally, on a paper written by Liam, Kathy wrote, “These are wonderful sentences. Make sure you write big enough for someone else to read it.” This is an example of written feedback on task, process, and praise. Additionally, Kathy wrote this on a pre-writing assignment, “This is a fantastic start. Use more adjectives to help the reader of this web know what you are talking about.” This demonstrates how she combines feedback on task, process, and praise. On a reading assignment, Kathy wrote, “Remember to go back to the paragraph and look for the information”. In this example, she is helping the student with a self-regulation strategy.

In the interviews with teachers, I asked them what type of feedback they provide most often. All of the participants said it is a combination of feedback about the task, process, self-regulation and praise. The participants only specifically spoke of praise as a type of feedback but responded to questions about the other types. Amber said this about praise:

> Praise definitely has its place. Kids are very smart and they pick up on sincerity, I try to make sure if I praise them it is sincere. If I have to move them from a place where they do know what they are supposed to know, I may have to work with them individually to find out what process they are using incorrectly. We talked about the process you follow to get the end result. I think it depends on the task you are asking them to do to determine what to do. In writing, there is a lot of encouragement because writing is hard and it is personal and you have to be really careful in your feedback so they don't feel shot down. So you want to use praise that is positive and encourage them on the other end. For example, we are doing poetry now. I may say, 'Your first two lines are great. What can we do to the next two?' You know your students, so you know if you need to nudge them, give them an idea, or send them back on their own.

Helen stated that she provides a combination of types of feedback, with an emphasis on the role of praise. She said,

> It's a combination. It depends on the circumstance and the instructional standard that we are trying to reinforce. Processes, trying to show them there is more than one way to work a certain problem in math. Individual growth, saying you are doing good at this and you have to go to the next level and this is how you do this and how to make it better. Like in writing, saying 'you can do this instead' and showing them a different way or a better way. Praise has a lot to do with it. Reinforcement, positive reinforcement. Encouraging them to do well; building that confidence level.

All of the participants indicated in their interviews that they provide a combination of types of feedback and base their choice of feedback on the individual students' needs; the nature of the subject matter or assignment; and where they are in the course of the lessons. In regards to when to use what type of feedback, Kathy said,

> I think that depending upon the activity, depends on the type of praise or feedback I give back. If it is something they are struggling with, I tend to give more praise because they tend to shut down immediately if I don't. When learning a new process, it tends to be more 'you are on this step, great job, now you need to get to the next step'. So I think it kind of depends on the activity that we are doing. I probably use a good bit of all it. The biggest thing I have learned is that I need to give specific feedback.

Sheryl and Kathy both said they are conscious of the types of feedback they provide while Sharon specifically stated that her feedback just comes out naturally without much conscious thought. Sheryl stated she is concerned about the feedback she provides "Because, the way you respond to fourth grade, they are a little tender hearted, the moment I put them down and make them feel bad about them, I've lost them and it will take weeks to get them back where I was on the same playing field with them. So, I really pay attention on how I do it so I can bring them up." Kathy is in graduate school and has studied feedback and has considered feedback in terms of her being a student as well as her being a teacher.

When asked about when feedback does not work or seem successful, Sheryl stated, "… you have a few kids where you can't figure out what's going on and why they aren't successful. I guess there is a breakdown in communication there, I don't know. They just aren't getting it and I look for outside help." In an email follow-up, Kathy wrote that she is satisfied with her oral feedback but not satisfied with the written feedback she provides her students. She stated, "When I provide written feedback it is hard to ensure the students understood what I was trying to say." She said she wants to work on ways to give productive feedback that is clear to students. Kathy said she knows that the effectiveness of her feedback is dependent upon her establishing trust and respect with the students. Amber wrote that she wants to figure out a way to incorporate student

conferencing into her feedback routine. She wrote that she is aware that feedback can be powerful, both in a supportive way if done well or a destructive way if done carelessly. To what degree does feedback in a standards-based classroom convey judgments about student performance in relationship to the learning standards?

The feedback in a standards-based classroom should convey judgments about student performance in relationship to the learning standards. In tables 1 and 2, where I have noted that the feedback answers questions one and two of Hattie's three questions, you can see that the feedback informs the student of the standard and how well he or she are doing in regards to the standard. This is usually in written form and usually occurs when the teacher uses the standards-based rubrics provided by the school district. Even in the rubrics that Sharon used which were not the district rubric, the students saw their scores based upon their performance of the standard. The details provided to individuals by the teacher varied and the oral feedback frequently lacked a reference to the standard. In order to see if teachers perceive a connection between feedback to standards-based grading and reporting, I posed questions about communication in classrooms based upon the standards-based reporting project in Lea County. This line of questioning in combination with what has been noted already about the content of feedback answers the key question about the degree to which feedback conveys judgments about student performance in relationship to the learning standards.

Sharon, having been out of the classroom for ten years, re-entered the profession the year that Lea County moved to standards-based reporting. From what she recalls of her previous teaching and her current methods, she said, "I talk about the standards a lot more, I verbalize what that means, what they have to learn, and what they need to be able

to give the information back to me." When asked about standards-based reporting and classroom communication and feedback, Kathy said,

> I think it helps your feedback be more specific. They need to know what part of each standard they know and don't know. For example, with cause and effect (comprehension), they could get all but two questions right so they overall do well, but both questions could be cause and effect and so you can see they don't have that part. So, when you are working with that kid, you can say, 'We need to work on cause and effect'. I think that communication is very beneficial. I think it does help you be more specific instead of just saying, 'you have an 80 on that reading test'. You know specifically what area they need help in.

Keri and Helen also agreed that the feedback becomes more specific in the standards-based classroom. Helen said, "It is more specific feedback. You have a specific task. It is great for the parents that they can see what their students have mastered and what they need to improve upon. I just think it is very valuable. I have done it both ways, grades out there and specific and I think it is much better." The teachers agreed that standards-based grading and reporting impacted the feedback they provide students.

The interviews, observations, and document analysis has provided a picture of how teachers who implement standards-based grading provide feedback to students. The quality of that feedback has been analyzed by carefully comparing the content of the feedback with Hattie's three questions and Nicol and Macfarlane-Dick's framework for feedback loops in classrooms. The final chapter of this dissertation will address the research questions through analysis of the data collected.

CHAPTER 5

DISCUSSION

The combination of interviews, observations and document analysis has provided meaningful information about the feedback provided by teachers in Lea County Schools who implement standards-based report cards in grades three and four. While the sample of six teachers is small, I am able to provide detailed descriptions of the teacher feedback in this district and can comment on areas where it is likely that teachers use comparable feedback content and procedures and where teachers are likely to vary their methods. I will also address, in addition to the four research questions, the possible impact standards-based grading and reporting has had on feedback.

Research Question 1: Do teachers provide students with feedback that answers Hattie's (2003) three feedback questions (Where am I going? How am I going? Where to next?)?

In this case study, the answer to this question is yes; teachers who implement standards-based report cards provide students with feedback that answers Hattie's (2003) three questions (Where am I going? How am I going? Where to next?). The raw data about oral feedback shows that teachers most frequently answer the questions "How am I going?" and "Where to next?". The raw data from written feedback indicate that teachers most frequently address the questions "Where am I going?" and "How am I going?" in writing.

Oral Feedback

The teachers in this study frequently used oral feedback to assist students. All six teachers were less likely to answer where am I going in their oral feedback, but were more likely to address how am I going and where to next. In a sense, this was surprising to me because it has become almost ubiquitous in standards-based training and preparation to tell teachers to address the learning goal or standards in each and every lesson. And yet, it is not surprising that once the standard has been stated in class upon beginning the lesson, it is not stated or addressed again in the personal feedback provided to students. When asked if the students understand the standards, all six of the teachers said yes, however, Amber was somewhat skeptical. She felt as if it is more helpful to students to consider the standards as they work with the teacher on individual goal statements. She would rather her students understand the standards in relationship to their own personal goals for growth. With that said, it is likely that the teachers are comfortable with what the students know about the standards and are less likely to address that in oral feedback.

Written Feedback

This study found evidence that district rubrics are likely to influence the kind of written feedback teachers give. Lea County's rubric states the standard and describes/outlines necessary requirements for meeting the standards. As a result of using the rubrics, teachers provided more written feedback regarding "Where am I going?" and "How am I going?" In fact, teachers provided more than twice as much feedback characterized by Hattie's question "How am I going?" in their written feedback when compared to their oral feedback. Five out of the six teachers studied indeed used the

district rubric on the assessments they provide students. The sixth teacher used a rubric, but it only provided the answer to “How I am going?”. (I do not know the origin of the rubric used by the sixth teacher.) When the five teachers paired using the district rubric with comments on how the student can progress from where they are to where they need to be, the feedback on the work then answered all three of Hattie’s questions. In order to answer the third question, teachers have to use custom feedback given that each individual student may have different difficulties and therefore will require different advice on how to improve. Pairing the district rubric with individual feedback on how to improve is one way teachers can answer all three of Hattie’s questions in their written feedback.

As stated in chapter 2, there are many reasons why students have not traditionally received quality feedback (Black & Wiliam, 1998, Black et al., 2004; Butler & Nisan, 1986; Butler, 1987; Hattie & Timperley, 2007; Hattie, 2002; Wiggins, 1993, 1996). Airasian and Jones (1993) wrote that teachers do not adhere to the advice of researchers on feedback because what research suggests is impractical. In the individual interviews with teachers, several teachers stated they want to improve the written feedback they provide students. Kathy specifically stated that she wants to continue working on ways to give students productive and clear written feedback. The district rubric is a practical tool for teachers in that it provides them an already typed and printed method of providing written feedback to students.

Five of the participant teachers were comfortable with their oral feedback. Kathy specifically stated that she is fine with her oral feedback but wants to work on written more. Amber, however, said she would like to work on individual conferencing with

students. Perhaps conferencing is indeed a method of answering all three of Hattie's questions for students while being able to gauge their understanding of the feedback. Regardless, it is clear that a combination of methods of oral and written feedback is effective in order to thoroughly answer all three of Hattie's guiding questions for providing feedback to students.

What types of feedback do teachers provide students?

Oral feedback from all six teachers was mostly about the task or process. Hattie and Timperley (2007) wrote that task-related feedback has great potential to benefit students and Butler and Nisan (1986) wrote that task-involved feedback is more motivational because students do not take a problem with the task personally. All six teachers provided the least amount of feedback about how students can regulate themselves to improve. All six teachers married praise with other feedback statements. While Hattie and Timperley (2007) wrote that praise is indeed the most prolific form of feedback in classrooms, it is not the most prolific in my case study. All six teachers used more praise in oral feedback than in written feedback but none of them exceeded the amount of task or process related feedback with praise. Orally, praise is perhaps a buffer to maintain strong communication and relationships between the teacher and student.

Teachers in this study used less praise in written feedback than offered in oral feedback. Again, teachers in this study offered more feedback about the task or the processes of the students and the least about self-regulation. The district rubrics, depending upon subject area, addressed task or process but rarely both in one element. The district rubrics do not offer advice on how to improve, nor do they provide praise, or hints about self-regulation. Therefore, the rubrics do not guide teachers regarding the type

of feedback. The teachers seem to choose feedback about the task or process based upon the content of the assessment or assignment. Differences were also noted among the various disciplines. Feedback in reading and math focused largely on processes whereas feedback in science and social studies focused on tasks. While I am not able to generalize, I do suspect that further study would reveal similar numbers of feedback samples on task and processes given a balance of subject area assignments or assessments.

Praise seemed like a way for teachers to explain to students what they did well and then address where students needed to go next by combining the praise with feedback on the tasks or processes. While the teachers say they value praise in and of itself, they use it in conjunction with other forms of feedback to motivate students rather than to explain performance or explain how to improve. In only one example (from Sharon) is praise provided without further feedback. I assert that praise is most often used by effective teachers in conjunction with other types of feedback. Praise that is not connected to other information is not instructional in any way (Butler & Nisan, 1986). How do teachers provide specific feedback to students?

Teachers provide specific feedback to students in writing and orally. They use rubrics, written comments, conferences, and oral comments to let students know their current status in relationship to their goals. They use these methods to communicate to students their performance on a task, a process, how to self-regulate and they communicate to make students feel confident about what they can do well. My study revealed that while teachers have patterns in how they provide feedback, they do not depend upon one method of providing students with feedback. In fact, in the interviews,

all six teachers stated that they use a combination of types and content of feedback and the observations and document analysis indicates this to be true. Hattie and Timperley (2007) state that it is necessary for teachers to use a combination of feedback methods and types to effectively communicate with students. This study confirms that teachers in classrooms where grading is standards-based use a combination of feedback types and content to communicate with students.

To what degree do teachers create feedback loops in their classrooms?

Using the Nicol and Macfarlane-Dick (2004) model for feedback, it is clear that the participant teachers complete the teacher-led portions of the model. Three steps internal to students, student motivation, student goals and unobservable learning outcomes, while not completely controllable by teachers, are indeed considered by teachers while implementing a feedback loop in their classrooms. The participant teachers did not use the term “feedback loop”. However, they stated that they provide students with the standards and criteria, obtain information about what students already know and are able to do, set goals, determine teaching strategies, assess students, provide feedback, and begin again with setting new goals based upon assessment evidence, determining teaching strategies, assessing students, and providing more feedback. In addition to being aligned with Nicol and Marfarlane-Dick’s model, the work of these teachers also fit Bloom’s model of mastery learning where teachers assess students and provide individual assistance to students based upon what was learned from the assessment. The research from Black and Wiliam (1998) (Black et al., 2004), Stiggins (2008), and Wiggins (1993, 1996) all support the formative assessment noted in this study; teachers design assessments, students take assessments; teachers design further

lessons based upon information gathered in the assessment evidence. The feedback loop is used correctly by the teachers in this case study as is suggested by research.

To what degree does feedback in a standards-based classroom convey judgments about student performance in relationship to the learning standards?

Most of the written feedback provided by the teachers conveys judgments about student performance in relationship to the learning standards. This is exemplified by how many elements of feedback answered the first two of Hattie's questions; "Where am I going?" and "How am I going?". All but Keri and Sharon had examples that combined questions one and two in oral feedback and all but Sharon had examples that combined questions one and two in written feedback. It was rare that one element of feedback provided the answers to all three of Hattie's questions; however, all six teachers combined methods in order to communicate with students. Only Helen lacked an example in this study of where all three questions were not answered on a given task.

Orally, the feedback frequently left out the element of the explicit statement of standards (or "Where am I going?"), so improving oral feedback would include connecting teacher suggestions for improvement with the standard. Teachers need additional support such as specific rubrics or professional learning to help support giving oral feedback that connects student performance to the standard more effectively. Kathy stated that she needed more work on written feedback than oral feedback; however, this study showed that she and others need to explore how they provide oral feedback to students.

Using the rubrics as a core tool for providing research is a useful strategy with written feedback. The strength of the rubrics is, indeed, how they support teachers to

provide specific, standards-based feedback to students. The study showed the most complete method of giving written feedback is for teachers to combine using the rubrics with specific, individualized comments on how to bridge the gap between where students are and where they need to be.

Further Study

This study has provided many insights and vivid description of what feedback looks like and sounds like; how it is viewed and used by teachers; and the role it serves in classrooms. While I feel satisfied in the regard that the interviews, observations, and document analysis provided the information I needed to answer my research questions, I certainly now have many more questions that should be pursued and answered.

First, the lack of student perspective in my study is glaring. The purpose of this study was to analyze and describe teacher feedback. A possible future step would be to determine how students perceive feedback. This would be a complex study. However, insights into how feedback is perceived could and should provide valuable information and insight into how to train teachers on how to create and use feedback effectively. Given that the teachers in Lea County use a combination of methods to provide students quality feedback, this location and/or others like it would provide an excellent context for this further study.

Second, a quantitative study could attempt to correlate the use of quality research to student motivation and/or student achievement. Black and Wiliam (1998), Butler and Nisan (1986), and Butler (1987) write about the effects of formative assessment and feedback on student motivation and achievement. Stiggins (2008), Wiggins (1993, 1996) and O’Connor (2007) also write of the possibilities of feedback on student achievement

and Bandura (1992) writes of the impact detailed feedback can have on student motivation. Given this information, a case study that includes student motivation and/or achievement information would provide scholars and practitioners meaningful information.

Yet, another study should examine teacher training in providing student feedback. In chapter 2, I highlight research on what teachers need to know in order to provide assessment and feedback (Black & Wiliam, 1998, Black et al., 2004; Butler & Nisan, 1986; Butler, 1987; Butler & Winne, 1995; Hattie & Timperley, 2007; Sadler, 1989; Stiggins, 2008). Exploring how teachers learn about using feedback, how they shed the negative models of feedback that perhaps they experienced as students, and how to create classroom cultures that support the use of detailed feedback would be vital for teacher preparation specialists as well as professional development experts.

Finally, the context of standards-based grading should be explored more. One major reason for exploring the use of feedback in a standards-based classroom is because research asserts that standards-based grading will allow and promote the giving of more quality feedback to students (Black & Wiliam, 2004; Guskey, 2007; O'Connor, 2002 and 2007). In this case study, standards-based grading provides one of the boundaries of the study and indeed, teachers indicate via their interviews that this grading format has changed how they provide students with feedback. In addition, it is clear that the rubrics used by the school district have had a positive impact on the quality of feedback, given that Hattie's first two questions (Where am I going? and How am I going?) are a fixed element of the rubrics. It would be interesting and important to compare the data collected in this study of the types and content of teacher feedback with data collected

from third and fourth grade classrooms and teachers of schools without standards-based grading in place.

Conclusion

This study of third and fourth grade teachers from Lea County Schools indicates that teachers who implement standards-based grading and reporting provide students with feedback that answers Hattie's three feedback questions and describes how that is accomplished. This study also provides insights into how teachers provide specific feedback to students. Additionally, this study describes what types of feedback teachers provide students. And finally, this research describes to what degree do teachers create feedback loops in their classrooms.

The results of this study indicate that teachers in Lea County Schools, while having room for improvement, provide students with quality feedback. The data indicates that they provide students the types of feedback that answer Hattie's three questions (Where am I going? How am I going? Where to next?) and indicates that teachers use feedback to give students information about the task, process, self-regulation and self. Standards-based grading seems to play a role in the giving of feedback given that the tasks and processes are based upon clear standards, that rubrics that articulate mastery levels are used and shared, and that teacher focus is on individual students' progress towards meeting each standard. Feedback loops are the norm in the standards-based classrooms I studied and while this study is bounded in one location, it is logical to consider that this is a characteristic of standards-based classrooms around the state and/or country.

This study is an important early step in evaluating the impact of standards-based grading on the giving and receiving of quality feedback in classrooms where grading is standards-based. I personally do not know of another study like this but would like to see this work expanded and used more universally to improve student motivation and achievement via improved grading methods and quality feedback.

This research has significance for schools and classrooms. Principals and school leaders could use the observation and data collection tables that I created to help teachers assess their own feedback and to discuss ways to improve it. Professional learning could and should be designed to teach pre-service and in-service teachers how to provide students quality feedback and how to assess where they are with the giving of feedback. My research can provide a framework for assessing feedback and training others on how to provide quality feedback, particularly in a standards-based setting. Additionally, readers of this research can use it as a guide for the creation and/or improvement of grading rubrics.

Standards-based grading is used throughout the country, in varying ways. Research indicates that altering grading from norm-referenced to standards-based can improve student achievement and motivation and one significant reason for this is because the giving of quality feedback is more aligned with standards-based practice. The interviews, observations and document analysis allowed me to examine both what the teachers intended to do with feedback and what they actually do in regards to feedback. To reiterate from chapter 2, McMillan (2009) writes, “Standards-based grading has clear implications for the nature of feedback students receive” (p. 117). The study of Lea

County Schools shows this to be true, and further study can indicate if this finding is universal and significant in other standards-based locations.

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APPENDIXES

APPENDIX A

Data Profile for Lea County Schools 2008

Grades: K – 12
Enrollment: 30, 823
Asian: 4.59%
Black: 2.20%
Hispanic: 8.95%
American Indian: .14%
White: 82.09%
Multi-Racial: 2.03%
Free and Reduced Lunch: 17.31%

Certified Staff: 2243
Support Staff: 228

Percent Meets and Exceeds on the Georgia Criterion Referenced Curriculum Test 2008

Percent Passing	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Reading	97%	98%	97%	96%	99%
ELA	95%	95%	95%	95%	97%
Math	95%	97%	90%	90%	96%
Science	Not Tested	Not Tested	90%	90%	89%
Social Studies	Not Tested	Note Tested	97%	97%	97%

Iowa Test of Basic Skills 2008
Grade 3
District Average: 73.8
District Average: 72.25
District Average: 77.19

APPENDIX B
Data Profile for Hopkins Elementary School

Grades: K – 5
Mascot: Champions
Enrollment: 914
Asian: 1.27 %
Black: .32 %
Hispanic: 12.28%
American Indian: 0 %
White: 82.54%
Multi-Racial: 3.6%
Free and Reduced Lunch: 26.24%

Certified Staff: 79
Support Staff: 33

Percent Meets and Exceeds on the Georgia Criterion Referenced Curriculum Test 2008

Percent Passing	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Reading	97%	99%	99%	98%	99%
ELA	95%	95%	95%	97%	99%
Math	95%	97%	80%	93%	93%
Science	Not Tested	Not Tested	88%	93%	93%
Social Studies	Not Tested	Note Tested	96%	99%	99%

Iowa Test of Basic Skills 2008
Grade 3
Reading: 74th percentile District Average: 73.8
Language: 78th percentile District Average: 72.25
Math: 78th percentile District Average: 77.19

APPENDIX C
Data Profile for Guffin Elementary School

Grades: K – 5
Mascot: Blue Bears
Enrollment: 694
Asian: 1.18%
Black: 1.90%
Hispanic: 8.16%
American Indian: .27%
White: 85.17%
Multi-Racial: 2.31%
Free and Reduced Lunch: 15.24%

Certified Staff: 62
Support Staff: 30

Percent Meets and Exceeds on the Georgia Criterion Referenced Curriculum Test 2008

Percent Passing	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Reading	97%	100%	98%	98%	97%
ELA	95%	100%	99%	98%	99%
Math	96%	99%	97%	94%	83%
Science	Not Tested	Not Tested	95%	92%	90%
Social Studies	Not Tested	Note Tested	98%	99%	98%

Iowa Test of Basic Skills 2008
Grade 3
Reading: 78th percentile District Average: 73.8
Language: 76th percentile District Average: 72.25
Math: 83th percentile District Average: 77.19

APPENDIX D
Interview Protocol

1. Can you describe your communication to students?
2. Can you describe the feedback you give to your students?
3. Describe a time when the students performance on an assignment or assessment caused you to change your lesson plans?
4. How do you tell students how to improve?
5. How do you describe to students how to bridge the gap between what they know and what they need to know?
6. To what degree do you involve the following: feedback about the task, feedback about the processes used by the student, and feedback about the students individual growth, or feedback that includes praise? A combination of these?
7. How do you help students learn to assess themselves?
8. How conscious are you of how you provide feedback to your students?
9. How do students respond to your feedback?
10. Describe how well your students articulate their understanding of your feedback?
11. How well do your students understand the standards? How do you know?
12. Describe communication between you and your colleagues? How do you receive feedback about your teaching?
13. How has standards-based grading had an impact on communication in your classroom? School?

APPENDIX E

Nicol and Macfarlane-Dick's (2004) Model for Feedback Loops in Classrooms

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APPENDIX F
Teacher Feedback Collection Form

Object Code	Feedback	Subject/ Grade Level	FT, FP, FR, or FS	Q1, Q2, Q3	Tone (+ or -)	Language (adult or child)	Comment

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