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Teachers' Perceptions of the Impact of Online Grading Systems

A dissertation

presented to

the faculty of the Department of Educational Leadership Policy and Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership

by

Brenda Mize

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Keywords: Parental Involvement, Technology, Gradebook

ABSTRACT

Teachers' Perceptions of the Impact of Online Grading Systems

by

Brenda Mize

This study examined the effects of the communication aspect of using an online grading program. This study explored teachers' perceptions of the implications of allowing the grading process to become transparent to parents. The purpose of this study was to assist teachers in searching for ways to create a positive parent-teacher relationship. A positive and constructive parent-teacher relationship is helpful to the student. If grades are made available to parents on a daily basis, they will have access to specifics about the academic performance of their child. Parents and teachers will be able to communicate with each other on a regular basis with the use of an online grading program. In-depth interviews of 10 middle school teachers were conducted using an interview guide. The interviews were then transcribed and coded by the researcher. The researcher found that teachers spoke positively regarding many of the features of Engrade, an online grade book. The teachers benefited from the convenience of communication with parents and students. The perceived primary result of Engrade is viewed as a positive by teachers because parents can communicate with the teachers about their children, and that, hopefully, allows them to be more involved in their child's academics. Further research opportunities are available in that the perceived implications of implementing an online grade book need to be evaluated from the perspective of parents and students.

DEDICATION

This study is dedicated to my family members, a close friend, and one professor. I am exceedingly thankful to my husband Kevin for encouraging me to continue working. He has taken on extra responsibilities for many years so that I could work uninterrupted. I could not have completed my degree without the encouragement and assistance of my husband. He is the most patient person I know. I would also like to dedicate my work to my two young children. They have also been most patient with me as I worked long hours on my research. I am looking forward to many play sessions in the future.

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At the beginning of my journey for an Ed.D, I had two very young children. They were 1 and 3 years old. People always asked me, "How are you doing that? How do you get your work completed?" I would always respond, "I don't have any idea. I pray to God, and it gets done." I give all the credit to God.

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CHAPTER 1

INTRODUCTION

As Dewey and Jefferson suggested, Americans cannot expect students to develop into productive citizens unless they are well educated (Gutek, 2000). There is much debate about different reforms and methods designed to improve education. Two issues, parental involvement and student grades, are often under discussion in the educational literature. The No Child Left Behind Act mentions parents over 300 times (No Child Left Behind, 2001). An action brief that was released in April 2004 outlined the involvement of the parent in the student's education. The brief explains that "the rights and responsibilities of parents under Section 1118 are not meant to be punitive or inflexible, but are designed to benefit the academic and social progress of the student, and strengthen the work and mission of the public school" (No Child Left Behind Action Brief: Parental Involvement, 2004).

Although a continuing debate regarding the most efficient way to educate students persists, the practice of assigning grades is rarely challenged. Grades are typically defined as the numbers or letters reported at the end of a set period of time as a summary statement of evaluations made of students by the teacher. The purpose and efficiency of assigning grades is discussed in detail in the literature. Assigning individual grades to students remains an accepted and established practice among educators as a part of the goal of educating students. Teachers typically assign grades at the end of a designated grading period. Parents and students place a great deal of importance on teacher assigned grades (Marzano, 2000).

A negative aspect with the current system of reporting a letter grade on a report card at the end of the grading period is that the teacher's assessment arrives weeks or even months after the assignment was graded. Although there is a range of means to communicate student learning,

currently a single report card grade for each academic subject is the most common and generally accepted system in middle and secondary schools (Allen, 2005). If students are falling behind academically or not exhibiting adequate motivation, parents may not be aware of the circumstances until it is too late to correct the situation. Online grade books allow the grades to be visible constantly, thus allowing the parent to be aware of the student's progress. The implementation of online grade books facilitates parental involvement and potentially, encourages teacher-to-parent communication regarding the academic progress of the student.

This qualitative study was designed to assess teacher perception of increasing the visibility of classroom grading by making students' grades available for viewing via the use of an online grade book. Teachers daily engage in some aspect of assigning grades to students. Therefore, teachers must have some sort of system to record their grades. An online grade book is a web-based tool that allows teachers to share their system of recording grades with parents and students. An online grade book also allows teachers, parents, and students to communicate. When establishing an online grade book, a teacher assigns a student a unique username that allows the parent and student to view the student's individual grades via the Internet.

Within education, grades are the most powerful message teachers can send to parents and students (Guskey, 2002). Teachers need to look at the reasons for grading, which are to communicate to parents, to provide incentives to learn, and to provide information for student self-evaluation. The importance of grades is so ingrained in American educational culture that the practice of giving and receiving grades often goes unchallenged. Grades provide the avenue for teacher-to-parent communication regarding the student's progress. Teachers, parents, and students continue to place a great deal of confidence in the grading system. Grades are most important to students and their families who have suggested that teachers should take extra care

to make sure they adhere to the grading policy in their school system. Teachers must use data from multiple, appropriate sources and know the limitations of the data and assigned grades (Kubiszyn & Borich, 2010).

As educators attempt to demystify the grading procedures currently in place, they have initiated a discussion about what to do next. Keeney (2000) urged teachers to communicate clearly with parents and allow the grading process to become visible to students and parents. Online grade book software makes daily grades visible to parents. The software also allows the parent and teacher to send and receive messages to each other concerning students' assignments. Making the students' grades visible to parents facilitates direct communication between the teacher and the parent. Direct parent communication is paramount to the success of the child. According to the parents' guide associated with the No Child Left Behind legislation:

The law requires that parents and school personnel write each parent involvement policy statement together. This requires parents to be at the table with school administrators and educators to help write a policy that addresses how every school, through partnerships with parents, will promote the social, emotional, and academic growth of children. (No Child Left Behind: A Parent's Guide, 2003)

In addition to educating the parent on the academic progress of the child, online grade books allow the parent and teacher to comment on individual assignments and facilitate easy communication between parents and teachers. Hornby (2000) reported, "The limited amount of research which has focused on parental preferences for the various forms of involvement has generally found that most parents prefer communication with teachers to be *frequent* and *informal*" (p. 33). Mid-grading period printed reports and occasional

parent-teacher conferences do not fit the criteria of “frequent and informal.” The use of an online grading program allows parents and teachers to converse informally regarding the progress of a student on a day-to-day basis, thereby facilitating parental involvement.

Statement of Purpose

Teachers have been searching for ways to create a positive parent-teacher relationship. A positive and constructive parent-teacher relationship is helpful to the student. If grades are made available to parents on a daily basis, they will have access to specifics about the academic performance of their child. The parent will no longer be able to say, “Why didn’t you tell me my child was falling behind?” or “Why didn’t you tell me my child failed the English test last week?” Parents and teachers will be able to communicate with each other constantly. This study examined the effects of the communication aspect of using an online grading program. This study explored teachers’ perceptions of the implications of allowing the grading process to become transparent to parents.

I contacted Joyce Epstein, a leading educational researcher in the area of parental involvement, via email. I asked Epstein if she had conducted a study regarding parental involvement focusing on the use of online grade books. Her response was “Good topic, very interesting, becoming more common – we have not conducted research on the topic, and I know of no studies of the impact of on-line grading systems on parents’ knowledge, interactions with students, teachers’ connections with families, or student achievement.” (J. Epstein, personal communication, July 21, 2010).

This qualitative study addressed the use of online grade books by teachers in the middle grades and investigate teachers’ perception of the implications of using an online

grade book. This study will provide educators with a view of the perceptions of fellow professionals as online grade books are implemented.

This study examined teachers' opinions of the role of parental involvement in the grading process. The use of the online grade books may help parents stay connected with their children while allowing students to take responsibility for their academic performance; however, students may become more reliant on their parents. The purpose of this study is to add insight into teachers' perspectives on the use of online grade books to facilitate parental involvement.

Research Questions

This study examined the attitudes and opinions of teachers as they implement an online grade book for the reporting of grades to parents and students. I anticipate that the process of interviewing 10 teachers will open a dialogue about assessment and the implications of making the grading process visible to parents and teachers. The participants were taken from two purposive samples. One sample group consisted of teachers who have voluntarily implemented online grade books for a full academic year. Another sample group consisted of teachers who have been asked by their administrator to use an online grade book for the 2010-2011 academic school year. Five subjects were taken from each group for a total of 10 interviews.

The primary question this study will address is, "What are teacher perceptions of the implications of using online grading systems?" In order to understand the implications of implementing online grading systems, the following questions were addressed:

1. Does the use of online grade books to report students' grades affect the teacher's relationship with parents? How?
2. Does increasing the visibility of grading to students and parents affect the teacher's relationship with students? How?
3. How do teachers perceive the impact of online grading on student motivation?
4. Does increasing visibility within the grading process affect parent-to-teacher communication? How?
5. How does increasing the visibility of grading affect the quality of assessments and feedback given on assignments?
6. How does the use of an on-line gradebook impact student interest in learning?

Scope of Study

This study addressed the research questions listed above through qualitative methods. Teachers were interviewed using an Interview Guide to facilitate the interview process. The purpose of the interviews is to gather teacher perceptions and viewpoints regarding the practice of using online grade books for recording students' grades. The in-depth interviews were the primary method of data collection. An emergent design process permitted the course of the study to flow according to the thoughts of the participants and to grant them the time and opportunity to express their thoughts and opinions about ways in which online grading has affected them, parents, and students.

Statement of Researcher Perspective

As a teacher, I have an interest in and experience using online grading. Consequently, my interest and experience may bias my findings. I have used and will continue to use an online grading system while I conduct the research for this study. Many of my experiences in using online grading have been positive but not all. However, the implications of making my grading process transparent to parents and students have yielded more positive than negative results.

Summary

This chapter has introduced and provided an overview for the study. Chapter 2 includes a review of related literature and findings on assessment, reporting, and parental involvement. Chapter 3 presents the methods and procedures used to gather data, including the interview process. Chapter 4 contains the data collection and findings. Chapter 5 provides the conclusions and summary of the study and recommendations for future research.

CHAPTER 2

LITERATURE REVIEW

The purpose of examining the pertinent literature for this study is to focus on the following three aspects: student assessment and reporting, parental involvement, and the development of technology in schools that facilitates the implementation of online grade books.

Student Assessment and Reporting

Kirshenbaum (1971) provided a brief history of the development of the grading system commonly used by teachers. In the early stages of education, all education took place within the family. Children did not attend school to obtain an education. Children were educated at home by their family members. If the members of the family were farmers, the family taught the children to farm. If the members of the family were soldiers, the sons were trained to be soldiers. In early America only the wealthiest of families provided a tutor for the children. In the mid 1800s the one room school house became the norm in the United States. When compulsory attendance laws were instituted in the late 1800s to the early 1900s, the number of students in school increased significantly. The education of the child moved from the home to the school house. At this time the high schools began to assign percentage grades to students (Kirshenbaum, 1971). Colleges began using grades as a screening tool for applicants. Marzano (2000) recounts that in 1780 Yale University began using a system that was probably a precursor for the system used today. They began assigning grades on a 4.0 scale. From that point forward universities switched from a narrative approach of reporting student progress to a quantitative approach. Today teachers assign grades for much the same reasons they did many years ago (Marzano, 2000). The manner in which teachers assign grades and the meaning associated with grades is

currently under scrutiny in the American education community (Allen, 2005; Gouwens, 2009; Guskey, 2002; Hursch, 2008; Marzano, 2000; Reeves, 2008).

Purpose and Meaning

Authors of texts related to education suggest that the major reason for assigning grades is to create a public record of a student's academic achievement that can precisely and successfully communicate to others the level of mastery of a subject a student has demonstrated (Allen, 2005; Bailey & McTighe, 2006; Olsen, 2005). Marzano (2000) defined grades as, "The numbers or letters reported at the end of a set period of time and as a sum statement of evaluations made of students" and assessment as "vehicles for gathering information about students' achievement or behavior" (p. 12). It is logical to conclude that teacher assessment leads the teacher to assign grades. The assigning of grades is used as a means of making students accountable to themselves, their parents, their future employers, and other educators (Brown, 2008).

One immediate problem educators have regarding grades is that the terms *grades* and *assessment* mean different things to different people. Traditionally, the meaning associated with *assessment* is "mastery-learning, where assessment referred to the processes used to determine an individual's mastery of abilities, generally through observed performance" (Banta, 2002, p. 9). Marzano (2000) defined *grades* as "the numbers or letters reported at the end of a set period of time as a summary statement of evaluations made of students" (p. 13). Grades are pointless for students and parents unless some criteria can be attached to them that are seen as being of value to parents and teachers. Allen (2005) stressed the importance of teachers understanding the grading process when assigning grades. It is very difficult for students to gain admission to some schools if their grades are not sufficiently high. Invalid grades that devalue the student's knowledge may prevent a student with aptitude from pursuing certain educational or career

opportunities (Allen, 2005). It is important that teachers understand how to assign grades accurately. If grades are not accurate measures of the student's achievement, then they do not communicate the truth about the level of the student's academic achievement (Allen, 2005).

Most educators are required to follow policies that demand letter and number grades (Kubiszyn & Borich, 2010). For the vast majority of schools in the United States, grades are collected for every student, at every grade level, and in every subject (Bowers, 2009). The numerical symbol system is a common type of mark assigned to students by teachers as a grade. Usually a 100 is the highest number grade a student can receive. The student report card will carry an associated letter grade equivalent to a number grade (Kubiszyn & Borich, 2010). For example:

Numerical grade

90-100 = A

80-89 = B

70-79 = C

60-69 = D

Below 60 = F

The use of the numerical system has three advantages. Numbers are convenient; they can be averaged; and unlike letter grades they are widely understood by teachers, parents, and students. Marzano (2000) described the above mentioned grading scale as the "norm referenced approach to grading" (p. 17). Although norm referenced grading is most common, the actual manner in which the numerical grade is assigned varies widely among teachers. Kubiszyn and Borich (2010) found that teachers, parents, and students are often unsure what the grades mean precisely because the practice of assigning grades varies so much from state to state, county to

county, and teacher to teacher. Because the methods teachers use to assign grades vary, what teachers intend to communicate with their grades is not always what parents hear from these grade reports (Moran, 2007). The meaning assigned to grades is often misunderstood by the parent (Carifio & Carey, 2009). Communication of the meaning associated with the grades from teacher to parent is paramount to avoid confusion.

Typically, grades are assigned every 6 to 9 weeks as a grading period. The teacher uses daily grades, tests, portfolios, and other criteria to assign grades. Kubiszyn and Borich (2010) argued that teachers should not include attendance and behavior as factors when calculating students' grades. Allen (2005) discussed grades as valid measures of academic achievement. Studies have found that two out of three teachers believe that effort, student behavior, and attitude should influence the final grades of students (Allen, 2005). Conversely, educational researchers claimed that grades should reflect student learning without including nonacademic factors. In an ideal grading arrangement, effort, conduct, and attendance would not be included with academic achievement in an overall grade (Marzano, 2000). When teachers begin including factors such as behavior and attendance, the parent may misconstrue the meaning of the assigned grade (Bowers, 2009; Kubiszyn & Borich, 2003; Marzano, 2000; Moran, 2000;).

Marzano (2000) addressed the problems of current grading practices by identifying three major problems teachers face when assigning grades. The first problem in assigning grades is that teachers consider factors other than academic achievement when calculating grades (Carifio & Carey, 2009).

The second problem teachers face when assigning grades is that teachers weigh assessments differently. The difficulty occurs when teachers use a solitary score to represent students' performance on a wide assortment of skills and abilities (Carifio & Carey, 2009).

The third problem that teachers face when assigning grades is the misinterpretation of a single score. Despite the difficulties teachers face when assigning grades, one of the more obvious purposes for grades is to provide feedback about student achievement (Marzano, 2000). It is necessary for the teacher to communicate student achievement to the parent.

A popular way to communicate assigned grades to parents in secondary schools is a computer generated report card that is mailed to the parent at the end of the grading period. The teachers enter the students' grades and the reports are printed and mailed. One issue with this method of reporting grades is that parent-to-teacher communication does not exist. There is minimal space for the teacher to write comments and no space for parents' written comments. This system prevents the report card from being used as an interactive communication tool. Also, computer generated report cards fail to give accurate descriptions of the meaning of the assigned grades (Moran, 2007).

Guskey (2002) defined grades as "the collection and evaluation of evidence on students' achievement or performance" (p. 1). Guskey related the following six purposes of grading and reporting:

1. To communicate the achievement status of students to parents and others.
2. To provide information students can use for self-evaluation.
3. To select, identify, or group students for certain educational paths or programs.
4. To provide incentives for students to learn.
5. To evaluate the effectiveness of instructional programs.
6. To provide evidence of students' lack of effort or inappropriate responsibility (p. 6).

Although all of these purposes may be undeniably important, educators and parents seldom agree on which purpose is most important. This lack of cohesiveness on the purposes of

grading and reporting among teachers and parents has led educators to report on all purposes with a single reporting device, usually a report card (Allen, 2005). The purpose of an academic report as related by Allen (2005) is “to communicate the level of academic achievement that a student has developed over a course of study” (p. 218). Teachers are then required to report the grades that reflect the academic achievement a student has displayed within a grading period.

Scholars in the field of education have contended that the purpose of grading is to report academic achievement (Allen, 2005; Guskey, 2002; Kubiszyn & Borich, 2003; Marzano; 2000). Teachers often have conflicting views of the purpose of grading and reporting. Reviewing the content of the literature, Allen (2005) concluded that teachers believe that effort, student conduct, and attitude should influence the final grades of students. He said, “It would appear that grades are often measures of how well a student lives up to the teacher’s expectation of what a good student is rather than measuring the student’s academic achievement in the subject matter objectives” (Allen, 2005, pp. 218-23).

There seems to be a lack of cohesiveness about what grading and reporting mean among teachers, students, parents, and community members (Allen, 2005). Brown (2008) addressed the notion that assessment means different things to different stakeholders in education by stating that “teachers and students are aware that assessment also has an accountability component – either for and about the learner or for and about the instructors and schools” (p. 153).

Teachers may not agree that assessment and accountability are necessary. Nearly all teachers, elementary and secondary, say they really do not like grading and reporting (Guskey, 1996). The current reality for most teachers is that they are required by the school district to dispense grades indicating students’ academic accomplishment in the subjects they teach (Allen, 2005).

There are many ways to document student learning. To document learning at the classroom level, teachers use tests and quizzes, observations of their students, performance-based assessments, portfolios of student work, and standardized tests (Gouwens, 2009). Grading activities range from casually checking and correcting students' learning errors to scoring and recording the results of quizzes, examinations, and performance assessments (Guskey, 1996). Individual teachers usually decide whether a particular assignment warrants *checking* or *grading*. Guskey (2002) differentiated between the terms *checking* and *grading* in the following explanation:

But checking is different from grading. Checking involves gathering evidence in order to guide improvements. Grading involves judging student competencies and evaluating the merits of their performance at a specific time. So while teachers use checking to diagnose and prescribe, they use grading to evaluate and describe. (p. 3)

Educators must be careful not to misrepresent students' learning when calculating final grades. It may be argued that distorted feedback is more troublesome than no feedback at all (Kubiszyn & Borich, 2010). Proper communication between the educator and parent maintains a clear understanding by parents regarding the meaning attached to grades. Watts (1996) stated:

The need for caution in communication is as true for grading and reporting as for anything else, perhaps even more so. Grading and reporting are fraught with overtones of judgment; even when they purport to be objective, they cannot be free of the subjective. Educational jargon, hidden assumptions, and inappropriate reporting make communication all the more perilous. (p. 6)

The use of letter grades establishes a clear communication between teachers and parents because letter grades are widely understood (Kubiszyn & Borich, 2010). Using letter grades is the most common symbol system used by educators (Bailey & McTighe, 2006; Guskey, 2002; Kubiszyn & Borich, 2010;). Guskey (2002) reported, "Percentage grades are generally more popular among middle school and high school teachers than among elementary teachers" (p. 54). Guskey (1996) contended, "The issues of grading and reporting on student learning have perplexed

educators for the better part of this century” (p. 13). The practice of grading and reporting remains a troublesome aspect within teaching and learning.

Guskey (2002) listed the following developments that have prompted change in grading and reporting systems:

1. Recognition of inconsistencies in the grading policies and practices of elementary, middle, and high school educators shows the need for change.
2. The growing emphasis on standards and performance assessments makes current reporting practices inadequate.
3. Advanced technology allows for more effective reporting of detailed information on student learning.
4. Growing awareness of the gap between our knowledge of grading and reporting methods and common practice necessitates change (p. 4).

Some scholars contend that a change in the grading and reporting system is needed to ensure the success rate of students. Reeves (2008) argued, “If you want to make just one change that would immediately reduce student failure rates, then the most effective place to start would be challenging prevailing grading practices” (p. 85). Practices vary greatly among teachers in the same school and even worse, the practices best supported by research are infrequently in evidence (Reeves, 2008).

A common criticism of grading practices is grade inflation. Marzano (2002) defined grade inflation as “an increase in grades without a concomitant increase in achievement” (p. 9). Grade inflation – or the propensity for teachers to assign higher grades today than in the past for the same level of performance – has become a matter of significant public concern (Kubiszyn & Borich, 2010).

The grading and reporting of student achievement requires careful planning from educators. Grading is a subjective process. It involves teachers making a judgment about the performance of students and reporting the judgment to parents. If grading and reporting are well done they can result in a highly successful process for teachers, students, and parents (Guskey, 2002).

Education Reform

U.S. Secretary of Education, Terrel Bell, established a National Commission on Excellence in Education in 1981. The National Commission on Excellence in Education in its 1983 report, *A Nation at Risk: The Imperative for Educational Reform*, concluded that the educational system needed to be reformed. The release of the report has shaped the conversation about educational restructuring since its publication (Gouwens, 2009). Hursh (2008) reported that, beginning with *A Nation at Risk*, “many corporate and governmental leaders have argued that our schools are in decline and can only be remedied by establishing standards, standardized testing, and accountability” (p. 1). Since before the release of *A Nation at Risk*, a climate of widespread disappointment in American education among many stakeholders had been discussed (Fishman & McCarthy, 1998). Parents have recognized that they need to pay attention to the happenings in public schools and become involved in improving schools. The National Commission on Excellence in Education recognized “the critical role that parents and students themselves play in improving schools and learning” (Gouwens, 2009, p. 13). The No Child Left Behind (NCLB; PL 107-110, 2002) legislation also documented the importance of parental involvement.

The federal government passed the Elementary and Secondary Education Act (ESEA) in 1965. The most significant section of ESEA was the Title I component of the act (Gouwens,

2009). Title I, subtitled “Education of Children of Low Income Families,” was intended to supplement the education of children in poverty. The reauthorization of ESEA, the No Child Left Behind Act, expanded the scope of the legislation from children in poverty to all public school children. No Child Left Behind (NCLB) passed with large majorities in the House and Senate and was signed into law by President George W. Bush on January 8, 2002. It stated that the achievement gap between high-achieving students and low-achieving students was growing. Also, the achievement gap between the United States and other countries was growing. No Child Left Behind was intended to narrow those achievement gaps by establishing nationwide standardized assessments.

Hursh (2008) proposed that No Child Left Behind strongly suggests that teachers have not been doing their jobs. The teacher-designed assessments of the past do not measure a child’s knowledge compared to their peers. A child can go through school getting straight As and not be prepared for college. No Child Left Behind standardized testing gives parents a more accurate measurement of their child’s progress as compared to other children in the nation (Hursh, 2008). No Child Left Behind also delineates the curriculum that is assessed, thereby determining the curriculum that is taught in the classroom by the teachers. Standardized assessments are then administered to students with the results being communicated to parents. The reporting of the results of student achievement has prompted a call for better and more appropriate reporting systems.

Within the current climate of educational reform, teachers evaluate methods of assessment in the classroom. Brown (2008) defined the goal of assessment as a method “to hold students individually accountable for their learning” (p. 23). Brown elaborated on the meaning students attach to accountability by saying, “although some students might be aware that

assessment could improve teaching or their learning or alternately make schools accountable, the conception that assessment makes students accountable is well-entrenched in their thinking” (p. 32). Students may realize that teachers use assessments to monitor their learning; however, students believe the assessments make them accountable to their teachers and their parents.

Regardless of the meaning attached to accountability or how accountability came about, accountability is likely here to stay. Banta (2002) reported that “the vast majority of institutions continue to report engagement with assessment, conference attendance is burgeoning, publications abound, and growing bodies of practitioners see assessments as their primary professional practice” (p. 21). Banta proposed that the staying power of accountability is due to the external stakeholders in education that will not let the matter of assessment drop.

State interest in assessment is now stronger than ever and is fueled by the demand for student achievement data. Accrediting agencies are growing increasingly interested in examining student assessments. The media are more performance aware and data hungry than ever, and newspapers sometimes report school achievement. Assessment of student learning and, therefore, reporting of student learning are currently engrained within the fundamental aspect of educational policy.

Through the American Recovery and Reinvestment Act of 2009, four billion dollars have been allocated to improve state and local education systems and have been labeled *Race to the Top*. According to the U.S. Department of Education (2009), the Race to the Top Fund is designed to motivate states to reform in four areas: adopting standards and assessments that prepare students to succeed, building data systems that measure student growth, recruiting and retaining effective teachers and principals, and turning around low-achieving schools. Much

pressure has been placed on states and school systems to reform their educational practices as a result of Race to the Top (Rothman, 2010).

Despite ever increasing pressure to reform, Firestone and Monfils (2004) contend the following:

All the pressure in the world seems unlikely to change practice, however, if educators do not receive adequate support to make the changes demanded by higher standards and more challenging tests. The necessary support includes knowledge of the content being taught, an understanding of the ways in which children learn the content, effective strategies for teaching it, the social supports to help teachers learn new instructional approaches, materials aligned with the new assessments, and the time and other financial resources to support change. (p. 13)

Houston (2010) stated that a new reauthorization of ESEA will use competition between schools and districts as an attempt to institute positive change in schools. He further suggested that the problem with Race to the Top is that it relies on extrinsic threats and rewards to move people to perform. Teachers and students rely on intrinsic rewards for motivation (Houston, 2010; Pink, 2010). One of the reasons for the lack of expansion of formative assessment with a focus on learning is the precedence given to high-stakes summative assessment in terms of funding, public accountability, and political rhetoric. Preparing students by focusing on the assessment or test has never in modern times been so prominent in the minds of teachers, pupils, parents, and policy-makers (Lambert & Lines, 2000).

Importance of Feedback

The debate over grading and reporting continues in education and educational researchers have discussed which practices are the best for students. The research pointed to the importance of feedback to students and its beneficial effect on student performance (Marzano, 2000). Students performed better when they received feedback that is accompanied by specific or individualized comments from the teacher (Keeney, 2000). Student feedback should be the

fundamental purpose for grades, given its magnitude to the learning process. To be effective feedback must be specific to the student (Marzano, 2000). The practice of reporting academic achievement to students and parents has remained a common practice among educators. Educators assess students' knowledge and transfer that assessment to a reporting device that contains grades. The attachment of specific feedback regarding student performance demonstrated best practice in grading and reporting (Phillips, 1992). Phillips reported that "parents could benefit from personal feedback about their children's strengths, accomplishments, and potential. Test scores and grades, especially without explanation, may lower expectations" (p. 29). Banta (2002) recounted a report titled *Involvement in Learning* that provided three main recommendations, one of which was that students be provided with punctual and constructive feedback (Banta, 2002). Brown (2008) suggested that students wanted teachers to provide constructive feedback regularly. Students benefited when teachers made their learning criteria explicit and provided detailed feedback to the students and parents. Allen (2009) suggested that the problem is that teachers do not always communicate, and when they do it is not always in ways that support student learning.

Marzano (2000) and Guskey (2002) reported that grades should only include academic achievement. Marzano (2000) elucidated that academic achievement is defined as competence in: "(1) the specific subject-matter content, (2) thinking and reasoning skills, and (3) general communication skills" (p. 39). Academic achievement should be the primary factor on which grades should be based. Attentively designed grading and reporting systems that emphasized the formative and communicative aspects for grades can preserve students' focus on important learning goals (Guskey, 2002). If implemented correctly, grades can communicate information to parents that is accurate, significant, and beneficial.

Motivating Students

Student motivation encourages students to become and remain engaged in their learning (Mitchell 2007). Blankenstein et al. (2007) defined student motivation as “what encourages students to become and remain engaged in their learning” (p. 69).). A common belief among educators is that assigning grades motivates students to succeed. As cited in Boydson (1970) John Dewey suggested that learning is not forced: “The school does not have to force the student to be interested, to learn, to be motivated – for the student is interested, is learning, is motivated” (p. 266). A common belief among educators is that assigning grades motivates students to succeed. Guskey (2002) contended that during the middle school years student motivation begins to withdraw. Guskey explained, “Around the middle school years and sometimes earlier, students’ perceptions of grades begin to change . . . students no longer see grades as a source of feedback to guide improvements in their learning. Instead they regard grades as the major product that teachers offer in exchange for their performance” (p. 33). Students may begin to see grades as punishment; this perception may stem from experiences with individual teachers using grades in a punitive manner. No studies have found the use of failing grades to be beneficial for students’ motivation. Conversely, using grades as punishment may cause the student to withdraw from learning. Using low grades as a weapon can adversely affect students, teachers, and their relationship (Mathison & Ross, 2008). Active parental involvement assists with student motivation particularly in the middle school years (Baker, 2000). Middle school parents and schools face a challenge in working together for the benefit of the student because of the maturing nature of students in the middle grades. It is during early adolescence that children and parents begin to renegotiate the level of participation in and control over children's lives.

Students are beginning to establish a greater sense of independence and do not necessarily want parents involved in the same way and to the same extent as they were earlier.

Report cards should not be a prospective reward but a way to offer students useful feedback on their progress (Pink, 2009). Blount (1997) also suggested that grades should not be used to motivate students. Research shows that when parents have high expectations children do well in school (Baker, 2000). Parents who use the report card as an opportunity to discuss the students' progress while demonstrating an interest in their child's learning will motivate the child to succeed in school (Baker, 2000; Blount, 1997; Pink, 2009). In regard to student motivation, John Dewey said, "Verbal memory can be trained in committing tasks, a certain discipline of the reasoning powers can be acquired through lessons in science and mathematics; but, after all, this is somewhat remote and shadowy compared with the training of attention and of judgment that is acquired in having to do things with a real motive behind and a real outcome ahead" (Dewey, 1907).

Parental Involvement

The National Committee for Citizens in Education as cited in Whitaker (2001) urged that parents take an active role in their child's education and specifically urged all parents to:

- Support student events and performances by helping with them (such as sewing costumes or planning scenery for a school play)
- Be part of the decision-making committees dealing with school issues and problems, such as a Parent Advisory Committee (these often meet during the evenings)
- Ask your child's teacher if she or he has materials that you can use to help your child at home.
- Help your child develop a homework schedule that he or she can stick to.

- Have high expectations for your child's learning and behavior at home and at school.
- Avoid making homework a punishment.
- Praise and encourage your child. (p. 185)

Overview of Parent Participation in Schools

Within the No Child Left Behind Action Brief for parental involvement (No Child Left Behind Parent Guide) there is a checklist of the rights and responsibilities of the parental role. One of the items on the checklist to determine if school systems are facilitating parental involvement reads as follows:

If the school district notified parents, was this notification by letter only, or did the school district employ other means to contact parents such as special meetings, a phone call home, Internet, school newsletter, or through the school's parent organization. It is apparent that educators are expected to communicate with parents. If we consider how student learning is communicated to parents, we get the following list: national policy setters, state education departments, school districts, principals, teachers, other students, and the learners themselves (Watts, 1996). Watts (1996) elaborated on the methods of communication by stating that “the avenues spiral back. Some are two-way streets; some are not”. (p. 6)

Some of the means of communication come back to the teacher and some do not.

Whitaker and Fiore (2001) stated that school personnel must communicate with parents on the forefront to avoid a conflict with difficult parents. Problems arise when parents feel that the school does not welcome them or while school personnel feel that parents are unwilling to help or be supportive. The key to successful parent-teacher communication according to the No Child Left Behind Action Brief: Parental Involvement (2004) is as follows: “Use creative forms of communication between educators and families that are personal, goal-orientated, and make optimal use of new communication technologies.” One idea mentioned in the brief was the installation of a telephone in every classroom. Perhaps another idea would be to make grades visible to parents by instituting the use of online grade books.

Varied means of communication are important. The most respected and effective educators use diverse forms of communication to provide feedback frequently to all stakeholders, especially parents (Whitaker & Fiore, 2001). Informing parents of any cause for concern before it escalates into a major problem derails disagreements between teachers and parents (Baker, 2000; Whitaker & Fiore, 2001). The most popular form of a report card among secondary students is a computer generated report card that is mailed to the parent (Moran, 2007). If parents first become aware of a problem after the report card is mailed, the window to correct the problem has already passed. Parents become disgruntled when they find out their child has been performing poorly in the classroom and they were not made aware of the problem. A computer generated report card is not an effective means of communication. It is a one-sided communication tool that often arrives too late (Moran, 2007).

What Parents Expected in the Past

Parent-teacher relations have been discussed for decades in educational literature. One component to be considered regarding parental involvement involves the economic resources of the family. Low income, adult-centered, or self-centered, parents spend much of their time worrying about basic needs such as food and shelter. As a result children and the things they need are often pushed aside. In addition to the apparent dysfunction this creates, children in adult-centered families do not have as much attention paid to their educational needs as do children in child-centered families. The result is less parental involvement at school, lower expectations, and poorer achievement. When families have the resources and/or the desire to be child-centered, then the needs of the children become a focal point in family life (Whitaker & Fiore, 2001).

Whether the discussion is the family of the past or the family of today, the financial well-being of the family plays an important role in how actively involved parents are in the child's education. Middle-class families are more often child-centered because the demands of life are less, as opposed to the high income or low income families. Whitaker and Fiore (2001) further explicate the involvement of parents of the past by stating, "Parents, valuing the patriotism, heroism, and strong work ethic schools professed, were highly supportive of American school's endeavors and continued to reinforce their teachings at home. The major curricular decisions, however, were still left to the experts" (p. 158).

What Parents Expect Today

With the current promotion of more in-depth parental involvement, child-centered families are becoming more concerned about the educational process. With this concern comes more input and involvement from the child-centered family. According to the No Child Left Behind Action Brief: Parental Involvement (2004) parents are now given the opportunity to expand school improvement projects and conduct action research – survey other families, observe in classrooms, review materials, and visit other schools and programs. It seems the parents are now to be included in the decisions related to academic curriculum. Parental involvement is a component in much of the current commentary on educational reform. Parents have a greater responsibility than to provide follow-up to the school agenda (Phillips, 1992).

Guskey (2002) explained that when parents were asked in interviews what they wanted, most responded that they want feedback from educators on a more regular basis about how their child is doing. This is why it is so important for parents and teachers to work together to ensure their communication is clear, concise, and well understood by everyone involved in the process (Guskey, 2002). Moran (2007) addressed the major difference in which grades were reported to

parent of the past as opposed to parents of today. Parents saw only a letter grade in the past; today, parents are able to view all of the individual grades that made up the average. If they choose to be involved daily, parents can view a child's daily grades on the computer. Parents and students can then discuss the result of the student's performance in order to make improvements as the grading period progresses.

In the past the performance of the child would only be discussed when the end of the grading period results were communicated or the parents attended a parent-teacher conference. Phillips (1992) found that parent conference attendance was significantly related to the academic achievement of the child. Online grade books provide constant feedback to parents, positive or negative. Hernandez (2009) described an online grade book, Parentlink, as a powerful tool that would allow parents to work more closely with teachers to help their children. Either way, the parents receive a great deal of information that may motivate them to attend parent-teacher conferences.

Many parents experience considerable anxiety about assessments conducted with their children. They realize the importance of the results of such assessments in making decisions about their children's education. Most parents are, therefore, very keen to know about any assessments their children are to undertake and like to receive comments on such assessments as soon as possible afterwards (Hornby, 2000). The implementation of an online grade book facilitates the parents' desire to receive feedback on assessments as soon as possible in order to reap the benefits that high grades give students. One of the main benefits students achieve with high grades is that they are more likely to be admitted to the college or university of their choice and receive scholarships and tuition assistance (Allen, 2005). In an article addressing the use of an online grade book called Edline, Weeks (2007) proposed that making the grading process

visible will not change how parents parent their children. In pre-Internet days, parents who wanted to be involved attended back-to-school night and parent-teacher conferences. These same parents are those who will monitor their child's grades online. If they were supportive of their children in the past, they will be supportive now. If they were overbearing and micromanaged their child's academic life before the Internet, they will continue to do the same today.

Many educational researchers reported on the positive effects of parental involvement via parental expectations. Bornhold and Goodnow (1999) reported findings that confirm the importance of parental expectations of adolescents in maintaining adolescents' performance. Similarly, Phillips (1992) focused on a study that found a direct, positive relationship between parental expectations and achievement gains of students. Thompson, Alexander, and Entwisle (1988) found that a substantial part of students' performance is mediated through parents' expectations whether the student is white or black. Current thinking does not discount the positive effects of parental involvement and expectations, but parental involvement can be taken to an extreme. With so much at stake regarding a student's success in school, *watchdog technology* such as online grade books and their immediate *techno-feedback* have an obvious appeal for parents. "For hovering 'helicopter' parents, it's a high-beam searchlight. No bad grade escapes its glare" (Weeks, 2007). The increased use of technology to provide more detailed feedback for parents can lead to interesting consequences.

Whitaker and Fiore (2001) expressed concern regarding helicopter parenting. Helicopter parenting can be damaging to the child if the family becomes extremely child-centered. The child will develop an unclear view of self if the parent always defends the child's actions even when the child is clearly wrong. The use of an online grade book might help parents stay connected with their children while granting students a sense of independence, or it could add to

students' dependence on their parents. Students may hesitate to develop autonomy from their parents if the parent is constantly hovering over the students' grades. Adolescents may view the use of online grade book as a sort of "nanny-cam" that monitors their every move. For example, the parents could know the results of a quiz before the student. This immediate knowledge on the part of the parents can cause friction within families (Weeks, 2007).

Development of Technology in Schools

Friedman (2007) commented on the importance of learning how to learn. Friedman stated, "The first, and most important, ability you can develop in a flat world is the ability to 'learn how to learn' – to absorb constantly, and teach yourself, new ways of doing old things or new ways of doing new things" (p. 309). Educators need to guard their ability to learn new things because the use of technology within education increases every year. One change in education has been the ever-increasing use of online grade books to report student performance. The use of today's technologies has undoubtedly changed how educators teach. Even though the use of technology may change how teachers teach, technology cannot replace creative, motivated, and well-trained teachers (Feder, 2000). Research conducted by education scholars addresses the question, "How did instructional practices change with the use of technology?" (Dillon, 2006). Technology can make information accessible anytime and anywhere. Because computers can collect and accumulate vast amounts of information – as well as process and recall it quickly and precisely – they put users in charge of the information they want to receive. We value what we assess, but we can only evaluate what we see or hear. Technology will make student achievement more observable. Technology allows us to review earlier performances from any time – weeks, months, or years earlier (Brewer & Kallick, 1996). Another benefit of using technology to report grades is that school districts are reducing the amount of paper being

sent home. Some districts do not print report cards, and will be saving money by posting grades on parent portal websites. A problem with using technology to communicate grades to families is that some families do not have regular access to the Internet and may miss important information and not even be aware they have missed it (Hu, 2009).

There is a wide variety of grade books available, each providing a range of services. There are open source grade books such as Engrade that are free. The price tag of the online grade book, Pinnacle, that is used in Miami-Dade County, Florida, is \$1 per student per year. The cost of the ThinkWave product is an initial \$59.95 for the product per teacher, and an online service charge of \$35 per teacher per year. Most grade book products allow parents to view the contents of their child's grade with a login that is password protected (Davis, 2009). The use of technology to report grades provides positive and negative consequences. Harwood and Asal (2007) cautioned educators by stating, "Remember, a technology does not do anything to us, it is how we apply a technology that affects the change" (p. 29).

Impact of Online Grading

The use of online grade books is an administrative use of technology. The facilitation of reporting grades via a computer program is not a way of using technology in instruction. Teachers use the technology more as an administrative tool, while usage of these new technologies as teaching tools is being understood as secondary to their administration power by some teachers (Harwood & Asal, 2007). When online grading tools began to become more available about 3 years ago, developers were more interested in helping teachers than parents. Thinkwave started as Windows software that enabled teachers to store grades, tabulate weighted averages, and produce reports (Guernsey, 2001). The development of mygrade book.com, another online grade book, was spurred by an English teacher who lost her grade book on her

laptop when it was stolen. Her husband developed the website as a place for his wife to store her grades (Guernsey, 2001). Development of the TigerNet system allowed parents to have quick, powerful access to information about their child's daily activities and performance in school (Zappe, Sonak, Eunter, & Suen, 2002). Radsch (2005) recounted that one school set up Internet-based grading systems in part to allow parents to monitor a child's progress and in part to eliminate tampering with report cards by the students.

Marzano (2000) supported the use of the online grade books by teachers. Marzano asserted that "in this age of technology, it seems silly to expect teachers to spend their valuable time doing what can be done more efficiently and accurately on a computer" (p. 81). Guskey (2002) reported, "Today many middle and high school teachers use electronic grade books to record this information on computer spreadsheets. Each page of their grade book lists the names of the students in each of their classes, followed by columns filled with a complicated array of numbers and symbols" (p. 17). Many electronic grade books can be found on the Web after just a few minutes of searching. Once the choice is made regarding the grade book to use, the setup process takes approximately 30 to 60 minutes, and teachers would be required to take a few minutes to enter grades into the program after each assignment is graded. The teachers are expected to do this outside of their instructional time (Reich & Thomas, 2008). One obvious advantage of using an online grade book is that it will calculate grades for the teacher. Electronic grade books can do so much more than just calculate grades, such as the following: assist teachers in keeping track of attendance, posting assignments on a calendar, sending and receiving messages from students and parents.

Student Motivation

One of the potential effects of the implementation of the online grade book may be an increase in student motivation. Brown (2008) summarized student academic success by stating, “to succeed in life, to achieve one’s goals, to fulfill one’s potential, it is necessary to take responsibility for one’s own choices, actions, and behavior. Students who are academically successful have tapped into this conception and their responses about the purposes and nature of assessment appear to express this principle” (p. 154). Marzano (2000) mentioned student motivation as a factor in assigning grades as he lists the purposes of assigning grades saying that “using grades to provide feedback about student achievement should be considered the primary function of grades. Guidance is ranked second, instructional planning and student motivation are tied for third, and administration last” (p. 16). Kumar (2002) proposed that the use of online grading sheds light on school work and eliminates excuses for students and parents. Kumar conducted an interview wherein parents explained that there were no more excuses about the teacher’s grading techniques being to blame for poor grades because parents can view all of the assignments and scores that led to the final grade. Another parent in Kumar’s interviews explained that getting the child to turn in assignments on time had been a constant challenge because the child is very bright but lazy. Perhaps the use of the online grade book will assist students in becoming more self-regulating.

With the implementation of grade-reporting software, some teachers “may become more self-conscious about their grading habits and methods, which could have an effect on their attitude toward grading, parent-teacher relationships, and the software itself” (Moran, 2007, p. 21). Some teachers often describe the grading process as “troublesome, time-consuming, and counter to what they consider being their major responsibilities as teachers; that is to engage

students in high-quality learning experiences” (Guskey, 2002, p. 17). Moran (2007) reported teachers’ concerns about using the online grading system Edline as placing too much importance on grades and numbers and not enough on learning and growing. Teachers often do not embrace the grading and reporting process.

Teacher Perspective

Some teachers find that using online grading systems makes correspondence with parents more convenient. The capability of new technologies to provide electronic mail, an asynchronous communication, is a benefit to many educators. E-mail is faster than sending an actual letter and allows teachers to respond to correspondences at a time convenient to them (Harwood & Asal, 2007). Jonassen (2000) explained:

Asynchronous communication (not at the same time; also known as delayed communication) occurs when only one person can communicate at a time. Telephone answering machines and faxes are asynchronous. One person leaves a message, and the other returns the call in hopes of communicating synchronously with the original caller . . . most forms of computer-mediated communication are asynchronous” (p. 245).

Online grade books offer a feature that allows the parent to leave an asynchronous message for the teacher regarding assignments (Guernsey, 2001). The teacher can then respond at a convenient time. Teachers cannot answer a phone call immediately during the day because they are conducting class. The online grade book allows the parent to leave a message and the teacher to respond at a later time.

Teachers may not enjoy using online grade books because parents expect information too frequently. Teachers have many responsibilities, the first of which is planning and teaching lessons. Guernsey (2001) reported on an interview with a teacher who said one reason he stopped using an online grade book was the barrage of e-mail he faced from inquisitive parents asking

why he was not uploading grades regularly and requests for passwords. Teachers are not grading and reporting machines as some parents come to expect when an online grade book is in use.

Moran (2007) found that teachers may become more self-conscious about their grading methods. The teachers who become uncomfortable with making grades visible may allow their discomfort to carry over into the parent-teacher relationship. Moran established that one concern teachers bring to the table regarding the implementation of Edline is that it reduces the classroom experience to a letter or a number. Guskey (1996) reported that “no one method of grading and reporting serves all purposes well” (p. 16). The criticisms of grading and reporting as posed by the teachers in Moran’s study and by Guskey supported the statement made by Hursh (2008): “Rather, I want to suggest that the kinds of questions Dewey raised about education and teaching are the kinds of questions that teachers need to continually raise if we are to develop democratic schools and a democratic society” (p. 8). Conversely, Brewer and Kallick (1996) argued that “society will demand more and more information about student performance; and as people become more knowledgeable, they will want more complex information” (p. 178). Educators, parents, and stakeholders must continually evaluate methods of grading and reporting in order to make improvements over time.

Summary

The literature indicated that teachers often face obstacles when assigning and communicating grades to parents. Parental involvement is beneficial to student motivation and success. New technologies are emerging to facilitate teacher and parent communication.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter describes the qualitative methods used to implement this study. The design, the instruments used for generating and collecting data, the sample size, the description of the sample, and the justification for using these methods and procedures are included in this section. The recruiting protocol for participants is made transparent. The interview guide and interview logistics are explained. The focus of this study was teacher perceptions of the implications of using online grading systems.

The research questions the study addresses are:

1. Does the use of online grade books to report students' grades affect the teachers' relationship with parents? How?
2. Does increasing visibility of grading to students and parents affect the teachers' relationship with students? How?
3. How do teachers perceive the impact of online grading on student motivation?
4. Does increasing visibility within the grading process affect parent-to-teacher communication? How?
5. How does increasing the visibility of grading affect the quality of assessments and feedback given on assignments?
6. How does the use of an online gradebook impact student interest in learning?

The first research question to be answered by this qualitative study was divided into more specific parts. The question of parent-teacher relations and student-teacher relations was explored in detail. When parents started viewing the online grade book, were they in contact with their child's teacher more often? Did the software replace time spent at parent-teacher

conferences and writing emails to communicate? Did the teachers have more or less time in contact with the parents because of the software, and did the tone, subject, and nature of their conversations change? Finally, how did the teachers who were interviewed feel about their interaction with parents who entered into these conversations armed with the knowledge of assessments gained through the use of an online grade book?

The second research question answered by this qualitative study was further divided as follows: Did the use of online grade books to report students' grades affect the teachers' relationship with students? Were the students more inquisitive regarding their grades throughout the grading period? Did the students quiz the teacher about entering grades into the program?

The third research question involves student motivation. Did using an open grade book in the grading process motivate students to learn and perform in the classroom? If students were aware that their parents and teachers were communicating with each other about every assignment, did each student perform to the best of his/her ability on each assignment?

The fourth research question regarding the aspect of parent-teacher communication was further explored. Did the use of the online grading software allow the teacher to communicate more easily and effectively with the parent? Did the use of the software eliminate parents' asking why they were not informed that their child was performing poorly? This research question will also address the issue of communicating easily with parents. Did the use of an online grade book allow teachers to communicate with parents on each assignment more conveniently? Was the use of the online grade book as a way to communicate asynchronously more convenient than making a telephone call or composing an email?

Finally, this study addressed the issue of the implications for the grading process that using an online grade book imposes on the teacher's grading practices. Did the use of an online

grade book change the nature of assessments? Did the teacher give more feedback on an assessment with the knowledge that parents would be seeing the assessment?

This qualitative study used in-depth interviews to collect and analyze data. Ritchie and Lewis (2008) stated that, “In-depth or unstructured interviews are one of the main methods of data collection used in qualitative research” (p. 138). Coleman and Briggs (2002) stated, “In education, the face-to-face interview is still the most frequent form of discourse, as both parties often want to see each other when talking about human affairs and there is some unease about the veracity of replies given via the somewhat detached medium of email (p. 145). An in-depth interview is not designed to test a hypothesis, instead “it is designed to ask participants to reconstruct their experience and to explore their meaning” (Seidman, 1991, p. 69). This study describes the impact of using an online grading system and explains the teacher’s perception of the implications associated with the use of the grade book. Qualitative methods were selected because of its value for analyzing data in context. McMillan and Schumacher (2006) contended that qualitative research is “concerned with understanding social phenomena from participants’ perspectives” (p. 315).

The in-depth interview is used in qualitative research to gain an understanding of the participant’s subjective experience. In-depth interviews are the most appropriate avenue for data collection because they provide in-depth answers to the research question, “What are teacher perceptions of the implications of using online grading systems?” I conducted semicontrolled in-depth interviews while using the interview guide approach. In a semi-controlled in depth interview, the topics are selected in advance, but I decided the order the questions will be presented during the interview and may follow with questions designed to obtain a greater

representation of the interviewees' perceptions. While using the interview guide approach, I conducted the interview in a conversational manner.

The key features of an in-depth interview make it most useful for this study. Ritchie and Lewis (2008) addressed the following four key features of in-depth interviews in the text:

1. The in-depth interview is intended to combine structure with flexibility.
2. The interview is interactive in nature.
3. The researcher uses a range of probes and other techniques to achieve depth of answer in terms of penetration, exploration and explanation.
4. The interview is generative in the sense that new knowledge or thoughts are likely, at some stage, to be created (p. 142).

An interview guide was used to ensure that the interviewer explores dialogue pertaining to the research questions. In the interview guide approach, topics are selected in advance, but the researcher decides the sequence and wording of the questions during the interview (McMillan & Schumacher, 2006). The interviewees were granted the flexibility to discuss what they consider pertinent to the topic so that new knowledge and thoughts will be given the chance to develop in the conversation. The researcher's goal in using the interview guide is to keep the interview relatively informal and situational.

Data Collection

For this study I invited a purposive sample of 10 teachers in a middle grades school because they all implemented an online grade book, Engrade (<http://www.engage.com>), to record grades and calculate averages. Five of the interviewees were chosen because these teachers had been using Engrade for at least one academic year. They possess the necessary technical skills and familiarity with the software. These selection criteria allowed these teachers

to focus on the implications of using Engrade and not be slowed by the technical difficulties of using new software. Five of the interviewees were chosen because they have used Engrade for less than one full academic school year.

If a participant chose to withdraw from the study, I took one of two actions. I either contacted other teachers within the middle school building that fit the purposive sample or I began the process of recruiting participants from a different middle school located in the same county.

I initially contacted, via telephone, the director of schools in which the sample of teachers are employed in order to gain permission to contact teachers within the school system. I then contacted the principal of the middle school to ask permission to interview the teachers who use an online grade book. I also asked the principal to provide the names of teachers who had used Engrade for more than one academic school year and the names of teachers who have used Engrade for less than one academic school year. I contacted the teachers on the telephone to ask to meet face-to-face when permission was granted, I then traveled to the teacher's building in order to explain the study and asked the teachers if they would be willing to participate in the study. If an individual agreed to participate, I then asked for a convenient time to come back for the one-hour interview. The timing of the interview needed to be semicontrolled because it allowed respondents to articulate themselves at length but offered sufficient structure to prevent aimless rambling (Coleman & Briggs, 2002).

I used an interview guide while conducting the interviews. See Appendix A for the research guide.

I recorded the interviews on two electronic devices. I used a tape recorder to record the interviews having it serve as the back-up recording of the interview. I also used an application,

SpeakWrite (<http://www.speak-write.com/web/>), on my Android cellular phone to record the interviews. SpeakWrite uses no voice or speech recognition software at any stage of the process; only qualified and experienced word processing personnel transcribe material. Immediately after the interview, I uploaded the interview to SpeakWrite and their typists transcribed it. I received the typed transcription via email in about 3 hours. The names of the interviewee were not associated with the interview when I upload the interview and each interviewee remained anonymous.

I suggested that the interviews be conducted in the classrooms of the teachers being interviewed after the school day concluded. Conducting the interviews after the school day concluded helped to ensure that there were not any interruptions. One important element regarding the interview is confidentiality, and, without privacy, few people were expected to be frank. As I interview teachers in the school, I ensured that other teachers, students, and parents were not present because the interviewee may think he/she must act in a certain way. I requested permission to put a “do not disturb” sign on the classroom door to help ensure that there were not any interruptions and that confidentiality was maintained (Coleman & Briggs, 2002).

Ethical Protocol

Before the study begins, the following procedures were completed. I obtained authorization to complete the study from the East Tennessee State University Institutional Review Board (ETSU-IRB). Permission to interview the teachers was obtained from the administration of the teachers’ school. The administration of the school was assured that the names of the participants remained confidential and anonymous, and pseudonyms were used to conceal identities. After being selected to participate in the study, the participants were asked to sign a consent form. The participants were told that their participation in the study is voluntary

and they may choose to withdraw from the study at any time. The participants were assured that their identities remained confidential and anonymous.

Data Analysis

Qualitative data analysis is primarily an inductive process of organizing data and identifying patterns in the data that is then divided into categories. The method of data analysis in qualitative research is not universal. There is no one right way to decode and interpret the data. The interpretation of the data is up to “the researcher’s intellectual rigor” (McMillan & Schumacher, 2006).

I employed the template analysis style to analyze the data. The template analysis style “logically applies derived sets of codes and categories to the data; however, these classifications are frequently revised during data analysis” (McMillan & Schumacher, 2006, p. 365). Initial codes and categories were derived from the interview guide and may not be retained in the final analysis of the data. Tentative categories were assigned at the beginning of the study, and they will remain flexible throughout the analysis phase of the study.

Quality and Verification

Ritchie and Lewis (2008) propose that in order to create an inferential generalization in qualitative research, a researcher is required to offer *thick description*. Thick description is a technique of data reporting that requires the researcher to provide adequate detail of the original observations or commentaries – and the environments in which they occurred – to allow the reader to determine and assess the meanings attached to them. It would be impossible for one to be aware of every situation where the results of the research have enough merit to be generalized. Therefore, I provided a thick description of the interviews to enable the reader of the research to determine if the study can be generalized to the reader’s perceived circumstances.

The concepts of reliability and validity exist in the natural sciences. The meaning of reliability in qualitative research is *sustainable*, and the meaning of validity in qualitative research is *well-grounded* (Ritchie & Lewis, 2008). The meanings associated with reliability and validity help to strengthen the relevance of the data.

In order to conduct a good qualitative research study, Ritchie and Lewis (2008) suggest “one which has a clearly defined purpose, in which there is a coherence between the research questions and the methods or approaches proposed, and which generates data which is valid and reliable” (p. 47). Ritchie and Lewis state, “Reliability is generally understood to concern the replicability of research findings and whether or not they would be repeated if another study, using the same or similar methods, was undertaken” (p. 270). In other words, could another researcher repeat the same study and expect to gather similar data and arrive at the same conclusion? The complete replication of this study is an unrealistic demand. Therefore, I have elucidated in detail as much as is possible of the procedures that have led to the conclusions from the study.

Validity of qualitative designs is “the degree to which the interpretations have mutual meanings between the participants and the researcher” (McMillan & Schumacher, 2006, p. 324). The validity of the design occurs when the researcher and the participants agree on the meanings of what occurs. In the case of this study, the validity of the study was reinforced when the researcher employs member checking after the in-depth interview. Gall, Borg, and Gall (1996) explained member checking as “the process of having these individuals review statements made in the researcher’s report for accuracy and completeness” (p. 575). I shared the transcript of each interview as well as the report to be written about each one. Member checking facilitated the research by acquiring affirmation for the interviewee that the understanding of the dialogue in

the interview is accurate. Member checking contributes to the trustworthiness and credibility of the research report (Seidman, 1991).

Chapter 4 discussed in detail all of my research findings. I used direct quotes from the participants to support my findings. I represented my findings in a way that remains grounded in the accounts of research participants and explains its subtleties and its complexities (Ritchie & Lewis, 2008). I offered reflective commentary on direct quotes; however, I did not overuse quotations. I used original passages sparingly and for well-judged purposes. I discerned patterns and associations among the 10 interviews in order to offer reflective commentary about common themes found within them. I provided the reader with a description of what qualitative research is and what it is not. I offered an explanation of the limitations of my study, and discussed the inferences that can be drawn from the interviews. I attempted to “strike a balance between descriptive, explanatory and interpretative evidence” (Ritchie & Lewis, 2008, p. 289). I kept the story clear for the reader and conveyed the complexity of research without losing readability.

Chapter 5 synthesized all of my findings into a summary. I linked my research findings to existing literature, and made recommendations for practice based on my findings. I also made recommendations for future research.

CHAPTER 4

FINDINGS

The purpose of this study was to investigate teachers' opinions of the implications of implementing an online gradebook in the middle grades. The study involved collecting data through one-on-one interviews with 10 middle school teachers within the parameters of an interview guide. Purposeful sampling was used, selecting teachers who had implemented an online gradebook. Initial contacts were obtained through email asking teachers to donate an hour of their time for an interview. The research examined the perceptions of teachers as related to the following research questions:

1. Does the use of online grade books to report students' grades affect the teachers' relationship with parents? How?
2. Does increasing visibility of grading to students and parents affect the teachers' relationship with students? How?
3. How do teachers perceive the impact of online grading on student motivation?
4. Does increasing visibility within the grading process affect parent-to-teacher communication? How?
5. How does increasing the visibility of grading affect the quality of assessments and feedback given on assignments?
6. How does the use of an online gradebook impact student interest in learning?

Following the completion of interviews of 10 middle school teachers who employ an online gradebook, I began the data analysis phase. I examined the transcripts and organized them for data analysis. I read through all of the transcripts while listening to the recorded interview to

ensure the accuracy of the transcriptions. I coded the data by hand while separating the content of the interviews into themes related to the research questions.

Results

The personal interviews told the story of how the teachers' perceived the implications on implementing an online grade book. The teachers recounted their personal experiences in a detailed manner. After I had carefully coded the data, I selected specific quotes that were pertinent to the research question in order to address the research questions.

Teachers' Relationships with Parents

Teachers were asked how many parents were checking Engrade. Each teacher was quick to point out that it was impossible to tell if a parent or a student had been checking Engrade. As Mary, a sixth grade teacher with 32 years experience, revealed:

I couldn't tell you exactly how many parents are checking Engrade, but the last count we did was two weeks ago, and I think all but 15 of our students and/or parents in the sixth grade were on Engrade, which is amazing to us.

Each teacher explained that Engrade has a report that displays how often the student account is accessed; however, the report does not display who checked the account. The person checking the account could be a parent or a student. Nonetheless, teachers are assured that parents are checking Engrade at conferences and when messages are received from the parent with questions regarding Engrade. The teachers were surprised to learn how many parents or students were checking Engrade. Several teachers predicted that the numbers of parents and students checking Engrade would increase each year due to intense advertising on the part of the school.

The middle school in which the participants teach has implemented a campaign to advertise Engrade and encourage parents to check their child's academic progress. The marquee

in the front of the school asks, “Have you checked Engrade today?” The parents see this highly visible sign as they drive around the building to drop off their child at school each day. The monthly newsletters that are sent home with the students include a reminder for parents to check Engrade. One teacher commented that if a parent has not signed up for Engrade “It’s not from a lack of knowing; we send home paperwork, we sent home their codes in their report cards, we have signs in the building.” In order for parents to sign up for Engrade, they need an access code that is provided by the teacher. The teachers professed to providing some parents with the access codes quite frequently. As one teacher phrased it, “If the parents aren’t checking Engrade, it’s because they don’t want to know. We advertise it all the time.”

As the students and parents become more and more familiar with Engrade, it is probable that the parents and students will come to expect grades to be published in high school. Matthew said, “I know teachers at the high school that use it.” I continued this thread of conversation by asking Matthew if he could foresee that in the future more and more of the high school teachers will start using an online gradebook. Matthew responded, “I think, I think you’re gonna see, I think you’ll see pressure from parents even.”

When asked if the use of online gradebooks affects the teachers’ relationship with parents, 9 of the 10 teachers interviewed stated that they perceived an impact on their relationship with parents. Janet, an eighth grade teacher, did not say that she noticed an effect on her relationship with the parents of her students. Janet explained:

I’ve not seen much of a difference in using Engrade in my relationship with the parents of my students. I’ve seen a bigger difference between my students and myself. The student, what I’ve found is that they’re more likely to contact me per Engrade.

The nine teachers who did perceive an impact on teacher-to-parent relations made comments similar to the following statements:

“I have a much better working relationship with the parents who check Engrade.”

“The parents that are on it, for the most part, are pretty positive.”

“I believe it’s making it better because I believe that it allows the parents to become more involved in the student’s education and grades because they’re able to see what they’re making. We are working more as a team with Engrade because we’re able to actually see the grades.”

One implication of implementing an online gradebook that teachers perceived was an effect on the teacher’s relationship with parents. According to the majority of the teachers, the dynamics of parent-to-teacher communication have changed as a result of the implementation of Engrade.

When asked about the effect Engrade had on her relationship with the parents of her students, Janet, a middle school teacher with 16 years experience talked more about the effect on her relationships with her students. However, she stated that she has seen more positive relationships with the parents of her students. Janet explained:

Honestly, I’ve not seen much of a difference in using Engrade in my relationship with parents of my students. Now, the parents that I do get involved with through Engrade, we have a positive relationship. I don’t think it’s been negative in any way at all. I think if anything, it’s been a positive relationship with the parent.

Despite the teachers’ repeated expressions of satisfaction with the many facets of Engrade, teachers did recount instances involving Engrade that became negative interactions with difficult parents.

Difficult Parents. George explained a parent situation that was not necessarily a negative relationship associated with Engrade, but it was not positive either. A parent had been over-checking Engrade and frequently sending messages to George regarding the child’s assignments and grades. George had missed a few days of school because of illness. While he was out of school, the students’ grades did not get recorded into Engrade in a timely fashion. The parent that

had been over-checking Engrade then sent George three emails asking the same question at varying times throughout the 3 days. When George recovered from his illness, he had to explain to the parent that he would catch up on the grading and recording as soon as possible. Another teacher, Matthew, spoke to this issue as well. He explained that using Engrade does put some pressure on the teacher because parents can go to the computer and see what happened in class that day. Parents then expect the teacher to keep the data on Engrade up-to-date and record grades in a timely fashion. There are invariably times when it is not possible for the teacher to grade assignments in the same day they are collected and record them as quickly as the parent would prefer.

Janet recounted an instance where she had an altercation with a difficult parent that involved the parents' access to Engrade. Janet explained:

Sometimes parents come in and use Engrade almost like ammunition. They like to come in already fit to be tied, and already angry, and it's my fault that their kid hasn't turned in the work. And why didn't I call sooner? And, you know, they come in with that type of attitude. And, and so they sound like they come in armed ready to attack. I think Engrade gives them more ammunition because they come in with their mind made up. What happens is they print just how their kid's doing; what their missing in my class. They print it off. They've gotten Johnnie and Susie's side of the story.

Janet became agitated as she told the story of the parent coming in with Engrade printouts as ammunition. The parent Janet references had arrived at the parent-teacher conference with a confrontational attitude. She would point to the report of missing assignments and berate Janet for not calling her. Janet's view is that the student should have been turning in his work on time, and the parent should have been checking Engrade regularly. In this instance, Janet refused to take responsibility for the poor performance of the child.

Grading Mistakes. Another issue that has presented itself to teachers implementing Engrade in the middle school is the inevitability of a grading mistake on the part of the teacher

being noticed by a parent. When grades are made transparent to the parent, mistakes made by the teacher may be called to the teacher's attention by a parent. Two of the 10 interviewees reported that they had not been made aware of a grading mistake via the use of Engrade. Eight of the teachers responded that they had made mistakes. Terry explained how easy it is to make a grading mistake, "When you've got 140 students and you take 12 to 20 grades six weeks; it's easy to plug in a 10 instead of a 100." Janet commented on grading mistakes that she had made in the past:

I've made grading mistakes. There's not a year that goes by that I don't make grading mistakes. In years past, I put the grade down in my grade book and it was a done deal. The kids didn't see my grade book. They had to take my word for it. Now when I've made a grading mistake and it's brought to my attention by a parent or a student, I just apologize and tell them I'll make that correction.

All of the teachers admitted that making a grading mistake is unavoidable. The two teachers who said that they had not been questioned about a grading mistake speculated that they would make a mistake in the future that would be brought to their attention by a parent or a student. The eight teachers who have made grading mistakes commented that they have apologized for the mistake and changed the grade at once. One teacher changed a grade immediately in front of the student, so that the student would be assured that the correction had been made on Engrade. Students can monitor their grades online for any mistakes made by the teacher if they are motivated to do so and can compare their online grades with the returned papers that they receive from the teacher. Several teachers commented that they suspected that they made fewer errors when using of Engrade because students and parents could monitor it as well and bring any mistakes to the teacher's attention. None of the teachers had an instance to share describing parents or students being difficult over grading mistakes. It appears that if the teacher is apologetic about the error and makes an immediate correction, the parent is satisfied.

Communication. The teachers were asked to explain their perceived relationship between Engrade and parent-to-teacher communication. Janet explained that she appreciates the impact Engrade has on communication. In the instance she explained, a parent might call her with a question regarding the student's grades. Janet and the parent would have the capability to view the student's grades on Engrade at the same time. This allows the parent to ask Janet specific questions about assignments, and Janet understands what the parent is asking thus permitting the parent and the teacher to conduct a parent-to-teacher conference on the phone. Janet expressed her satisfaction with Engrade in this situation when she said, "You know, I love that!"

Each of the 10 teachers had positive comments regarding their perception of the impact Engrade has had on teacher-to-parent communication. Terry, a seventh grade science teacher, clearly explained her perception of the impact Engrade has on teacher to parent communication:

It makes us able to communicate on a daily basis. The parents are very appreciative that they have both their daily progress plus the daily assignments, 'cause we use the calendar on Engrade to record the assignments so that we're not dependent on just the planner, and parents are not dependent on just the students to get the information that they need. They can go daily and look up what we did in class and the students should also have their assignment book.

Terry explained to me that the Engrade has a calendar that she uses to communicate the daily assignments for her class to parents. Terry expressed appreciation that she does not have to rely on the students taking their planners home in order to communicate the daily assignments to the parent. Parents can view the daily assignments on the Engrade calendar in order to be actively involved in their child's daily academic life.

The majority of the teachers remarked that teachers communicate more frequently with parents with the use of Engrade. George explained:

I think we actually communicate more now. Whenever I didn't have Engrade we used other grading programs. We would rarely hear from parents. With Engrade, I get emails every other day at least from a parent or two parents or ten parents or

whatever. I'm, even though it's email, it's not per phone conversation or face to face, there's more communication going on now.

The teachers I interviewed did not express regret for the increased communication between themselves and parents. On the contrary, teachers welcomed the increased communication with parents. George stated, "I want that and if that means they communicate daily, then it's fine with me." The teachers approve of the increase of communication between the teacher and parent. The teacher explained to me that, hopefully, the increased teacher and parent communication will lead to more successful students

Parents checking Engrade may lead to more positive and efficient communication between the teacher and the parent. Matthew described his perception of the impact Engrade has on his relationship with parents with the following comment, "It's kind of nice to actually not be in a defensive mode. It's almost gotten to the point, from the teacher perspective; it's almost not defensive at all anymore."

The teachers repeatedly expressed appreciation for the ease of communication. In the past, teachers would have to wait their turn to use the telephone at the end of the day to communicate with parents. Now, with the implementation of Engrade, the teachers spend a few minutes responding to parents questions. Missy, a sixth grade teacher, commented, "I prefer emails than person-to-person interactions. I'm a lot faster typing than I am talking. It saves time and it saves the parents' time."

The convenience of the parent to teacher communication was undisputed among the 10 interviewees. Mary explained:

I find it inconvenient to have to run down to the office to make a phone call, and then the parent isn't home. I leave them a voice mail and back and forth and back and forth. Engrade is more immediate.

When I asked Elise how she felt about not needing to contact parents on the phone because she could now send messages via Engrade, she replied, “It’s wonderful.”

Teachers’ Relationships with Students

The second research question “Does increasing the visibility of grades affect the teacher’s relationship with students?” was asked of the interviewees. The teachers responded that they have seen a bigger impact of the teacher-to-student relationship versus the teacher-to-parent relationship. Each interviewee spoke to the relationship between the student and teacher.

Nine of the 10 teachers said that using Engrade did have an effect on their relationship with the students. Conversely, when I asked Elina, an eighth grade teacher, about the use of Engrade affecting her relationship with her students, she said, “I’ve had a couple of students that might send me messages to have a good holiday, but not normally about questions about grades. I don’t think it affects our relationship with the student.” Elina was the only teacher interviewed who did not perceive a change in her relationship with the students due to the implementation of Engrade.

Communication. The teachers who said that Engrade affected their relationship with their students commented that the students seem hesitant to talk to the teacher in class. Conversely the students don’t hesitate to contact the teacher via Engrade messaging. One participant mentioned that students seem comfortable on the computers and enjoy sending messages on the internet.

Janet remarked that the students seem to be “braver at a distance.” Janet recounted the following story about one of her students checking Engrade:

I have one student in particular who contacts me up to three times a week on Engrade. So I asked, “Okay, why didn’t you just ask me that in class?” He said “Well, I was just looking on Engrade” and I think he just feels more comfortable in discussing it with me per, you know, that barrier. He doesn’t have to see my eyes or whatever.

The students often ask the teacher about a missing assignment, late work, or a possible mistake in their grades via the messaging system. Janet went on to speculate:

Maybe they get home, and they actually sit down, they have a moment and they're like, "Well, I'm going to ask my teacher what the deal is with this; why did I make an 85 when I thought I should have made this." I have noticed that they are definitely more confident in asking questions like that. Whereas before Engrade, very, very rarely did I have a student ever question why they made what they did with me ever. I have noticed that they feel more confident in what they ask me, which I don't have a problem with.

Janet proposed that students may simply have more time to ask a question when they get home. Middle school students change classes in a brisk manner throughout the day. It is possible that a student does not have time to think about a question they may have, much less find the time to ask the teacher a question. Also, in a classroom setting, teachers are dividing their attention among an entire classroom of students. When messaging within Engrade, students receive one-on-one attention from their teacher. This individualized attention may grant the students access to the teacher so that they can ask a question and have it answered without being interrupted.

Some students use the messaging system just to offer pleasantries, i.e., saying hello or Merry Christmas. An interviewee recounted an instance when her father was very ill, and she missed class to care for him. A student sent her a message to let her know the student was praying for her father's recovery. Donna became emotional as she recounted:

My dad had a stroke and has some surgery here several, well a couple of months ago and I was out for a couple of days, went out of town with that, and then when I came back there were kids that you know we said a prayer for you at church today and I hope your dad – I know it makes me wanna cry, and so that was nice you know because they're good kids and they probably wouldn't have come up to me and said that.

Debbie did not request that the student pray for her. She was absent for a few days, and the students missed her in class. The students had discovered that Debbie was nursing her ill

father back to health, and the student that messaged Debbie was concerned about her. Debbie was quick to point out that it is in the best interest of the teacher to be cautious regarding how close the teacher becomes to the student via the messaging system. Debbie said:

So, you know, we try to touch base with them on a personal basis. You just have to be so careful sometimes these days. Relationships can be misconstrued. So, and that's terrible but you know there's also that, that grey area that – you know I enjoy what I do and I love the kids and they know that my concern is that they understand what they're doing because math is so important.

The relationship between the teacher and the student could be misconstrued by outsiders as being inappropriate. It is important that the teacher be adamant about not blurring the lines between teacher and student while maintaining a relationship with the students.

Matthew described how the change that using Engrade for messaging is bringing to the teacher-student relationship in the following statement:

The whole, the whole messaging changes the dynamic a little bit. They think it's cool to be able to send a message to a teacher. At the beginning of the year, you'll just get these student messages that does open up an avenue that they can question. They can question assignments. They can question how to fix things. But in other cases I think there's students who would have a hard time directly asking that question, but can ask it through Engrade.

Tena explained how Engrade has affected her relationship with her students:

What's so funny is that students sometimes just send a message, like "Are you having a good day" or "I really liked Science yesterday." We have that friendly communication that we never had before. Middle school kids are starting to come to that age where they don't wanna be seen as un-cool because they have a teacher that they like.

Overall, the teachers seemed to enjoy this increased communication with their students. The teachers seemed to be pleased that they now have the ability to talk to their students. Several of the teachers interviewed commented with satisfaction on their ability to communicate with the students. George has had students send him social messages, but they have not questioned him regarding assignments via Engrade as of yet. George is also

one of the teachers who has not yet received a message from parents or students regarding a grading mistake. George shared his experiences and opinion regarding communicating on Engrade with the following comment:

Students are coming to me face-to-face and the only message I've gotten through Engrade from students have been like, I just wanted to say, Hi," you know, more like that. Just, "How's it going?" or "I wanted to show you that I could send you a message." From students I haven't had any questions about a grade other than face-to-face.

I asked George if he thought that developing a relationship with the students would lead them to perform better for him in the classroom. He responded:

Well, I hope it's because they feel like they have a better relationship with me, one that I'm not going to just jump down their throats on things and that's what I tell them from day one, you know, I don't want them to be made fun of outside of this class or inside of it. And I don't want them to feel that they're afraid to talk. I want them to feel like if they have something they don't feel comfortable telling anybody else, I want them to be able to come tell me so I can help them.

George and other teachers seem to desire to make a connection with the students. The teachers seem genuinely to care about the students. The teachers do not appear to be inconvenienced by the increased communication with the students on Engrade. The teachers are satisfied, if not a bit excited, about developing a closer relationship with the students as a result of the increased communication

Inquisitive Students. The students appear to be more inquisitive regarding their grades with the implementation of Engrade. I asked the teachers the following question: "Are your students more inquisitive regarding their grades throughout the grading period?" The teachers offered many stories that displayed the students' interest in their grades that they did not display before the use of Engrade. Terry explained, "So sometimes your grades and your grade book have been updated before the grades on Engrade. And you'll start getting emails from the parents about 'I've turned this in. Why isn't Engrade updated.' "

Matthew's students have learned not to ask him about their grades. They request to go straight to the computer to check their grades as needed. Matthew was clear about his experience with students being inquisitive about their grades with the following explanation:

Occasionally, I will still get questions. "What grade am I getting in your class?" I tell the students to think about how many grades we deal with. I don't know your grades by heart. So the kids say "Can I go get on the computer?" That's the next thing they'll say. I think it's less asking me directly about grades and more can I get on the computer and check. They know where to look.

Matthew has successfully expressed to his students that they should be the ones in control of their grades. He has repeatedly told them that they need to be the ones who monitor their grades. Matthew lets his students know that he is not the one ultimately responsible for their grades. Matthew uses Engrade in order to teach the students that they are responsible for their own grades. Matthew's students have reached a point where they take it upon themselves to check their own grades and perhaps take ownership of their grades themselves.

Student Motivation

The following research question, "How do teachers perceive the impact of online grading on student motivation?" was addressed through the following interview question: "Does the use of Engrade affect your confidence in your ability to motivate students to learn and perform in your classroom?" Each of the 10 interviewees said "No" or "No, not at all" when asked this question. Yet, each teacher then went on to explain how they perceived Engrade as a motivating factor of student performance.

Parents Monitoring Engrade. Teachers explained to me that students seem to try harder if they know their parents are monitoring Engrade. I asked Terry if he would attribute Engrade to motivating his students. He responded that the students are motivated "because they wanna

please their parents.” When I asked Elise if Engrade was a motivating factor for students to perform in the classroom, she said:

No, I don’t think so. I don’t know how, I don’t see how my using Engrade is going to motivate them. Perhaps if it’s the ones that are already motivated and they can check and see how they did on a daily basis, but I don’t think my being on it has any affect on their motivation.”

Many teachers explained to me that some students are intrinsically motivated and some students are motivated to perform because of the expectations of their parents. I asked Elise what she thought was motivating students and without hesitation, she said, “Their parents and their nature.” George spoke hopefully about parents checking Engrade:

Maybe they’re trying harder because they know mom and dad are looking at it. It helps make the students a little bit more responsible or holds them more responsible. I think if that is the main result of Engrade then it’s definitely a positive because if we have more parents involved then, hopefully, the students will perform better.

The teachers interviewed were hopeful that if the parents become engaged with their students’ daily academic progress by monitoring Engrade, then the students will be more mindful of how their daily performance affects their grades.

Students Taking Responsibility for Grades. The students appear to desire to check Engrade. One teacher speculated as to why students check their grades saying, “They’re looking for their grades because I think they like that they can check their grades.” One teacher commented that she knew her students were interested in their grades. She offered an instance in which a student walked out of her class one day, went to the computer lab, and then sent her a message asking a question about one of her grades. The students appear to be motivated to check Engrade on their own without encouragement from their teacher or their parent. Teachers suggested to me that students who check Engrade on their own become more aware of how their

performance affects their grades and, therefore, begin to take responsibility for their grades.

Matthew told the following story:

We talk in math class about outliers and what they do to averages. The students really get to see what happens when they make a zero. They get to it if they're watching it close enough and they're missing an assignment. They get to see that one zero means three or four points on their average. There have been times where I've literally showed them. Not so much here lately. It seems like this year we have got a group of kids that seem to be on top if it themselves a whole lot more. I've shown students that struggle in turning stuff in on time. I've sat them down and said, "Look at this one assignment on Engrade. This one assignment took you from a failing grade up to a passing one because you got rid of that one zero."

Matthew told a story about a student who took responsibility for his grades on a day he was absent in the following recounting:

I've had a few examples – I had one student this year that I was so impressed. He actually brought his homework in the day after he was sick. I commented to him that it is good that he had his book at home. He said he did not take his book home. [He said], "I looked it up on Engrade and I pulled the book up on your webpage." And he pulled, he pulled the book up at home and looked at the assignment and did it. He brought it to school the next day. So, he wasn't behind at all. And that's – to me, that's like the ultimate step, the end of the spectrum where the kids are looking at it and paying attention to their grades and less parents doing it 'cause once they get to that point they kind of have ownership.

Matthew's story is one wherein a student knows he was absent and has completed a missing assignment. He has the motivation to check the calendar on Engrade for the assignment, follow the link to the online textbook that he found on the teacher's webpage, and complete the day's assignment. Matthew summed up the telling of this story when he stated, "I thought that was amazing." This particular student in Matthew's class has taken responsibility for his learning and assignment completion. The student in Matthew's story will not be posted as having a missing assignment on Engrade because of his absence. The day following his absence from class Matthew will have graded the assignment and posted the class grades on Engrade. The student who was absent will have feedback in a timely fashion for an assignment completed from

a day he was absent. This responsible attitude allows the grading and reporting process to be more efficient for the student and the teacher. The issue of students turning work in late because of an absence or simply not completing an assignment on time creates confusion and delay in the grading and reporting process.

Several teachers responded that students refrain from turning in their work late when they are actively viewing Engrade. In the past teachers have had a problem of students not turning their work in on time. Now that students have constant access to their grades online, they can monitor daily to see if they have any missing assignments. If the students notice a missing assignment on Engrade, they can turn it in right away instead of waiting for the teacher to provide a mid 6-weeks report or orally ask for the missing assignment. Matthew commented:

I may get a little bit of an influx of assignments turned in late at the end of the six weeks, although this year, not near as much as previous years, and I think part of that contributed to them being on top of it throughout the six weeks. The students are aware what happens to their grades when they receive a zero or points off when checking Engrade.

Matthew is hopeful that the use of Engrade will encourage the students to turn in their assignments on time. When students turn in their work on time, this allows the teacher to grade the assignments efficiently and post them on Engrade. Students who turn in their work late create a bit more work for the teacher and the subsequent result is a delay in the teacher grading the assignment.

Peer Motivation. Matthew recounted his procedure for posting late assignments on his board. He prints off missing assignment reports from Engrade each day and publically posts them in his classroom. He says that peer pressure begins to motivate students to turn their work in on time because they do not like other students seeing their name posted under missing assignments. Matthew says he posts missing work so the class can view it daily. He says,

“Anybody that wants to look at it, can look at it. It’s not a mystery.” Matthew says because he makes missing work public knowledge on a daily basis, “It changes the dynamics between the students a little bit.” I asked Matthew to explain what he meant when he told me that daily posting of missing assignments changes the dynamics of student relationships. He responded as follows:

Depending on the kid, maybe, I’ll see them looking at the list and go, “Golly, how could you have that many missing assignments. I don’t see how that could happen unless you just don’t care.” So there is some social pressure there for the students to complete their assignments.

Matthew perceived this peer pressure as a motivator for students to learn. If the students are completing their assignments and turning them in on time, they are learning.

Several teachers mentioned that they perceived that some students do not seem to be concerned about their grades, and Engrade is not going to change those students’ attitudes toward their academic performance. Elina offered the following statement regarding students who are not motivated by grades:

You know, I have some students that they’re motivated to learn because they want to learn, not because of the grades. And then you have those students that, they don’t care. They don’t care about their grades, you know. “I don’t care if you give me an F. I don’t care if you give me an A. I just don’t care.”

According to Elina if students are motivated to learn, they will learn and perform in the classroom. If students lack intrinsic motivation, they are not likely to change with the implementation of Engrade.

Intrinsic Motivation. Teachers perceive that the students who are intrinsically motivated to perform academically benefit the most from Engrade because the students can monitor their own progress on a daily basis. One teacher mentioned that students are sometimes motivated because they simply want to please their parents or the teacher, and Engrade does not have an

impact on their motivation except as a tool to view their grades. Another teacher suggested that perhaps students are impacted by Engrade because they enjoy interacting with anything on the computer.

Learning Indirectly. There appears to be a disconnect between the influence teachers which were interviewed perceive Engrade to have on student motivation to learn and the actual influence that Engrade has on student motivation. The teachers told me that Engrade did not motivate their students to learn, but the teachers proceeded to recount instances when the implementation of the program indirectly motivated students to perform in the classroom. It may be that students are mostly motivated to turn in their work verses actually learning something. As Matthew pointed out, “Whatever the reason for the students doing the work, if they are completing assignments, they are learning.” Students may be motivated to complete their assignments because their parents are monitoring Engrade. They may be turning in their work because they do not want their names listed on the board for a missing assignment, or they may be intrinsically motivated to learn. As the teachers repeatedly told me in various ways, the teachers’ goal for the students is to learn the material presented to them. Regardless of the motivating factor that impacts students’ academic performance, they should be learning the material if they complete their assignments.

Parent-To-teacher Communication

The research question, “Does increasing visibility within the grading process affect parent-to-teacher communication?” was addressed with the interview questions:

- Does the use of Engrade change the tone, subject, or nature of parent-teacher conferences?

- What are the positive or negative aspects of conversations that you have had with parents who have seen the students' grades online?
- Did the use of Engrade replace time spent at parent-teacher conferences and writing emails to communicate with parents?

Conferences. The teachers were quick to point out that the use of Engrade has led to more productive conferences. As George pointed out, "They come in asking for solutions instead of coming in to attack sometimes." By the time parents have arrived at a parent-teacher conference, they have already seen their child's grades online. At the point where they actually meet with the teacher face-to-face, they are ready to work collaboratively with the teacher to come up with a solution for any problems their child may be having in class.

The use of Engrade made communication very convenient for teachers and parents. The teachers could check their Engrade messages at a convenient time, whether it be 6 a.m. or 11 p.m. The teachers recounted how some parents may be on Engrade late at night because of work schedules. Engrade allowed parents that work nontraditional hours to maintain active involvement in their child's academic success.

Currently, the middle school students are required to use an assignment notebook to record their daily assignments. One teacher referred to the assignment notebook as a "dead horse." The students often don't know where the assignment notebook is located or they left it in their lockers. Some students will refuse to take the assignment notebook home to have the parents sign it. Teachers explained that frustration occurs when the teacher would write notes in the assignment notebook for the parents, but the student would not show the assignment notebook to the parent. With the use of Engrade, the teacher can send a message to the parent that is almost certain to be delivered.

Students in Split Households. Several teachers described instances where students are from split households. Sometimes, if the child's parents divorce, the child may stay with Mom one week and Dad the next week. Students often became confused about their assignments because the students lacked continuity in their home environments. Parents would express concern because both parents were not receiving the same communication from the teacher regarding the child's academic progress. Engrade allows multiple individuals to access it at once. This feature allows both parents to track their child's grades and communicate with the teacher. One teacher commented that this eliminated the "blame game," wherein the child would blame one parent or the other for missing assignments or poor performance.

Terry explained that she hasn't really seen an instance where Engrade has any effect on a split household, stating:

We're actually meeting with one that we met a couple times before that his parents are divorced and they do use Engrade and, you know, I haven't seen any problem to this point with it. I haven't gotten feedback from most parents that say, "Well, when he's with his dad, it looks like he's doing poorly, or, you know, when he's with his mom, he's not turning his work in." Not from Engrade. We have met with one set of parents that they hadn't even signed up for Engrade and when the child is at his mom's house all she does is work, but I haven't seen anything where Engrade affects that.

Terry did offer that she could see how it could be a positive thing for divorced parents to have access to Engrade. Elisa added that she has not seen a situation where divorced parents used Engrade, but she could see that it would be a beneficial way to communicate with both parents, "especially if one parent is out of the state or the area." Allowing both parents from a divorced family to monitor Engrade would open up avenues of communication that may have otherwise been difficult to achieve.

Lack of Internet. Teachers repeatedly mentioned to me the issue of lack of Internet access in the home as not being an obstacle when it comes to using Engrade. The computer lab at the

school is open to the parents to use to check their child's grades. Also, parents can gain access to the Internet at their local library. During three different interviews, teachers shared an instance wherein a devoted parent would take the child after school to view grades on the computer at the library. The teacher later learned that the parent and child were struggling to find housing at the time. This situation exemplifies a parent who went beyond expectations to help her child be successful. One teacher mentioned that she worked extra hard for this child because the parent was working diligently to ensure her child was academically successful. Matthew said this was an interesting interaction with a parent because the parent had previously been labeled by the teachers as a "troublemaking parent." As this particular parent let her situation become known to the teacher, the teachers changed their attitude toward the parent and the child. The final result in this situation is that the parent, child, and the teachers worked collaboratively to assist the child with his academics.

Assessments and Feedback

Research question 5 states, "How does increasing the visibility of grading affect the quality of assessments and feedback given on assessments?" All of the 10 interviewees reported that Engrade did not have an effect on the quality of assessments and feedback given on assessments.

Number of Grades. One teacher mentioned that she had heard another teacher say she was concerned because she did not take very many grades in a 6 weeks due to the nature of her class. Her class consisted of many assignments requiring group work and projects without an opportunity for daily grades. Matthew mentioned that Engrade lends itself more to math because there are daily grades to be recorded in that subject area.

The feedback given on assessments did not change after the implementation of Engrade. The teachers explained that they still make all of their comments on the actual papers that students turn in not on Engrade even though Engrade does have a feature that allows teachers to make individualized comments on assignments for parents and students to view. One teacher stated, “middle school kids are just overgrown third graders.” They still want to see comments on their paper like “good job” and receive stickers as well. Several teachers expressed concern about the time it would take to make individualized comments on Engrade. They did not think it was feasible to comment on assessments on Engrade as well as grade and record assignments for so many students.

Student Interest in Learning

I asked the teachers during the interviews, “Does the use of Engrade put too much emphasis on assignment completion and not enough emphasis on learning?” Three teachers said, “Yes,” four said, “No,” and three teachers were unsure. There were teachers who were not sure how to answer this question. Elina’s response was, “Yeah, I do. I don’t, I don’t know.” Donna hesitantly responded, “I think it could.”

Grading System. Donna was not the only teacher concerned with the shifting of the focus from learning to assignment completion and grades. Elise responded to the question by stating, “I don’t think so. No more so than having progress reports and grade cards.” Terry did not state that Engrade is shifting the focus from learning to making a grade. Terry explained her stance as follows:

No. I don’t think so. I, it’s just a way for them to know they have completed an assignment and how they did on it. I don’t feel like we’re just focusing on the grade. We’re focusing on the material and the learning.

Terry speculated that the desire to be in the Beta Club contributed more to an emphasis on grades than Engrade does. When I asked her about Engrade appearing to put too much emphasis on assignment completion and not enough on learning, she responded:

Well, I don't know if Engrade really plays a part in that. I think, you know, everything's more visible and maybe that places more pressure on the kids to make a certain grade instead of just learning it. But yeah, I think students want to be on the A/B Honor roll. They, they want to be in Beta Club, you know. They want to be all these things and if they learn or if they don't as long as they can make a 90 or as long as they can make a 95 they feel like they have accomplished something.

Overall, the teachers did not attribute the growing shift of emphasis from learning to an average of grades to Engrade. The explanation of shifting the classroom emphasis from learning to acquiring grades is a multi-faceted problem that is more complex than the implementation of Engrade. As one teacher pointed out to me, "Now, the system is flexible enough that you can grade any way you want." This teacher did not state that Engrade shifts the focus from learning to grades because he adjusts the grades as he sees fit. He expresses his main concern in the following statement, "

I'm really not concerned about their grades. If they do their work every day, it's gonna take care of itself. I tell my students that, literally, if you do every assignment and turn it in you will not fail. You will pass even if you are a low student that struggles. I grade differently on the lower classes. I want a lot of my students to have As and Bs, learn the material, and feel successful.

Teachers repeatedly explained to me that Engrade is simply a communication tool that they use not a motivating factor in their classroom. Engrade is not the driving force behind what happens in their classrooms.

Suggestions. Several teachers made suggestions about reforms that they would like to see happen regarding grades. Donna stated that she would like to see the grading system made obsolete saying:

Pitch out all the grades and just make sure they know what they're doing. I tell students and parents that my concern is that they get the material. They have to get the material. They'll figure it out if they can do the work and they've showed me that they can do the work then the grades are just gonna fall in place.

I asked Donna about what she thought would motivate the kids to do their math practice if she did not take grades for their math homework. She speculated, "Well, what you find in math a lot, is they like math. I would be happy if we got rid of grades because it takes the pressure off of the kids and the whole nine yards. Just get them to learn something, but then you have the task of motivating them with the joy of learning something new."

Donna also described what she viewed as the "watering down of an A." Donna became animated as she told the following story about her experience in a study researching businesses and manufacturing companies to determine if the businesses found their workforce ready to work when they graduated high school:

I think back in the late 70s and 80s and now it seems like the value of, of the A, well the value of everything and, I guess that's just me, the quality of everything is going downhill. I actually did a summer thing years ago, several years ago, where we went out in the community. There was a group of teachers that asked businesses and manufacturing companies and stuff if they felt kids were prepared for the workplace when they came out of school, and most of them said, "No." They said, "No." It, it doesn't do any good to look at grades because an A is not an A is not an A like when they grew up kinda thing. And you know they can have an A in literature and you hand them a manual to read and they can't read it. And they said, what is that about? And what was an interesting perspective on what they get for applicants. Several of the companies had developed their own tests, reading and math tests for when people come in, the applicants, and they said you can tell pretty much from the beginning when they can't fill out an application, and then you look at their grade and they've got all these As and Bs and they're going how is this when we can't fill this out and we can't test this method. I looked at a couple of the math tests and it was just basic stuff. Just basic on-the-job stuff. We talked to people in manufacturing, in the factories. We also talked to places, other businesses that were like a step above or what they call a step above the manufacturing, they has some more technical skills, and it was just interesting to listen to these people in human resources who said that they, just overall they didn't feel the people were equipped to work like that.

After Donna passionately recounted her story of the lack of preparation for the work force, I asked her if Engrade could be contributing to this problem. She replied, “I don’t know.” She then suggested that someone interview the students to determine what the students’ perception of the implications of the implementation of Engrade were.

When I asked Donna what she considered the most important thing we had discussed during the interview, she responded:

It’s a two-way street like with anything else in education. Engrade, when it’s used correctly, it’s a very good thing. I mean, it’s positive. It makes the kids more accountable and the parents are better able to communicate, but then again you’ve got these kids that are not doing, sliding, doing whatever they can to just get the grade, just to get the grade. So, is it a cure all? No. Has it helped? I think so. I think it has.

Reality. Matthew said that Engrade encourages the kids to learn and is not always focused on just a number. Because teachers record grades and missing assignments, the kids are encouraged to turn in their assignments to keep their averages up. If kids are completing assignments, they are learning regardless of the motivation that made them do their assignment in the first place. He explains, “Engrade may shift the focus a little bit from learning to a final grade, but the students are learning because they are completing their assignments. They can’t keep from learning.”

Summary

Janet summed up the implications of implementing Engrade when she said, “It’s a tool for me. It is not something that makes or breaks my classroom.” I asked Janet to expand on that statement, and she responded:

The curriculum, how I teach has not changed just because of Engrade. You know my style has not changed. The only thing that’s changed is now I have an easier way of calculating averages, and it allows students and parents to have more communication with me. I can easily be on the phone with a parent. I’ve called many a parent. Kids have two zeros. I pick up the phone, “Mom, kid has two zeros.” Mom says “Really! What?” I say, “Do you have access to Engrade?” She says, “Yeah.” Well, can you pull it up right now? I can talk to a parent right then and there. She’s looking at Engrade. I’m looking at Engrade. We’re on the phone together, and we can have this conversation. You know, to me it’s a great tool. Does it affect me as a teacher and my style? No. Do I teach differently because of Engrade? No.

Teachers spoke positively regarding many of the features of Engrade. The teachers enjoy the convenience of communication with parents and students. Engrade doesn’t make the students more responsible, but it can hold them more responsible for their performance. The perceived primary result of Engrade is viewed as a positive by teachers because parents can communicate with the teachers about their children, and that, hopefully, allows them to be more involved in their child’s academics.

CHAPTER 5

SUMMARY OF FINDINGS AND RECOMMENDATIONS

Introduction

The purpose of this study was to investigate teachers' perception of the implications of using an online grade book and add insight into teachers' perspectives on the use of online grade books to facilitate parental involvement. This study also provided insight into teachers' opinions of the role of parental involvement in the grading process.

Research Questions

Research Question #1

Does the use of online grade books affect the teacher's relationship with parents?

Interview responses in this study indicate that the majority of teachers do perceive an impact on teacher to parent relations as a result of the implementation of an online grade book. The main impact that teacher's revealed was the dynamics of parent to teacher communication has changed as a result of the use of Engrade. Allen (2009) suggested that a problem is that teachers do not always communicate with parents, and when they do, it is not always in ways that support student learning. Teachers expressed appreciation for the ability to communicate with parents regarding the student's performance. The majority of the relationships that teachers established with parents through the use of Engrade have been positive. The parents now have access to their child's grades throughout the 6 weeks in the instruction and grading period. This encourages parents to contact the teacher on a more frequent basis in order to monitor their child's performance. The teachers interviewed commented that this frequent and informal conversation between the parents and the teacher led to a positive interaction between the parent and teacher. The teachers also appreciated the convenience of the communication with the

parents. Conversing via Engrade allows the parent and teacher to send messages to one another when the time is convenient for both parties. Engrade has eliminated the problem of playing phone tag between teachers and parents. The parents are now able to ask the teacher specific questions about assignments without worrying about interrupting class or inconveniencing the teacher. When phone conversations do take place between the parent and the teacher, the parent and the teacher can log onto Engrade at the same time, view the child's grades, and discuss the child's performance over the phone.

The teachers interviewed expressed an appreciation of the ability to communicate with the parents on a daily basis. The frequency of parent-to-teacher communication has dramatically increased. The teachers I interviewed are not inconvenienced or upset by this increased communication. The communication that does occur between the teacher and parent is beneficial to the student. With the frequent communication between the teacher and the parent, a collaborative attitude is developed over time.

Parents can over check Engrade and expect too much from the teacher. One teacher did mention a parent-to-teacher relationship that was not necessarily positive. He recounted a time when he had become ill and could not keep up with loading grades on Engrade for a few days. One parent had sent him several messages asking him when he was going to load the grades onto Engrade. Teachers have multiple responsibilities throughout the day. Teachers cannot constantly update and monitor Engrade for messages. Parents need to understand that teachers professional responsibilities and personal lives limit their ability to immediately load grades in the computer. Most of the parents understand that teachers need some time to grade assignments and record them on Engrade. However, findings in this study suggest that there are only a few parents who

become impatient and inquire about the frequency of grades being recorded and posted on Engrade.

Eight of the 10 teachers interviewed acknowledged making a grading mistake that was called to their attention by the parent, and the 2 teachers who had not experienced this admitted that this was likely to happen. Teachers grade and track numerous assignments and grades on a daily basis. They then record these assignments in traditional grade books. The teachers then enter the grades for each assignment in the computer on Engrade. There are times when mistakes are made. For example, a teacher could easily transpose numbers and enter a 79 instead of a 97. Students and parents need to be monitoring their grades on Engrade and reconciling the grades on the papers that are handed to them with the grades that are entered on Engrade. When mistakes are discovered by the parent (or student), the mistake needs to be revealed to the teacher. The teachers interviewed stated that they were not inconvenienced by this process. None of the teachers interviewed stated that they had difficulty dealing with a parent because of a grading mistake being brought to their attention. When this scenario occurred, the teacher would apologize to the parent or student and then change the grade. The parents and teachers seem to understand that grading mistake will occur. As long as the mistake is corrected, there is not a problem between the teacher and the parent. The students checking teacher grading accuracy might actually contribute to student learning. There is an opportunity here for a teacher to use such a mistake to help students develop responsibility for their own learning. The teacher becomes the facilitator of the work by assessing it. Students are then checking the accuracy of the teachers work and contributing to their own learning in the process. Perhaps teachers should encourage this behavior by discussing it with parents at orientation and conferences.

Research Question #2

Does increasing the visibility of grading to students and parents affect the teacher's relationship with students?

Nine of the 10 teachers interviewed expressed a perceived impact on the teacher's relationship with the students as a result of the implementation of Engrade. In the interviews teachers explained that there are students who are hesitant to ask a teacher a question face to face. With the messaging feature of Engrade, students can easily send their teacher a message without having to face their teacher.

Multiple teachers discussed instances where their students would send them messages of a social nature. The student would just wish to say hello or wish them a happy holiday. The teachers explained that the students feel comfortable chatting with the teacher on Engrade. The students find the teacher approachable when they used the messaging feature of Engrade.

Teachers explained during the interviews that students like to check their grades on Engrade. The students will check their grades without prompting from the teacher or their parents. One teacher stated that the students are "braver at a distance." The students will voluntarily check their grades and then send the teacher a message to ask a question about an assignment. One teacher told of an instance where a child physically walked by her and then logged into Engrade to send the teacher a message. The students may ask the teacher about a missing assignment, late work, or a possible grading mistake. It is possible that the student feels rushed throughout the day and does not have the time to ask a teacher a question. When the student has a moment to reflect on the day, it is at that time when a question may come up for the student. The moment students think of a question to ask, they can log onto Engrade and send their teacher a message. The teachers can then check Engrade when they have a moment and

answer the child's question. When students and teachers communicate via Engarde, the student has one-on-one attention from the teacher. With this communication the student does not have to share the attention of the teacher with an entire class. It is also possible that the communication through Engarde provides the student with privacy. If the students are sending messages on Engarde, they do not have to worry about their question or comment to the teacher being overheard by another student. Engarde provides a private avenue for the student and teacher to communicate.

With the implementation of Engarde, teachers have noticed that students are a bit more inquisitive regarding their grades. The students will sometimes quiz the teacher about when grades are going to be made available on the computer.

Research Question #3

How do teachers perceive the impact of online grading on student motivation? Each teacher was asked "Does the use of Engarde affect your confidence in your ability to motivate students to learn and perform in your classroom?" Each of the 10 interviewees said "No" when asked this question. However, each teacher then went on to explain how the students were motivated to perform.

Guskey (2002) contends that during the middle school years student motivation begins to decrease. Teachers I interviewed responded that students appear to be more motivated when the students know that parents are monitoring Engarde. Active parental involvement assists with student motivation particularly in the middle years (Baker, 2000). The students may ask the teacher to put in grades before their parents get a chance to view Engarde because the students are concerned about their parents' reaction to their grades.

As the students monitor their own grades and ask teachers to enter grades into Engrade, the students are taking responsibility for their grades. The students are becoming aware of how individual assignments affect their overall average for the class.

One teacher explained that he posts a list of missing assignments on his board everyday. The teacher tracks missing assignments in his class with the use of Engrade. The students may be motivated to turn their work in on time so that their names do not appear on the missing work board. In this instance the students may be motivated to perform because of peer pressure facilitated with the use of Engrade.

Teachers stated that some students may be intrinsically motivated to perform in the classroom. If students are intrinsically motivated, they will perform with or without an online grade book like Engrade. These students are motivated because they enjoy the learning process. The intrinsically motivated students may enjoy the ability to view their grades online in order to monitor their progress. These students use Engrade as a monitoring tool that allows them to communicate with their teacher. Teachers agreed that Engrade is not a motivating factor for the intrinsically motivated student. However, the students who are not intrinsically motivated to complete their assignments may become motivated to complete their assignments because they do not want to see a missing assignment on Engrade affect their grade averages for the class. These students may complete their work just so that they can turn it in to the teacher for a grade. When this is the case, these students are learning, but their motivation is external and provided by Engrade. They may not be motivated to learn for the sake of learning, but they are completing the assignments just the same as the intrinsically motivated student. If students complete the assignments, it is expected that they learn the material. Teachers speculated that Engrade motivated these students to learn.

Research Question #4

Does increasing visibility within the grading process affect parent-to-teacher communication?

The teachers interviewed were asked “Does the use of Engrade change the tone, subject, or nature of parent-teacher conferences?” All of the 10 teachers interviewed agreed that the use of Engrade led to more productive conferences. The communication feature of Engrade made communication with the parents highly convenient before conference time. Because teachers and parents could communicate easily before conferences, when conference time came around, the teacher and parents were ready to work together to come up with a solution to any problems that students may be having. The students in the middle school are required to keep an assignment notebook. However, the teachers expressed frustration with the assignment notebooks because it is impossible to actively communicate with parents via the assignment book. Students would inevitably misplace it, leave it in their lockers, etc. With the communication feature on Engrade, teacher can frequently communicate with parents between conference times. Therefore, there would be not surprises for the parents during conference time. The most respected and effective educators use diverse forms of communication to provide feedback frequently to parents (Whitaker & Fiore, 2001). Keeping grades updated on Engrade allows the teacher to inform parents of any cause for concern before it escalates into a major problem that leads to disagreements between teachers and parents.

Teachers mentioned times when Engrade would help to facilitate communication between the teacher and divorced parents. This ease of communication with Engrade allowed the teacher to communicate the academic performance of the child to both parents. Frequently during parent teacher conference, one parent or the other parent would show up for conferences.

It is rare that divorced parents both come to parent teacher conferences. Engrade allows the teacher to communicate with both parents. The use of Engrade also eliminates the “blame game” in which children of divorced parents would blame their lack of performance on either parent. If both parents monitor Engrade and communicate with the teacher, the parents and the teacher can work collaboratively for the benefit of the child.

During the interviews teachers discussed the issue of lack of Internet in the homes of students. Teachers told me repeatedly that parents have access to the Internet at the school and the local library. Several teachers recounted in detail a situation where a mother did not have Internet, but she logged onto Engrade at the local library. This particular parent did not have the resources to acquire Internet at home, but she had access to transportation to the library to view her child’s grades. This parent took the initiative to take advantage of the benefits of Engrade so that she could help her child succeed at school. When the teachers saw how dedicated the parent was to her child’s success, the teachers worked diligently to ensure the child was successful as well. If a situation ever arose where a parent did not have transportation to the school or local library to check their child’s grades, the child could log onto Engrade at school and print their report in order to take the report home to the parent.

The key to successful parent-teacher communication according to the No Child Left Behind Action Brief: Parental Involvement (2004) is as follows: “Use creative forms of communication between educators and families that are personal, goal-oriented, and make optimal use of new communication technologies.” The implementation of an online grade book is an effective way to use technology to communicate with parents regarding their child’s academic success.

Research Question #5

“How does increasing the visibility of grading affect the quality of assessments and feedback given on assessments?”

All of the 10 interviewees reported that Engrade did not have an effect on the quality of assessments and feedback given on assessments. It was mentioned that concerns had been raised by teachers that parents may not understand why some classes have more grades recorded on Engrade than others. Math classes will typically have more daily grades recorded than more project based class. A math teacher can give daily assignments and take daily grades, whereas other classes may take days to complete on assignment due to the nature of the assignment. The teachers are not changing their assessments or assessment policies as a result of the implementation of Engrade. Engrade allows teachers to make individual comments on assignments electronically. Teachers said that they did not use this feature because it is not feasible time wise to manage a comment on each assignment. Teachers said that they still write comments on the actual papers that students hand in as they are graded.

Research Question # 6

How does the use of an online grade book impact student interest in learning?

The teachers were asked “Does the use of Engrade place too much emphasis on assignment completion and not enough emphasis on learning?”

The teachers interviewed did speculate that perhaps there is too much emphasis on assignment completion and grades in education. However, they did not think the current focus on assignment completion and grades was attributable to online grade books. The teachers did not see that the use of Engrade attributed to a focus on grades and away from learning any more so than progress reports and report cards.

Recommendations for Practice

It was stimulating to consider that allowing students grades to become available to parents and communicating more frequently and informally with parents would assist teachers, parents, and students in the academic success of the student. The analysis of the insights provided by teachers in this study, my personal-experiences using an online grade book, and the literature discussed in Chapter 2 have confirmed for me that teachers want to communicate with parents regarding the academic success of each student. Therefore, I make the following recommendations for school districts application of gradebooks as a tool for improving communication among students, parents, and teachers:

- School systems should investigate the use of online gradebooks to determine the implications of implementing gradebooks. Online gradebooks are frequently implemented by teachers. It would be good practice to investigate the many implications of the use of online gradebooks.
- There should be a peer review of assessments found on online gradebooks to monitor the effectiveness of the teachers' strategies. This would allow teachers an opportunity to collaboratively discuss ways to improve instruction and assessments.

The following recommendations are designed to assist teachers as they use on-line gradebooks such as Engrade.

- Try to monitor an online grade book on a daily basis. Parents and students could possibly be communicating via the online gradebook. A quick response time from the teacher is reassuring to parents and students.
- Grade and record assignments on an online grade book as quickly as possible. Parents and students may be anticipating viewing recent grades. A quick response time regarding

assessments communicates students' understanding and progress to the parents and students.

- Encourage parents and students to frequently monitor Engrade. Parents need to be informed of their child's academic performance in order to make rapid adjustments if grades begin to decline.

The results of this study suggest the following recommendations for parents who use on-line gradebooks, such as Engrade.

- Monitor Engrade at least once a week in order to stay informed of your child's academic performance.
- Send the teacher a message if you have a question or a concern.
- Understand that it may take the teacher some time to record assignments, especially if the assignments were turned in late by the student.
- When it comes time for parent teacher conferences, peruse your child's grades so that you are informed prior to the conference.
- Encourage your children to monitor their own and assignments on a regular basis so that they can take responsibility for their own performance.

Recommendations for Further Research

Because the use of online grade books is a fairly new practice, more research needs to be done on the impact it has on the teaching and learning process. With this in mind, the following suggestions are made for future research:

- Research needs to be conducted to ascertain the development of student responsibility in regard to the use of online gradebooks.

- Studies that focus on interviewing parents and/or students who have had experiences with online grading could provide guidance for making effective use of on-line grade books as a communication tool.
- Conduct a study of the implications of an online grade book as an evaluation tool to be used by administrators.
- Conduct a study to evaluate the extent that the use of gradebooks contributes to increased student learning as opposed to an increase on task completion.

Researcher's Future Plans:

Throughout my research and interviews, I believe I have evolved as a professional educator. I hope that I will absorb all that I have learned in this process and continue to grow from this experience. I plan to continue to use Engrade with my future students and parents. I anticipate future opportunities to communicate with parents and students with the use of an online grade book. I aspire to work collaboratively with the parents and students in order to assist my students to become successful students. My findings suggest valuable possibilities for the implementation of online grade books in other schools. I have learned that the implementation of online grade books can facilitate improved communication among parents, students, and teachers. The implementation of online grade books also motivates some students to complete their assignments and monitor their learning process. The implementation of online grade books in other schools would benefit the students, parents, and teachers.

Concluding Statement

The findings of this study confirm the literature and my experiences as a teacher using an on-line grade reporting system. Although the implications of the use of on-line grade book

systems need additional research, I have learned that such tools can facilitate improved communication among parents, students, and teachers. The implementation of online grade books also motivates some students to complete their assignments and monitor their learning process.

REFERENCES

- Allen, J. (2009, January). Effective home-school communication. *FINE Newsletter*, 1(1).
Retrieved from <http://www.hfrp.org>
- Allen, J. D. (2005, May/June). Grades as valid measurement of academic achievement of classroom learning. *The Clearing House*, 78, 218-23.
- American Recovery and Reinvestment Act of 2009, 111-5 U.S.C. § 123 (2009). Retrieved from http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h1enr.txt.pdf
- Bailey, J., & McTighe, J. (2006). Reporting achievement at the secondary level: What and how. *ASCD Year Book*, 119-140.
- Baker, A. J. (2000, May). Parent involvement for the middle level years: Recommendations for schools. *Schools in the Middle*, 9, 26-30.
- Banta, T. (2002). An emerging scholarship: A brief history of assessment. In *Building a scholarship of assessment* (pp. 3-26). San Francisco: Jossey-Bass.
- Blankstein, A. M., Noguera, P. A., Lindsey, D. B., Mitchell, A., Peters, S., Guskey, T. R., . . . Boyle, A. (2007). *Engaging every learner* (A. Blankenstein, R. W. Cole, & P. D. Houston, Eds.). Thousand Oaks, CA: SAGE.
- Blount, H. P. (1997, Summer). The keepers of numbers: Teachers' perspectives on grades. *The Educational Forum*, 61, 329-34.
- Bornholt, L. J., & Goodnow, J. J. (1999). Cross-generation perceptions of academic competence: Parental expectations and adolescent self-disclosure. *Journal of Adolescent Research*, 14, 441-43. doi:10.1177/0743558499144003

- Bouffard, S. (2008, July). Tapping into technology: The role of the Internet in family-school communication. *Harvard Family Research Project*. Retrieved from <http://www.hfrp.org>
- Bowers, A. J. (2009). Reconsidering grades as data for decision making: More than just academic knowledge. *Journal of Educational Administration*, 47, 609-629.
- Boydston, J. A. (1970). *Guide to the works of John Dewey*. Carbondale: Southern Illinois University.
- Brewer, W. R., & Kallick, B. (1996). Technology's promise for reporting student learning. *ASCD Year Book*, 178-187.
- Brown, G. T. (2008). *Comparisons of assessments*. New York: Nova Science.
- Carifio, J., & Carey, T. (2009, November/December). A critical examination of current minimum grading policy recommendations. *The High School Journal*, 23-37.
- Coleman, M., & Briggs, A. R. (2002). *Educational management research and practice: Research methods in educational leadership and management* (T. Bush, Ed.). London: Paul Chapman.
- Davis, M. R. (2009, Spring/Summer). Gradebooks take virtual approach. *Education Week*. Retrieved from <http://www.edweek.org/dd/articles/2009/06/17/04gradebooks.h02.html>
- Dewey, J. (1902). *The child and the curriculum* [Project Gutenberg Edition]. Retrieved from <http://www.gutenberg.org/files/29259/29259-h/29259-h.htm>
- Dewey, J. (1907). *The school and society* [John Dewey Source Page Edition]. Retrieved from http://www.brocku.ca/MeadProject/Dewey/Dewey_1907/Dewey_1907a.html

- Dillon, S. (2006, May 15). States struggle to computerize school records. *The New York Times*. Retrieved from <http://www.nytimes.com/2006/05/15/education/15computers.html?sq=education%20+grades&st=nyt&scp=17&pagewanted=print>
- Engrade* [Online grade book]. (2003). Retrieved from <http://www.engage.com>
- Feder, B. (2000, May 17). Lessons: The Internet and schools: A vision and the reality. *The New York Times*. Retrieved from <http://www.nytimes.com/2000/05/17/us/lessons-the-internet-and-schools-a-vision-and-the-reality.html?scp=152&sq=education+%2Bgrades&st=nyt&pagewanted=print>
- Firestone, W. A., Schorr, R. Y., & Monfils, L. F. (2004). *The ambiguity of teaching to the test*. Mahway, NJ: Lawrence Erlbaum.
- Fishman, S. M., & McCarthy, L. (1998). *John Dewey and the challenge of classroom practice*. New York: Teachers College Press.
- Friedman, T. L. (2007). *The world is flat*. New York: Farrar, Straus and Giroux. (Original work published 2005)
- Gall, M. G., Borg, W. R., & Gall, J. P. (1996). *Educational research*. White Plains, NY: Longman Group.
- Ginsberg, R., & Hermann-Ginsberg, L. (2005, March). Accomplished teachers and their interactions with parents: A comparative analysis of strategies and techniques. *Harvard Family Research Project*. Retrieved from <http://www.hfrp.org>
- Gouwens, J. A. (2009). *Contemporary world issues series: Education in crisis*. Santa Barbara, CA: ABC-CLIO, LLC.

- Guernsey, L. (2001, October 18). Please don't email my dad, Mr. Weatherbee. *The New York Times*. Retrieved from <http://www.nytimes.com/2001/10/18/technology>
- Guskey, T. R. (1996). Reporting on student learning: Lessons from the past-prescriptions for the future. *ASCD Year Book*, 13-23.
- Guskey, T. R. (2002). *How's my kid doing?* San Francisco, CA: John Wiley.
- Gutek, G. L. (2000). *Historical and philosophical foundations of education*. Columbus, OH: Merrill Prentice Hall.
- Harwood, P. G., & Asal, V. (2007). *Educating the first digital generation*. Westport, CT: Praeger.
- Hernandez, J. C. (2009, May 29). Web site lets parents track data on students. *The New York Times*. Retrieved from <http://www.nytimes.com/2009/05/29/education/29aris.html?sq=education%20+grades&st=nyt&scp=12&pagewanted=print>
- Hornby, G. (2000). *Improving parental involvement*. New York: Wellington House.
- Houston, P. (2010, May 25). Sticks and carrots [Web log post]. Retrieved from <http://www.politicalph.blogspot.com/>
- H.R. Doc. No. NCLB: A Parent's Guide-U.S. Department of Education, Retrieved from: <http://www2.ed.gov/parents/academic/involve/nclbguide/parentsguide.html> (2003).
- Hu, W. (2009, September 8). Fewer fliers sent home as schools put more on web. *New York Times*. Retrieved from <http://www.nytimes.com/2009/09/08/education/08mail.html?sq=education%20+grades&st=nyt&scp=19&pagewanted>

- Hursh, D. (2008). *High stakes testing and the decline of teaching and learning*. Lanham, MD: Rowman & Littlefield.
- Jonassen, D. H. (2000). *Computers as mindtools*. Upper Saddle River, NJ: Prentice-Hall.
- Keeney, M. (2000, November). Understanding grading procedures. *Principal Leadership (High School Ed.), 1*, 68-72.
- Kirchenbaum, H. (1971). *Wad-ja-get*. New York: Hart.
- Kubiszyn, T., & Borich, G. (2010). *Educational testing and measurement*. New York: John Wiley.
- Kumar, K. (2002, October 15). Web shines light on school work. *Minneapolis-St. Paul Star Tribune*. Retrieved from http://www.pearsondigital.com/news/2002/1015-Web_shines_light_on_schoolwork.cfm
- Lambert, D., & Lines, D. (2000). *Understanding assessment: Purposes, perceptions, practice* (A. Moore, Ed.). New York: Routledge Farmer.
- Learning Point Associates. (2010, May). *State legislation: Emerging trends reflected in the state phase 1 Race to the Top applications*. Retrieved from Learning Point Associates website: <http://www.learningpt.org>
- Marzano, R. J. (2000). *Transforming classroom grading*. Aurora, CO: Mid-continent Research for Education and Learning.
- Mathison, S., & Ross, E. W. (2008). *Battlegrounds: Schools*. Retrieved from <http://www.netlibrary.com.ezproxy.etsu.edu:2048/Reader/>
- McMillan, J. H., & Schumacher, S. (2006). *Research in education: Evidence-based inquiry* (6th ed.). Boston, MA: Pearson Education. (Original work published 2001)

- Moran, J. J. (2007). *How the implementation of grade-reporting software affects teachers' attitudes towards the transparency of grade-reporting* (Unpublished doctoral dissertation). Chestnut Hill, MA: Lynch School of Education, Boston College
- No Child Left Behind, 20 U.S.C. § 603 (2001).
- No Child Left Behind action brief: Parental involvement* [Action brief]. (2004, April 23). Retrieved from http://www.ncpie.org/nclbaction/parent_involvement.html
- Olsen, L. (1995, 4, June). Cards on the table. *Education Week*, 23-28.
- Phillips, L. (1992, April). *Parent involvement: Relationships of expectations, goals, and activities to student achievement among minority, socioeconomic, and gender groups*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.
- Pink, D. H. (2009). *Drive*. New York: Penguin.
- Pope, N., Green, S., Johnson, R., & Mitchell, M. (2009). Examining teacher ethical dilemmas in classroom management. *Teaching and Teacher Education*, 25, 772-778.
- Quaid, L. (2009, July 24). Obama offers 'Race to the Top' contest for schools. *The Guardian*. Retrieved from <http://www.guardian.co.uk/world/feedarticle/8625198?FORM=ZZNR7>
- Radsch, C. C. (2005, March 2). Doctoring the report card? Studying is easier. *New York Times*. Retrieved from <http://www.nytimes.com/2005/03/02/education/02forgery.html?sq=education%20+grade&st=nyt&scp=74&pagewanted=print&position=>
- Reeves, D. B. (2008, January/February). Effective grading. *Educational Leadership*, 85-87.
- Reich, J., & Thomas, D. (2008). *Best ideas for teaching with technology*. Armonk, NY: Myron E. Sharpe.

- Ritchie, J., & Lewis, J. (2008). *Qualitative research practice*. London: Sage. (Original work published 2003)
- Rockwell, R. E., Andre, L. C., & Hawley, M. K. (1996). *Parents and teachers as partners* (C. P. Klein, Ed.). Orlando, FL: Harcourt Brace.
- Rothman, R. (2010, September). Race to the top of the tests. *Alliance for Excellence in Education*. Retrieved from http://www.all4ed.org/blog/race_top_tests
- Seidman, I. E. (1991). *Interviewing as qualitative research*. New York: Teachers College.
- Thompson, M. S., Alexander, K. L., & Entwisle, D. R. (1988, December). Household composition, parental expectations, and school achievement. *Social Forces*, 67, 424-48.
- Watts, K. H. (1996). Bridges freeze before roads. In T. R. Guskey (Ed.). *ASCD Year Book* (pp. 6-12). Alexandria, VA: Association for Supervision and Curriculum Development.
- Weeks, L. (2007). *How'd you do in school today?* Retrieved from <http://www.washingtonpost.com/wp-dyn/content/article/2007/04/29/AR2007042901391.html>
- Whitaker, T., & Fiore, D. J. (2001). *Dealing with difficult parents*. Larchmont, NY: Eye On Education.
- Zappe, S. M., Sonak, B. C., Eunter, M. W., & Suen, H. K. (2002, April). *The effects of a web-based information feedback system on academic achievement motivation and performance of junior high school students*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.

APPENDICES

APPENDIX A

Interview Guide

I. Introduction

- A. Introduce myself to participants and thank the participants for taking time out of their day.
- B. I would like to thank you for your willingness to talk with me about your use of Engrade as an open grade book. I will use your words to determine the implications of using Engrade. The three issues I will address will be the implications of using Engrade on yourself as the teacher, your students, and your parents. Your participation in this study is critically important. Your words, and the resulting findings, will help us understand the implications of using an online grade book in a middle school. I assure you that your participation in this study will remain anonymous. I may quote you in my final research report. However, I will not use your name in association with these quotes, nor will I use any identifiers that might link you to your words. The interview should take approximately one hour. I am recording this session in order to have an accurate record of your comments. Do you have any questions before I begin the tape recorder?
- C. Sign Informed Consent Form – I will give each interviewee a copy of the consent form to sign.
- D. Turn on tape recorder – I will ask, “Do I have your permission to tape record this session?”

II. Interview Questions

- A. To what extent, if any, does the use of Engrade affect your relationship with the parents of your students?
- B. To what extent, if any, does the use of Engrade affect parent-to-teacher communication?
- C. Does the use of Engrade change the tone, subject, or nature of parent-teacher conferences? What are the positive or negative aspects of conversations that you have with parents who have seen the students' grades online?
- D. How did you feel about your interactions with parents who entered into conversations armed with the knowledge of assessments gained through Engrade?
- E. Have you ever made a grading mistake and had the parent or student bring the mistake to your attention via the use of Engrade? If so, how did you handle the situation?
- F. Did the software replace time spent at parent-teacher conferences and writing emails to communicate with parents? If so, how?
- G. To what extent, if any, does the use of Engrade affect your relationship with your students?
- H. Does it appear that students are more inquisitive regarding their grades throughout the grading period because of the use of Engrade? Do they quiz you about their grades and entering new grades in the computer?
- I. Does the use of Engrade affect your confidence in your ability to motivate students to learn and perform in your classroom? If so, how?

- J. Does the use of Engrade appear to motivate the students to turn their work in on time? To learn?
- K. Does the use of Engrade affect the quality of assessments and feedback given on assignments? More so, less so, or has not changed it at all?
- L. Does the use of Engrade appear to put too much emphasis on assignment completion and not enough emphasis on learning?

III. Conclusion

- A. Based on the information that you have given me, I would summarize your comments in this way: Is my summary correct? Please remember that I plan to write a dissertation based on my research findings. Based on your understanding of the implications of using an online grade book, on what do you suggest I place particular emphasis when I report my findings?
- B. That concludes our session. Do you have any additional comments before I stop the tape-recorder?
- C. Turn off the tape recorder – I will ask, “Do you have any additional comments off the record?”
- D. Again, I wish to thank you for your participation in this study.

APPENDIX B

Letter of Permission

Brenda Mize
Teacher
Seymour Intermediate School
212 N Pitner Road
Seymour, TN 37865
(865)809-0030

Dr. Debra Cline
Director of Curriculum and Instruction
Central Office
Sevierville, TN 37865
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December 6, 2010

Dear Dr. Cline,

I am currently working on my dissertation for East Tennessee State University. The title of my project is *Teachers' Perceptions of the Impact of Online Grading Systems*. I would like to gain your permission to interview teachers in Sevier County concerning the implementation of online grade books. The purpose of this study is to explore the teachers' perspective of the implications of implementing online grade books. The teachers' participation in the interview will be strictly voluntary. Thank you for your time and support in this process.

Sincerely,



Brenda Mize

I hereby give Brenda Mize permission to pursue research in the Sevier County School System in pursuit of her doctoral study, as long as the teachers participate on a voluntary basis.



Dr. Debra Cline
Sevier County School System

SEVIER CO SCHL SYSTEM FAX:18657744562 8656092258
DEC-06-2010 10:58 From:SYIS
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P.2/2

VITA

BRENDA G. MIZE

Personal Date: Date of Birth: August 2, 1974
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 Marital Status: Married

Education: Public Schools, Seymour, Tennessee
 B.A. Psychology, University of Tennessee, Knoxville, Tennessee,
 1998
 M.A. Education, University of Tennessee, Knoxville, Tennessee,
 1999
 Ed.S. Educational Administration, Lincoln Memorial University,
 Harriman, Tennessee, 1999
 Ed.D. Educational Leadership, East Tennessee State University,
 Johnson City, 2011

Professional Experience: Teacher, Seymour Intermediate School; Seymour, Tennessee,
 1998-2011

Honors and Awards: 2008 Teacher of the Year at Seymour Intermediate School