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Running head: PERCEPTION OF ASSESSMENT AND PRACTICE

Student Assessment: An Exploratory Mixed Methods Study of
Teachers' Perceptions and Resulting Practices

Kathy J. Grover

May, 2009

A dissertation submitted to the
Education Faculty of Lindenwood University
in partial fulfillment of the requirements for the degree of
Doctor of Education
School of Education

DECLARATION OF ORIGINALITY

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work here at the Lindenwood University and that I have not submitted it for any other college or university course or degree here or elsewhere.

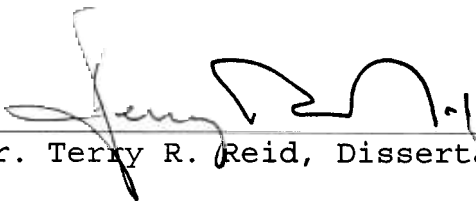
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STUDENT ASSESSMENT: AN EXPLORATORY MIXED METHODS STUDY OF
TEACHERS' PERCEPTIONS AND RESULTING PRACTICES

Kathy J. Grover

This dissertation has been approved as partial fulfillment
of the requirements for the degree of
Doctor of Education
at Lindenwood University by the School of Education.



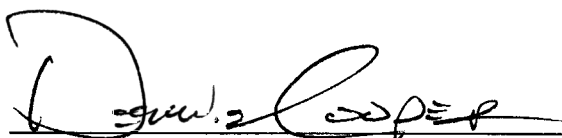
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Abstract

Federal and state accountability requirements have raised the stakes on student achievement testing. Teachers' perceptions of accountability testing influence classroom instruction (William, 2005). Teacher instruction greatly impacts student learning (Schmoker, 2006). This mixed method study examined teachers' perceptions of assessment and instruction. Analysis of data from case studies of three classroom teachers revealed three themes relating to assessment and instruction. The themes were further investigated by means of a Likert survey. The case study and survey methodologies provided descriptive data of teachers' beliefs regarding the value of various assessment types, the influence of different types of assessment on teaching practice, and the usefulness of various assessments as indicators of student learning. The results indicated that while teachers recognize the importance of preparing students for high-stakes testing, they value and depend on teacher observations and results of teacher-created assessments to measure student learning and inform instruction. A call for educational leaders to understand, communicate, and educate others regarding the value of formative and summative assessment was made. Interview data revealed a need for training of pre-service teachers and sustained training of in-service teachers in the analysis of assessment data, implementation of research-based

instructional strategies, methods of differentiating instruction in the classroom, and effective use of teaching resources.

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CHAPTER ONE - INTRODUCTION

Background

In the last decade, educators were faced with increased accountability for student learning. Not only has the level of achievement for which they are being held accountable risen, but the entities requiring an accounting have also multiplied. The federal law No Child Left Behind (NCLB) has mandated standards for which states and schools are accountable (United States Department of Education [DOE], 2008b). This accountability has trickled down to classroom teachers, affecting their perceptions and practices.

According to the DOE (2004b), "Schools are responsible for making sure your child is learning" (§ 4). In addition, NCLB holds each state and school accountable for student learning through annual student achievement assessments. Although the stated purpose of NCLB was to ensure student learning with achievement assessments intended to merely hold schools accountable (DOE, 2008b), comparison of district scores gleaned from NCLB required assessments have been misused causing improper conclusions to be drawn (Popham, 2001; Reeves, 2002; Schmoker, 2006; William, 2005). In reference to accountability assessments Popham (2001) reported:

This ranking system allowed parents to quickly see how their child's school stacked up against other schools.

And because most educators had previously accepted the idea that scores on standardized achievement tests indicated the effectiveness of educational programs, the press soon billed these annual rankings as reflections of educational quality.... These rankings invariably lead to judgments about which educators are doing good jobs and which are doing bad jobs. And because citizens believe that high scores signify successful instruction, the annual rankings place enormous pressure on teachers to improve their students' scores on statewide tests. (pp. 10-11)

Under this enormous pressure, instructional decisions are being made based on the prior year's assessment results (Popham, 2001; Reeves, 2002; Wiliam, 2005). Wiliam reported teachers lament, "I'd love to teach for deep understanding, but I have to raise my students' test scores" (§ 1). Wiliam concluded that teachers do not believe that raising test scores can be achieved through teaching for deep understanding. However, in a decade of study Wiliam found that when teachers assessed students to support learning achievement increased (§ 2). Wiliam stated, "The results to date suggest that teachers don't have to choose [between raising test scores and teaching for deep understanding] - the best way to improve students' test scores is to teach well" (§ 9).

Student assessment is usually divided into two categories, formative and summative. Fisher and Frey (2007) explained:

Formative assessments are ongoing assessments, reviews, and observations in a classroom. Teachers use formative assessment to improve instructional methods and provide student feedback throughout the teaching and learning process. Summative assessments are typically used to evaluate the effectiveness of instructional programs and services at the end of an academic year or at a pre-determined time. The goal of summative assessments is to judge student competency after an instructional phase is complete. (p. 4)

William's (2005) assessment for learning falls into the formative assessment category, while annual accountability tests fall into the summative assessment category. Popham (2001) posited that summative standardized assessments are the preferred assessment type for high-stakes tests, such as those required by NCLB, because the tests are prepared by *experts*, are therefore believed to be valid and reliable, and are ready to administer.

Many effective methods of formative assessment require teachers' resources, time, and knowledge of effective assessment practices (Popham, 2001). Teachers must (a) determine the essential objectives to be assessed, (b) select the method of assessment, (c) develop the assessment and scoring instrument, (d) administer the assessment, (e)

score the assessment, (f) analyze the assessment results, (g) provide student feedback, (h) reflect on strategies to improve results, and, finally, (i) implement those strategies intended to increase student achievement (Chappius, S., Stiggins, Arter, & Chappius, J., 2005).

Informal assessment through teacher observation appears to take less time than written forms, but the same purposeful planning, implementation, reflection, and analysis should occur. Of course, written forms require the teacher to take time to script at least an assessment and scoring instrument (Earl, 2003; Popham, 2001). If not purposefully analyzed, these forms of assessment may serve only to give a snapshot of what students know and can do. With purposeful analysis, formative assessment results can prescribe the next steps of instruction (Schmoker, 2006).

Stiggins, Arter, Chappius, J. and Chappius, S. asserted, "Used with skill, assessment can motivate the unmotivated, restore the desire to learn, and encourage students to keep learning, and it can actually create - not simply measure - increased achievement" (2006, p. 3). The purpose of this type of assessment is to inform instruction, or provide information that will help in planning future instruction, in order to increase individual student achievement through differentiation of instruction and assessment (Stiggins et al.).

Marzano, Pickering, and Pollock (2001) found that corrective, timely, and criterion-specific feedback is one

of the top nine strategies employed by teachers to improve student achievement. Using formative assessment throughout a unit of study reveals a student's level of understanding to the teacher. Formative assessment meeting Marzano et al.'s (2001) feedback criteria, which is that the feedback is corrective, timely and criterion-specific, reveals the teacher's expectation to students, and also allows teachers to make informed instructional adjustments. This teaching and learning process allows teachers to check student learning without waiting for a summative assessment to reveal students' misunderstandings (Fisher & Frey, 2007).

Sagor (2003) pointed out that the perception of an external locus of control has negative effects on the potency of teacher efforts. Sagor posited that the perception of assessment as an outside requirement placed on teachers and students, as in the case of most high-stakes tests, robbed teachers of a sense of efficacy. However, when assessment was perceived as a tool in the process of teaching and learning, locus of control was returned to teachers, resulting in practices that increased student achievement (Sagor). Sagor recommended teachers attend to careful lesson planning; monitor the lesson for success, or use formative assessment; adjust instruction as needed to meet particular student needs; use other more explicit forms of formative assessment throughout teaching an objective; and record the results of the effort. When teachers focused

on behaviors they could control, assessment was perceived as a useful tool instead of a threat (Sagor).

Neesom (2000) found in her report on behalf of the Qualification and Curriculum Authority (QCA) that Great Britain's teachers "feel that there are 'mixed messages' about assessment and that there is more pressure on summative assessment than support for formative assessment" (p. 6). Neesom's report also called for educational policy makers to officially and explicitly recognize the role of formative assessment in a standards-driven system. Teachers were confused about the difference between formative and summative assessment and how to implement formative assessment in addition to other myriad responsibilities (Neesom). This confusion and misunderstanding spurred Neesom to include a call for training in formative assessment for all of Great Britain's educators (Neesom).

Fisher and Frey (2007) cited the Bloom and Broder (1950) study which showed that formative assessment, or "checking for understanding" (p. 1), ensures students' true understanding of content and skills embedded in the lesson objective. Fisher and Frey claimed that formative assessment also exposes students to a variety of learning strategies, thereby increasing student understanding.

NCLB placed the responsibility for student learning on public schools (DOE, 2004b). In the public school system, classroom teachers stand at the front line of that responsibility. Teachers' perceptions and beliefs regarding

the teaching and learning process impact students every day. What are the perceptions of today's teachers regarding student assessment and their instructional practice? The Bloom and Broder study reported the benefits of formative instruction in 1950 (Fisher & Frey, 2007). Fifty years later Neesom's (2000) QCA report called for training in formative assessment for Great Britain's educators. What are teachers' perceptions and practices regarding assessment nine years later? Do educators have a common understanding of assessment? Do teachers understand the potential benefits of formative assessment? How are teachers using assessment to improve student achievement? In spite of years of research these questions are pertinent today.

Theoretical Framework

Assessment theorists agree that instruction and assessment are cyclical in nature (Gardner, 2006; Nicol, 2007; Popham, 2001). According to Erwin (1991), assessment theory is:

... the systematic basis for making inferences about the learning and development of students. More specifically, assessment is the process of defining, selecting, designing, collecting, analyzing, interpreting, and using information to increase students' learning and development. (p. 15)

Understanding the purpose of assessment is critical when analyzing results. Sometimes assessment results are used to make a point for which the assessment is not suited.

Popham (2001) asserts that high-stakes achievement tests are not designed to inform instruction. According to Marzano et al.'s (2001) findings, high-stakes achievement test results are not available soon enough to provide meaningful feedback to students, and specific feedback is rarely given to a student regarding his or her results on high-stakes achievement tests. Researchers agreed that the primary purpose of high-stakes tests is to determine the quality of curriculum and programs not to inform educators of the level of individual student achievement (Fisher & Frey, 2007; Popham, 2001; Wiliam, 2005).

Popham (2001) declared the primary purpose of classroom testing is to collect information about student learning. Student responses to classroom assessments allow teachers to choose more effective instructional strategies, thereby increasing the likelihood of student understanding (Popham). To improve student achievement, analysis of classroom assessment results is more suitable than analysis of high-stakes test results. Classroom assessment data can be analyzed rapidly, feedback given to students quickly, and adjustments made to instruction immediately (Popham).

Popham (2001) suggested four guiding principles, which naturally align with assessment theory, for assessment to increase instructional effectiveness and student achievement within the classroom. These four guiding principles provided a framework for considering the quality of assessment which classroom teachers may encounter. They are: (a) test only

indisputably important learner outcomes and formally test infrequently; (b) use a variety of assessment methods to pinpoint characteristics of learner outcomes; (c) use student responses to assessments to inform future instruction; and (d) use affective assessment to make group-focused inferences for instruction (Popham).

While high-stakes testing fits into Popham's (2001) assessment framework, high-stakes tests are to be administered infrequently and should assess only standards identified as essential. If teachers' perceptions regard high-stakes tests above other forms of assessment, the use of other forms of quality assessment may be underplayed. Regular classroom assessment to monitor student learning to inform instruction and thereby increase student achievement may be left unused.

Statement of the Problem

Assessment of student learning takes many forms and is accomplished at various times during the learning process. For optimum increases in student achievement, student work is analyzed and used to plan future instruction in a timely fashion (Marzano et al., 2001). With the current focus on high-stakes testing, classroom teachers may perceive high-stakes tests results as more valuable than formative assessment results of student work when making instructional decisions (Black & William, 1998; Popham, 2001).

Educators often lose sight of their primary purpose, to facilitate student learning. Conversations among teachers

become focused on defending or maligning accountability tools, the negative effects of accountability, how to target accountability measures (Reeves, 2002), and how to best teach test-taking strategies rather than how to best teach the skills and content of the standards being tested. With funding, accreditation, and school's reputations depending on accountability measures, how can educators remain focused on their primary purpose? The problem to explore is the impact of high-stakes accountability on teachers' perceptions of student assessment and instructional practice.

Purpose of the Study

NCLB mandates that student achievement is assessed annually in communication arts and mathematics in grades three through eight and once in high school, and science achievement is to be assessed once in each of three grade spans (Simon, 2004). William (2005) discovered that although teachers desire to teach for deep student understanding, teachers believe a majority of instructional time must be spent preparing students for federally-mandated assessments. William found that teacher time was more effectively used analyzing students' work and making instructional adjustments based on that analysis than directly focusing on preparing for a test. Focusing on students, centering concern on what and how they are learning, and adjusting instruction each day are pathways to achieving desirable expectations (Black, 1998; Black & William, 1998; Popham,

2001). Given these findings, it is important to gauge teachers' perceptions of assessment and how those perceptions impact teaching practices, which in turn impact student achievement. As a result, the purpose of this study was to determine teachers' perceptions of student assessment and how those perceptions impact teaching practices.

Research Questions

The dynamic nature of qualitative research requires the researcher to be flexible in the process of developing research questions (Marshall & Rossman, 2006). During the initial review of related literature for this study, the need for teachers to prioritize classroom formative assessment to inform instruction became apparent. Although teacher concerns about accountability were briefly commented on in the literature, the link between teachers' perceptions of assessment and resulting instructional practices was given little attention. The overarching questions guiding this study were developed to understand the link between teachers' perceptions of student assessment and teaching practices:

1. What is the link between student assessment and teaching practices of teachers?
2. What do teachers consider when making initial instructional decisions?
3. What do teachers consider when making instructional revisions?

4. What are teachers' perceptions regarding student assessment?
5. How can teachers optimize student assessment to improve teaching practices?

Limitations

Mixed methods research, or research done by analyzing both quantitative and qualitative data, has not always been viewed as legitimate research (Cresswell, 2008). However, in the last few decades as researchers debated the merits of mixed methods research procedures for the design have been developed and the design has become more acceptable (Creswell). In the case of this study, the people interviewed were selected to fit a particular profile for specific purposes of the study, and the people surveyed in order to strengthen the investigation were from the same state. In addition, response to the survey was voluntary which could indicate that respondents had greater experience, knowledge or interest in the topic than did non-respondents, thereby skewing the results. Therefore, it should not be attempted to generalize the results of this study.

This study will be limited by the following factors:

1. The collection of data was limited to one academic semester.
2. The location of the study was a Midwest state.

3. The online survey data was limited to the respondents who chose to complete and submit the survey.
4. The researcher relied on all respondents to answer all questions thoughtfully and honestly.
5. Researcher bias was monitored by the committee of educational advisors.

Design Controls

Bryman (n.d.) noted:

Triangulation refers to the use of more than one approach to the investigation of a research question in order to enhance confidence in the ensuing findings.... The term triangulation derives from surveying, where it refers to the use of a series of triangles to map out an area. (¶ 1)

For the purposes of this study, an online, anonymous Likert scale survey was offered to eighty-two thousand, eight hundred eighty-five public school educators (Missouri Department of Elementary and Secondary Education [MODESE], 2009a) in a Midwest state. In addition, three public school fifth grade teachers from the same state were interviewed using open questions. This between-method triangulation of research involved the use of more than one research method to check the level of agreement between the two sets of resulting data (Bryman, n.d.). The qualitative interview data and the quantitative survey data were analyzed

separately and then together to draw conclusions and determine implications.

The emergent research design in which the data is analyzed in an ongoing manner allowing findings to inform the next steps of the research is common in qualitative research, however non-emergent qualitative designs in which the data is first collected and then analyzed using qualitative methods also reveals important findings (Maykut & Morehouse, 2005). For purposes of this study, the non-emergent method was used with the minor exception of additional questions that evolved during interviews. Anonymity of all participants was ensured in order to elicit honest responses.

Following the collection and review of qualitative data from teacher interviews, an online survey was developed based on themes that emerged from the review of that data. The survey was made available to teachers state-wide in an effort to lead to "generalizable results through the . . . quantitative data" (Creswell, 2008). Once again, anonymity of participants was ensured to elicit honest responses on the survey.

Definitions of Key Terms

The definitions of key terms of this study are provided:

Assessment as learning. Assessment used to inform an individual student of his or her own level of understanding (Black, 1998; Earl, 2003).

Assessment for learning. Formative assessment activities used by teachers to collect information to modify instruction in order to meet student needs (Black & Wiliam, 1998).

Assessment of learning. A summative evaluation of a student's progress or achievement (Black & Wiliam, 1998).

End of Course Exams. The End of Course (EOC) Exams are mandated standardized norm and criterion-referenced tests given to all Missouri high school students upon the completion of Algebra I, Biology I and English II (MODESE, 2008b).

Enduring Understanding.

The term *enduring* refers to the big ideas, or the important understandings, that we want students to 'get inside of' and retain after they've forgotten many of the details. Put differently, the enduring understandings provide a larger purpose for learning the targeted content: They implicitly answer the question, Why is this topic worth studying? (McTighe & Wiggins, 1999, ¶ 4).

Essential Standards. The concepts identified by national content area organizations as the most important to student achievement and occurring most often on state standardized tests (O'Shea, 2005).

Open Question. Questions requiring the respondent to give an answer that requires more than simple recall of facts. Open questions may have more than one correct answer

and often require a description, explanation or justification. Scoring guides must be developed in order to consistently score open questions.

Response to Intervention. Response to Intervention (RtI) is a new and highly-effective approach to help identify students at risk for learning disabilities and work with all students to ensure their educational success (National Center for Learning Disabilities [NCLD], 2007).

Summary

Teachers have been assessing students for many years. United States public school teachers now have the added pressure of high accountability for their students' achievement levels on annual high-stakes tests (DOE, 2008b). This turn of events in American education has redirected the focus of educators from meeting the instructional needs of students to concern about preparing students for annual high-stakes tests (Popham, 2001; William, 2005).

Over many years researchers called educators to view assessment through the lens of student learning rather than the lens of high test scores (Neesom, 2000; Reeves, 2002). Instead of assessment evoking images of students sitting over test booklets for hours, assessment would bring to mind teachers and students investigating, reflecting and collaborating to improve student learning based on the results of formative assessments. This study sought to reveal the current state of teachers' perceptions of student

assessment and how those perceptions influenced their instructional practices.

In Chapter Two, a review of literature related to schools' accountability for student learning, types and purposes of student assessment, assessment best practices, resulting instructional practices and calls for professional support was presented. A description of the research design and methodology used to analyze findings was explained in Chapter Three. Qualitative and quantitative data and research findings were shared in Chapter Four. In Chapter Five, conclusions and recommendations for action and further study were shared.

CHAPTER TWO - REVIEW OF LITERATURE

Introduction

Schmoker (2006) declared, "... the single greatest determinant of learning is not socioeconomic factors or funding levels. It is instruction. A bone-deep, institutional acknowledgment of this fact continues to elude us" (p. 7). Linking assessment to instruction, Schmoker continued, "For the majority of lessons, no evidence exists by which a teacher could gauge or report on how well students are learning essential standards" (p. 16). Schmoker denied that this was discouraging information; rather he concluded that with a change in perception educators could take "immediate productive action" (p. 16) by improving instruction and providing ongoing assessment of student learning. In an era of high-stakes accountability this is good news indeed.

A review of literature is presented in this chapter beginning with a discussion of assessment theory, followed by current accountability requirements. Two categories of assessment are then examined with details of the types of assessment that fit into each. Strategies for classroom instruction based upon assessment results and recommended professional support for educators follow.

Assessment Theory

According to Erwin (1991), assessment theory is:

... the systematic basis for making inferences about the learning and development of students. More specifically, assessment is the process of defining, selecting, designing, collecting, analyzing, interpreting, and using information to increase students' learning and development. (p. 15)

Popham (2003) expanded the understanding of assessment theory applied to the classroom by listing the types of decisions that testing can inform. They are:

1. Decisions about the nature and purpose of the curriculum.
2. Decisions about students' prior knowledge.
3. Decisions about how long to teach something.
4. Decisions about the effectiveness of instruction.

(pp. 5-6)

Clearly, these decisions complete the teaching-learning feedback loop that is the basis of formative assessment. Popham maintained that teachers made better instructional decisions when they properly used assessment results.

In an earlier work, Popham (2001) suggested four guiding principles, which naturally align with assessment theory, for assessment to increase instructional effectiveness and student achievement within the classroom. These four guiding principles provided a framework for considering the quality of assessment which classroom teachers may encounter. They are: (a) test only indisputably important learner outcomes and formally test infrequently;

(b) use a variety of assessment methods to pinpoint characteristics of learner outcomes; (c) use student responses to assessments to inform future instruction; and (d) use affective assessment to make group-focused inferences for instruction (Popham).

Popham's (2001) first concern was the number of standards that teachers are expected to teach in a school year. There has been a call to limit the standards taught per year to those that are of greatest importance (Black & William, 1998; O'Shea, 2005; Popham, 2001; Popham, 2003; Reeves, 2000; Wiggins & McTighe, 2005). Wiggins and McTighe (2005) called these most important concepts "enduring understandings" (p. 10). O'Shea (2005) referred to these concepts as "essential standards" (p. 58), and recommended identifying critical standards by consulting national subject area standards as well as determining the state standards tested most frequently or weighted most heavily. Popham agreed that national standards should inform the identification of indisputably important learner outcomes. Identifying these most important concepts narrows the target for assessment and allows for more in-depth instruction.

The second assessment framework strategy recommended by Popham (2001) is to offer a variety of assessment methods. Gregory and Chapman (2002) supported the use of differentiated forms of assessment for students due to multiple learning styles and ability levels of students within a classroom. Similarly, Gregory and Chapman

identified a variety of purposes for assessment, which require different types of assessments. Beginning with pre-assessments to determine what students already know and are able to do, teachers may differentiate instruction and assessment for varying ability levels and learning styles within the classroom (Gregory & Chapman). During the instructional process, formative assessments are recommended to monitor student progress and inform future instruction (Gregory & Chapman, Popham). Once students have mastered the skill and/or concept, differentiated summative assessments are prepared to meet student's individual learning styles and ability levels (Gregory & Chapman).

Popham's (2001) third assessment framework principle involves using student assessment data to guide future instruction. Teachers' perception of assessment was the focus of this research, therefore it was vital to focus primarily on the assessment practices that are most valuable to teachers. Popham (2001) posited that assessment literate teachers understand that the richest, most meaningful data for their purpose is formative assessment. Teachers have the responsibility of facilitating student learning. Students must begin their learning journey at their current level of understanding. Therefore, it is imperative that teachers identify the current level of understanding of their students on a continuing basis. Popham's findings regarding assessment were not unique, other researchers have reported similar findings. The Bloom and Broder study of 1950 called

for formative assessment of students to inform instruction and remediation (Fisher & Frey, 2007). Black and Wiliam's (1998) ongoing work in assessment for learning presented the same research-based findings. Blythe, Allen and Powell (1999) acknowledged the importance of assessing student work and cited the following benefits of the practice:

understanding each student's response to an assignment;
defining levels for student performance in general;
understanding one's own teaching and assessment practices;
and, improving one's observation and interpretation skills.

Popham's (2001) fourth assessment framework strategy is often discussed by researchers but rarely implemented explicitly and with purpose in the classroom. This strategy addresses student affect (Popham). According to Gregory and Chapman (2002), students must believe they can learn, recognize the learning as useful to them personally, believe they belong in the classroom, and believe they have an important and active role in their own learning and behavior. Gregory and Chapman cited the research of leading psychology, brain, and education researchers Abraham Maslow, Eric Jensen and William Glasser respectively, regarding students' affective needs. Although the wording may change, each researcher found that students need to feel emotionally and physically safe; students need to believe they have the ability and opportunity to reach their goals and potential; students need to believe they are loved and accepted; and students need to believe they are able to celebrate and have

fun (Glasser, 1990; Jensen, 1998; Maslow, 1968). Jensen (1998) reported that without these conditions it is physically impossible for the chemistry of the human brain to be in the proper balance for optimum learning.

Accountability and Student Achievement

Every day educators are faced with the goal of raising student achievement. That is the federal and state mandated task of schools (DOE, 2004b; MODESE, 2008b). The federal law, NCLB, requires public schools to increase student achievement each year, with the ultimate goal of 100% of students scoring at the proficient or advanced level by 2014 (DOE, 2004c).

Missouri's Department of Elementary and Secondary Education (MODESE) requires all public schools to have district and building-level improvement goals, a majority of which must address increasing student achievement (MODESE, 2008b). With the pressure of these expectations the focus of many Missouri educators turned to end of the year high-stakes standardized testing. School initiatives passed through the *Will it address the MAP (Missouri Assessment Program)?* filter rather than the *Is it good for students?* filter.

Likewise, NCLB required school districts to increase or maintain a high percentage of college-bound students graduated each year (DOE, 2008a). Efforts to increase the number of college preparatory courses offered and college-bound students graduated each year placed great importance

on ensuring that students score well on college entrance exams (DOE). Due to these culminating high-stakes tests, educators have lost their primary focus, student learning (Neesom, 2000; Popham, 2001; Reeves, 2002; Wiliam, 2005).

Federal Accountability Requirements

As of the 2008-2009 school year the federal policy, NCLB, mandated that all public schools assess students to measure their achievement levels in language arts, mathematics and science (DOE, 2007). NCLB holds public schools accountable for providing a high quality education in these content areas (DOE). In June 2008 the state of Missouri received permission from the federal government to implement a growth model for annual student achievement accountability assessment, becoming one of eleven states with such a model in place (MODESE, 2008a). According to the MODESE (2008a):

The growth model looks at the academic performance of individual students to determine if they are "on track to be proficient" within four years. If students who are scoring below the "proficient" standard in reading or math are making progress and appear likely ("on track") to achieve proficiency, then they may be counted with the school's other proficient students. Schools will be able to count students as "on track" for no more than four years and only until the eighth grade. Missouri's MAP tests in mathematics and

communication arts are required for all public school students in grades 3-8. (§ 5 - 6)

The model allows schools another way to meet adequate yearly progress (MODESE, 2008), but perhaps more importantly recognizes and rewards the academic progress of students, the efforts of teachers and the quality of schools. Ramirez and Clark (2009) quoted U.S. Secretary of Education Arne Duncan, "I know there are schools that are beating odds where students are getting better every year, and they are labeled failures, and that can be discouraging and demoralizing" (§ 7). One of three goals Duncan revealed for his tenure is improved student assessment (Ramirez & Clark).

State Accountability Requirements

The state of Missouri measures achievement levels of students in language arts, mathematics and science through the MAP tests which are administered each spring in grades three through eight; and the End Of Course (EOC) exams which are administered at the conclusion of the final term of the designated high school course (MODESE, 2008b). MAP test results are returned the following fall and EOC selected response scores and performance event responses are returned within at least five business days to be scored locally by teachers (MODESE). Official state scores of EOC performance events are returned to school districts by the first of the following August (MODESE). As a result, students' official test scores are returned after students have completed the school year or the course.

Missouri's college-bound students commonly take the American College Testing (ACT) program's college entrance assessment for college placement (MODESE, 2008e). Missouri school districts are held accountable for student ACT scores (MODESE). ACT results are returned to students and schools, but are rarely reviewed by classroom teachers and contain little detail of student performance (ACT, 2008). Tests such as the MAP, EOC and ACT are considered high-stakes tests. School-funding, student placement, scholarships and/or school accreditation are affected in varying degrees by high-stakes tests (MODESE, 2008e).

Summative Assessment

Summative assessments are designed to reveal what students have learned after a certain period of instruction (McTighe & O'Connor, 2005). Common summative assessments include chapter tests, unit tests, course finals, annual achievement tests, college placement tests, and quizzes. Scores from summative assessments are used to assign a student a particular ranking compared to other students' scores or based on specific criteria (Popham, 2001). Earl (2003) and Wiliam (2005) refer to summative assessment as *assessment of learning*. Summative assessment results are also used as a means of comparing instructional effectiveness of teachers and the strategies they use; to evaluate the effectiveness of curriculum; to compare and rank school districts; and to compare and rank countries' educational systems (Popham).

In the past few years, educational researchers have studied the use of summative assessment to improve student learning, teaching practice, and curriculum. Popham (2001) found that properly developed summative assessment data can be used effectively to evaluate curriculum and instructional practice, and thereby improve student learning. However, researchers found that summative assessment data is not the most effective, or direct, method of improving student learning (Black & Wiliam, 1998; Neesom, 2000; Popham, 2003; Schmoker, 2006; Wiliam, 2005).

The Missouri Assessment Program (MAP) was developed, in part, to provide support to districts, administrators and teachers as standards and testing of those standards were implemented in the state (MODESE, 2008c). Through the MAP educators received training in developing higher-order thinking lessons and assessments for students (MODESE). Educators were trained to develop assessments that mirrored the state achievement test to ensure student familiarity with the assessment's format (MODESE). Teachers were also trained to use state test released items and samples of exemplary responses to familiarize themselves and their students with the test (MODESE). Finally, educators were taught to analyze state test data to improve curriculum, local assessment and instruction (MODESE).

Other studies revealed that the attention given to accountability testing has caused some educators to focus primarily on summative tests. Neesom (2000) reported that

"Teachers perceive the emphasis on summative assessment encourages them to focus on performance rather than formative assessment" (p. 4). While Wiliam (2005) found a primary focus on summative assessment his research revealed the use of formative assessment, or assessment *for* learning and assessment *as* learning, as the assessment types that yielded the most significant increases in student learning.

Formative Assessment

It has been shown that formative assessment, or assessment *for* learning, and assessment *as* learning is positively related to improved student achievement (Andrade, 2008; Earl, 2003; Popham, 2001; Stiggins et al., 2006; Wiliam, 2005). Black and Wiliam (1998) define formative assessment as the activities used by teachers and students to collect information to modify instruction in order to meet student needs. Chappius and Chappius (2008, p.15) stated that formative assessment "[is] not a product" and posited that how assessment is used determines whether or not it is summative or formative. If used to assign a score, the assessment is summative (Chappius & Chappius). The purpose of formative assessment is *for* learning, not assessment *of* a student's learning (Chappius & Chappius).

Tomlinson (2008) discovered several benefits of formative assessment, which Tomlinson called "informative assessment," (p. 10) over several years of teaching: formative assessment allows students multiple methods to show what they know, not all students perform well on

written tests; assessment is about more than ranking students and assigning grades, it is about student accomplishment; assessment does not have to be formal or on demand, teachers have the power to use naturally occurring interactions with students to assess student learning; development of objective worthy assessment prescribes instruction; formative assessment allows remediation in the moment rather than after a unit is complete; formative assessment is the beginning of better instruction, not the end of a lesson; formative assessment, then, is a part of instruction, not an additional task; formative assessment is not just pre-assessment, it is progress assessment. Formative assessment is about recognizing and celebrating progress, not only about pointing out weaknesses (Tomlinson). Finally, formative assessment isn't just for the teacher; it also informs students of where they stand in relation to what is to be learned (Tomlinson). Tomlinson's last benefit described assessment as learning.

How are teachers to *get it all done*? Implied in the teacher's comment, "I'd love to teach for deep understanding, but I have to raise my students' test scores" (William, 2005, ¶ 1) is a lack of time. Chappius and Chappius (2008) posited that the use of summative assessment as a formative tool requires more time than the use of formative assessment. Chappius and Chappius' research revealed that formative assessment is not another item added to teachers'

plates, instead formative assessment is a tool to expedite excellent teaching and learning.

According to Popham (2001), McTighe and Wiggins (1999) focusing on the important big ideas is one of the qualities of good instruction and assessment. Oftentimes teachers feel pressure to teach *everything in the book* when time would be better spent teaching and assessing the most vital concepts. Popham, McTighe and Wiggins recommended allowing students to delve deeper into carefully selected enduring understandings so they fully grasp them, then be allowed to make connections to other learning on their own. Tomlinson (2008) testified that formative assessment helped her pare unnecessary activities from her curriculum. By developing assessment before planning instruction, Tomlinson was able to avoid teaching material students already knew and to focus on the essential information students needed to learn. Tomlinson also noted that through formative assessment, she was able to gauge student learning and select the optimum pace of instruction. These benefits actually helped Tomlinson use limited class time more effectively.

Student self-assessment, or assessment as learning, is an effective and time-friendly strategy to increase student learning (Andrade, 2008). Andrade found that students, when provided descriptive rubrics of teachers' expectations and practice in their use, can monitor and correct their own learning. "If students can produce it, they can assess it, and if they can assess it, they can improve it" (Andrade, p.

63). Andrade's research showed that such self-assessment throughout the learning process resulted in a positive student affect and increased student learning. Andrade noted that the key to positive student affect in relation to self-assessment was that self-assessment was not graded, but used only to help students improve. Regarding student self-assessment, Neesom (2000) reported:

Teachers frequently refer to improvements in self-esteem, motivation and attitudes to learning in their pupils. The greater the involvement of pupils in the formative process the better the standards of performance. The most significant benefit of using formative assessment is seen to provide pupils with the range of skills to manage their own learning development. (p. 4)

Popham's (2001) assessment framework supported Andrade's (2008) findings that positive student affect (confidence) is positively related to actual student ability to successfully complete a task. Popham asserted that student affect assessments yield valuable information when making group-focused inferences regarding classroom learning. Smith, Smith & DeLisi (2001) found that assessment of a student's expression and body language revealed equally valuable information regarding individual student learning. Stiggins and Chappius (2005) declared that student affect is positively related to student achievement saying, "The actions they [students] take, and therefore their ultimate

success at learning, will be determined by their emotional reaction to the assessment results." (p. 20)

Assessment for learning (AFL) can be achieved in a variety of ways. AFL may take the form of a written quiz designed by the teacher to reveal student understanding of the prior day's objective; an exit ticket or open question given to students at the end of class to check the level of student understanding of the content and skills taught that day; teacher observation of students practicing a skill or of students discussing content and processes taught in the class; teacher observation of students brainstorming ideas based on course content; learning style inventories; portfolio development to determine growth over time; and criterion-based standardized achievement data (Stiggins et al., 2006). Student oral and written evidence becomes data used by a teacher to inform future instruction, or to uncover the need to differentiate instruction for students (Tomlinson, 2008).

Research-Based Instructional Strategies

Recent learning style research has shown that most teachers and administrators are primarily people-oriented, structured, disciplined, and organized personality types, while 50% of students question rules and regulations, love to learn new information, are not people or structure-oriented, prefer hands on discovery, and learn through action and movement (Lowery, 2006). Clearly 50% of students learn best from methods other than those preferred by their

teachers. Fortunately there exists a wide variety of research-based instructional strategies that can be used to provide the most effective instruction for each student.

Tomlinson (2002) stated:

Teachers in differentiated classes use time flexibly, call upon a range of instructional strategies, and become partners with their students to see that both what is learned and the learning environment are shaped to the learner. They do not force-fit learners into a standard mold. (¶ 4)

Research showed that not all learners have the same styles and that the learning styles of students are more varied today than ever before (Lowery, 2006). Instruction must be adjusted to meet a variety of needs. Marzano et al. (2001) offered nine research-based instructional strategies that increase student achievement. Identifying similarities and differences; summarizing and note-taking; reinforcing effort and providing recognition; homework and practice; nonlinguistic representation; cooperative learning; setting objectives and providing feedback; generating and testing hypotheses; and cues, questions and advance, or pre-lesson, organizers are the strategies that were found to be the most effective. Aligning these strategies with the learning styles of students ensures increases in student achievement while honoring the filter of doing what is best for students (Marzano et al.).

Instruction, practice and assessment are key components in the educational process. In quality curriculum development these components are aligned to a measurable objective, and research shows curriculum development is best achieved using a backward design (Wiggins & McTighe, 2005). Backward design determines what you want students to know and be able to do, *the objective*; how the teacher will determine if the students know and are able to do what is identified, *assessment*; what the teacher must do to instruct students, *instructional strategies*; and, what students must do to practice their knowledge and skill, *activities* (Wiggins & McTighe). These components are then developed in the order given. It is important that instruction, practice and assessment align with one another in terms of content, process and difficulty level (Wiggins & McTighe). Each component bears influence on the other once the curriculum is implemented in the classroom with students of varying learning styles and abilities (Wiggins & McTighe).

In 2004, the Individuals with Disabilities Education Improvement Act (IDEA) stated:

... local education agencies (LEAs) may use a student's response to scientifically-based instruction as part of the evaluation process; and (b) when identifying a disability, LEAs shall not be required to take into consideration whether a child has a severe discrepancy between achievement and intellectual ability" [P.L. 108-446, §614(b)(6)(A)] (DOE, 2004a).

In response to this federal law, Response to Intervention (RtI) was developed to meet the needs of the diverse learners in a classroom (Kukic, 2005). RtI is a three-tiered prevention strategy used to address the needs of students within the general education realm (Kukic). The first and largest tier of the structure is the comprehensive school-wide intervention tier (Kukic). This tier includes the regular district curriculum and the core interventions of differentiated instruction offered in the general education classroom during regular instruction (Kukic). Tier one effectively reaches about 81% of the student population (Kukic). The second and mid-sized tier of the structure is the targeted intervention tier (Kukic). This tier offers strategic interventions to smaller groups of four to ten students in addition to instruction in the regular curriculum (Kukic). Tier two reaches an additional 8% of the student population (Kukic). The third and smallest tier of the structure is the intensive intervention tier (Kukic). This tier offers intense, individualized interventions for individuals or very small groups of no more than three students in addition to instruction in the regular classroom (Kukic). Tier three reaches another 6% of the student population (Kukic). RtI is a general education structure, so it does not service students identified to receive special education services (Kukic).

The RtI structure also involves a process of identifying student weaknesses through a variety of

assessments, selecting research-based strategies to remediate those weaknesses, writing measurable goals, determining the frequency of progress monitoring toward the goal, and a plan to adjust the strategies if the intervention is not achieving the progress desired in the time that has been determined (Kukic, 2005). This data analysis of student learning is done at all three tiers, but with greater intensity in tiers two and three (MODESE, 2007). RtI is an exemplary model of the use of formative assessment or AFL.

Teacher Support

Black and Wiliam (1998) cited the following from the 1995 Johnston et al study of assessment's role in teaching and learning:

Most of the teachers in this study were caught in conflicts among belief systems and institutional structures, agendas, and values. The point of friction among these conflicts was assessment, which was associated with very powerful feelings of being overwhelmed, and of insecurity, guilt, frustration, and anger.... This study suggests that assessment, as it occurs in schools, is far from a merely technical problem. Rather, it is deeply social and personal. (p. 359)

In keeping with Andrade (2008), Glasser (1990), Gregory and Chapman (2002), Jensen (1998), Maslow (1968), Popham (2001), Smith, Smith, and DeLisi's (2001) findings, student

affect is a critical piece to assess and monitor during learning. It is essential that learners feel confident of their ability to learn, and that they are able to clearly describe what they should know and be able to do when they have achieved their learning goal (Andrade). This is true for adults as well as children, and therefore true for teacher training (Smith et al.).

Neesom (2000) delineated four areas of expertise teachers should possess in order to effectively use assessment for learning: involving students in their own learning (differentiating instruction); modeling quality; giving students feedback on their work; and involving students in self assessment and peer assessment. Popham (2001) added using, recognizing and creating effective assessments to this list. Popham reinforced those additions in a later publication when he stated that, "... the distressing reality is that teachers who do not possess at least a rudimentary knowledge about *testing* are less likely to do a solid job of *teaching*" (2003, p. vii). Clearly, teacher support is crucial to the effective use of assessment for learning.

In addition to training in the creation, use, and recognition of effective assessment, a need for training in the proper selection and application of research-based instructional strategies exists. Powell and Napoliello (2005) argued that teachers need more than traditional professional development methods to effectively implement

research-based strategies. They believed that teachers in their school needed information about how to use differentiated instruction, time to reflect on that information, and time to collaborate with administrators and one another to improve future instruction. Powell and Napoliello developed an observation protocol based on the following four qualities of differentiated instruction: "deep knowledge of the student as learner; deep knowledge of the content of the curriculum; a broad repertoire of effective instructional strategies; and a willingness to engage in collaborative planning, assessment, and reflection" (Powell & Napoliello, p. 53). After observing, the administrators reported their observations to teachers the same day, asked them to consider a reflective question based on the information gathered, and met with the teachers to discuss their reflections and other thoughts on how to better differentiate instruction for students (Powell & Napoliello).

Research revealed that job-embedded teacher support of the effective use of assessment for learning, including coaching in the proper choice and use of research-based instructional strategies, is crucial to change teachers' perceptions of assessment, their resulting practices and ultimately student achievement (Neesom, 2000; Popham, 2003, 2001; Powell & Napoliello, 2005). Investing in teacher growth is a wise investment for schools. William (2006) reported:

As we get better and better value-added datasets, we're beginning to discover that the variability at the classroom level is up to four times greater than at the school level. So really there's no such thing as a good school, but there *is* such a thing as a school full of good teachers.... If you get one of the best teachers you will learn in six months what it takes an average teacher a whole year to teach you. If you get one of the worst teachers, the same learning will take you over two years. There is a four-fold difference between the best and the worst teachers in the speed of student learning created (¶ 9).

William (2006) continued that proper training in the use of assessment for learning is the key to transforming the worst teachers into the best teachers.

Summary

This review of literature described current federal and state accountability issues, summative and formative assessment, instructional methods including an approach for addressing all students' academic success, and professional training for teachers regarding uses of assessment.

Effective educators maintain an unrelenting focus on *student* learning (DuFour, DuFour, Eaker, & Karhanek, 2004). The goal of increasing student achievement depends on attention to *student* learning and not on attention to the high-stakes tests used to measure student learning (DuFour et al). In maintaining the filter of, *what is best for students?*,

Response to Intervention effectively addresses increasing student achievement (Kukic, 2005). Within that structure, student learning is monitored by assessment for learning (Kukic). Weaknesses identified from assessment data are addressed through differentiated research-based instruction, and additional instruction is provided for students in greater need (Kukic). The progress of student learning is monitored by developing measurable learning goals for individual students (Kukic). This data-based approach has been proven to be effective (Kukic). Therefore, it is wise for educators to consider their beliefs regarding the impact assessment for learning has on student achievement and in turn on high-stakes test scores and to prioritize their efforts accordingly.

Chapter Two included a review of literature related to teachers' perceptions of assessment and resulting practice. Chapter Three addressed the design and methodology of the study, while data collected by the researcher was presented in Chapter Four. Chapter Five included a discussion of the study, limitations of the study, analysis of the data, and suggestions for future research.

CHAPTER THREE - METHODS

Introduction

Heppner & Heppner (2004) contended that research is more enjoyable when the researcher is passionate about his or her research topic. For the educational researcher uncovering practices that increase student achievement is a passion. Passion alone will not guarantee good results. Good research is carefully planned, logically organized and clearly explained so that replication of the study can take place.

NCLB heightened the awareness of educators and parents regarding the best practices to implement in order to increase student achievement (DOE, 2004b). One of the most often discussed and cited is quality, research-based instruction (DOE, 2004c). However, research-based instruction must be applied at the appropriate content and skill level to connect with students' current level of understanding to reap the benefits of instruction (Tomlinson, 2008). Formative assessment is used to determine students' current level of understanding (William, 2005). William posited that formative assessment is the key to informing teachers of the instructional needs of their students. William's study was undertaken to reveal teachers' perceptions of assessment and resulting instructional practice.

The design and methodology of the study was presented in Chapter Three. An exploratory mixed methods design, incorporating multiple case studies and a survey, was chosen to elicit responses from teachers regarding how their perceptions of assessment influence resulting instructional practices. The review of literature revealed that while many studies reported on the effectiveness of assessment for learning to increase achievement scores, few studies made mention of teachers' perceptions of assessment and how those perceptions might impact their instructional practices and therefore student achievement. In addition, Mortimore and Sammons' (1987) work, as cited by Schmoker (2006), reported that teachers' practices have six to ten times as much influence on student achievement as all other factors combined. Together this information provided the rationale for the framework of this study and the direction of the survey, interview and research questions.

Research Questions

The review of literature revealed that teachers' practices have the greatest impact on student achievement (Mortimore & Sammons, 1987), and that the use of assessment to inform instructional practice produced increased achievement within teachers' classrooms (Earl, 2003; Popham, 2001; Stiggins et al., 2006; William, 2005). The following research questions were designed to address teachers' perceptions of the use of assessment to inform instruction.

1. What is the link between student assessment and teaching practices of teachers?
2. What do teachers consider when making initial instructional decisions?
3. What do teachers consider when making instructional revisions?
4. What are teachers' perceptions regarding student assessment?
5. How can teachers optimize student assessment to improve teaching practices?

Population and Sample

One or more types of purposive sampling are generally used in mixed methods research (Fraenkel & Wallen, 2006). In this study, participants were chosen for their involvement with a variety of student assessments and experience with the instruction of heterogeneous groups. Fraenkel and Wallen identify eight types of purposive sampling. Two types of purposive sampling were employed in this study: typical sampling and opportunistic sampling.

A typical sample was selected for the case study portion of the project. In this instance the three teachers selected teach some combination of communication arts, mathematics and science to fifth grade students in a Midwest state. They were selected because the state's standardized achievement tests in communication arts, mathematics and science are administered to all public school fifth graders each spring. Therefore these three teachers had a common

experience based on the standardized achievement test and grade level of students.

An opportunistic sample was chosen for the online educator survey. The survey was made available to all educators in the Midwest state mentioned above by regional professional development centers and district administrators via the internet. This sample type was chosen in an effort to make the opportunity for input available to greatest possible number of educators, thereby providing a well-rounded picture of teachers' perceptions and practices.

Case Study Design

Initially a collective case study design was chosen, and interview questions were developed. The Institutional Review Board of Lindenwood University granted approval of the study. Collective case studies were used to provide a variety of perspectives regarding (Creswell, 2008) teachers' perceptions of assessment and how those perceptions impact teaching practices. Participants were invited to participate via a letter of introduction (see Appendix A). Upon acceptance of the invitation interview questions were mailed to participants (see Appendix B). A letter of informed consent was included in the mailing which requested participants' contact information, and a date, time, and preferred location for the interview, (see Appendix C).

Interviews were conducted at a location requested by the participant and anonymity was assured to allow him or her to speak openly, honestly and freely about his or her

perceptions of assessment and teaching practices. Two hours were allowed for each interview session. Participants were required to read and sign the letter of informed consent (see Appendix C) prior to the start of the interview.

Observations were noted for each interview session to provide additional descriptive information to enrich the interview results. With consent from the participants, the interviews were audio-taped. The audio-tapes were transcribed word for word to capture the verbal data accurately. The transcriptions were then presented to the participants to review for accuracy. Revisions were made at the participant's request.

Each participant's district data was collected for the purpose of additional insights as interview data was analyzed and compared. Participants were assured all data and documentation (including notes, district artifacts, audio-tapes and transcripts) would be kept in a secured location for three years and then destroyed.

Survey Design

As the collective case study process developed, a desire for additional data emerged. Additional data was collected through an online survey to strengthen the study's results. Creswell (2008) stated that quantitative data, such as survey results, are often used in exploratory analysis to develop "generalizations from a few, initial qualitative cases" (p. 566). From analysis of the case study data, three themes of interest were revealed:

1. Teachers' perceptions of the value of different assessment types.
2. Teachers' perceptions of the influence of different assessment types on teaching practice.
3. Teachers' perceptions of the accuracy of different types of assessment as indicators of student achievement.

The online survey resulted in a large amount of data from educators regarding those themes.

The survey was created using the online assessment and survey tool InQsit (Fortriede, 2008). The design of the survey was intentionally simple. Likert scales were created for the three themes, each of which included nine types of assessments for consideration. The survey was then administered to a test sample. Feedback from the test sample was studied and the survey was made available to educators throughout the state.

The survey web address was made available by email through the state's regional professional development centers and district administrators. Before entering the survey portion of the website, respondents were required to accept the terms of the survey. Within the terms of the survey, respondents were assured of anonymity and that all data collected would be filed in a secure location for three years and then destroyed.

The survey was available to educators online twenty-four hours a day, seven days a week for twenty-three

consecutive days. This method of delivery was chosen to make the survey easily accessible to a large number of prospective participants. The design of the survey was intentionally simple.

Rationale for Mixed Method Research

For this study, quantitative data from a state-wide survey provided generalizability to the qualitative data gathered through a small number of case studies. According to Fraenkel and Wallen (2006):

There is no question that mixed-methods studies have some definite strengths. Since they include both qualitative and quantitative data, they provide a more complete picture of a situation than would either type of data by itself. (p. 443)

Creswell (2008) defined qualitative research as the study of participants' perceptions through the collection of data in the form of words that are analyzed to reveal themes which are subjectively evaluated. In this instance, case studies revealed three themes that warranted further data. As a result, an online survey was offered to educators state-wide in order to collect input from over six hundred fourteen educators regarding the three themes revealed by the case studies.

Using an exploratory mixed method design after qualitative data was collected, coded and analyzed for themes in the first phase, a quantitative instrument was implemented to collect data in the second phase to test

first phase results (Creswell, 2008). The additional perspective provided by the quantitative data strengthened the findings and provided the foundation for methodology triangulation (Bryman, n.d.). The use of multiple case studies provided data triangulation (Bryman).

Study Design

An exploratory mixed method design evolved in this study. An exploratory design, in which qualitative data was collected and analyzed followed by collection and analysis of quantitative data, was chosen to complete the study. Hull (1997) stated:

Most generally speaking, the purpose of qualitative research is to understand human experience to reveal both the processes by which people construct meaning about their worlds and to report what those meanings are. (¶ 9)

According to Creswell (2008, p. 557), "quantitative scores on an instrument from many individuals provide strengths to offset the weaknesses of qualitative documents from a few people." This study was designed to reveal how teachers process student assessment data into information to be used to inform instructional practices. For the purpose of collecting rich meaningful data, multiple case studies were conducted. In order to elicit responses regarding how perceptions of assessment impact teaching practices from a large number of teachers, a survey was made available to teachers state-wide as well.

This multi-method design served to strengthen the validity, reliability and revelation of diverse perceptions of reality among the participants (Bryman, n.d.; Golafshani, 2003; Hull, 1997). In qualitative research validity, reliability and diverse realities are demonstrated through triangulation. "Triangulation refers to the use of more than one approach to the investigation of a research question in order to enhance confidence in the ensuing findings" (Bryman, n.d., p. 1). The design also allowed for both data triangulation and methodology triangulation in this investigation (Bryman, n.d.). In this study data triangulation was demonstrated by the multiple case studies in which comments were collected, the district standardized test scores reviewed, and the documents and notes considered. The use of case studies and an online survey to gather data provided methodology triangulation for the study.

In order to ensure consistency of data collection in the case study phase of the study, the pre-determined open response questions were scripted and followed in a formal manner for each interview. At the end of each interview, participants were allowed to make additional comments and follow-up questions were asked and answered. This portion of the interview was set apart from the pre-determined interview questions. All interviews were audio-taped with the participants' permission. The audio-tapes were then transcribed and sent to each respective participant for

approval. Any requested revisions were made prior to coding the transcript data. The researcher's notes were included in the interview data coding. Data from school documents was collected and analyzed to provide additional insight into the overall culture of the districts involved.

During review of the case study interview data three themes emerged. An online survey that addressed those three themes was developed, tested and made available to educators throughout the state. The data collected through the survey process was analyzed and compared to results related to the three themes in the case studies.

Data Analysis

Data for this study was viewed through the lens of assessment theory, which has been defined as "the systematic basis for making inferences about the learning and development of students" (Erwin, 1991, p. 15). Grounded theory research is used to "generate a theory that explains... a process... about a substantive topic" (Cresswell, 2008, p. 432). This study sought to better understand the role of assessment in the process educators implement when making instructional decisions, and how the educators' perception of assessment influenced that role.

Due to the abstract nature of how perceptions influence practice, a constructivist approach was used to analyze the case study data. Creswell stated that a constructivist approach to data analysis is appropriate when studying "views, values, beliefs, feelings, assumptions, and

ideologies," in other words perceptions, of participants (2008, p. 439). In the constructivist approach the use of conceptual maps; diagrams; categorizing, as in axial coding; and complex terms are avoided. Instead, active coding was used to describe participants experiences (Charmaz, 2006). "The narrative is written to be more explanatory, more discursive, and more probing of the assumptions and meanings for individuals in the study" (Creswell, 2008, p. 439).

A constant comparative method was used in the analysis of interview data with the "intent to 'ground' the themes in the data" (Creswell, 2008, p. 443). Transcriptions of the interviews were chunked by question, then by common strands of response and finally by theme. The themes were then analyzed through the lens of a theoretical proposition. Survey data was charted by percentage and examined for trends, and compared for similarities and differences. The results of the survey data were then considered in reference to the themes and theoretical proposition resulting from the case study data, and vice versa. The process consisted of "merging" and "integrating" the results of both sets of data (Cresswell, 2008, p. 552).

Credibility and Consistency

The credibility of mixed method research, or the internal and external validity and reliability of a mixed method study, are not black and white issues. Bryman (n. d., p. 1) stated, "Triangulation refers to the use of more than one approach to the investigation of a research question in

order to enhance confidence in the ensuing findings." Bryman continued:

... writers working within a constructionist framework do not deny the potential of triangulation; instead they depict its utility in terms of adding a sense of richness and complexity to an inquiry. As such, triangulation becomes a device for enhancing the credibility and persuasiveness of a research account. (n. d., p. 4)

Credibility was addressed through a mixed methods approach. One of which, the collective case study method, guaranteed collection of rich data, while an online survey gathered the perceptions of over six hundred additional educators. Triangulation was ensured through the use of data triangulation and methodology triangulation.

To ensure consistency in the collective case study participant selection and recruitment followed a structured process, formal interview questions were utilized verbatim with each participant, all responses were transcribed and checked by the respective participant for accuracy, and transcribed data was sorted by theme using the same process. Survey results were treated consistently. Statistical manipulation of the quantitative results was made within the inQsit™ (Fortriede, 2008) survey and testing program under uniform conditions.

Researcher's Biases and Assumptions

Creswell (2008) stated, "Grounded theorists needed to stress flexible strategies, emphasize the meaning participants ascribe to situations, acknowledge the roles of the researcher and the individual being researched, and expand philosophically beyond a quantitative orientation to research" (p. 433). In constructivist research the role of the researcher, rather than being minimized, is considered part of the study (Charmaz, 2006). Charmaz described the researcher's role as one who discovers themes of the research; questions the data collected; has values and experiences; and prioritizes information. In constructivist grounded theory research the perspective that the researcher brings to the study becomes a part of the study (Cresswell).

In this study the researcher held specific beliefs regarding assessment and instruction. The researcher believed that the most valuable use of assessment is to provide an individual with clear and timely feedback regarding his or her performance. Meaningful feedback includes specific descriptive information regarding a student's current performance and specific descriptive information regarding the steps needed to improve the student's performance in the future. The researcher also believed that an assessment is used effectively only when used for the purpose for which it was designed. Testing used for making evaluative conclusions is of little use to the individual being tested, due to the usually terminal nature

of evaluative conclusions. These biases and assumptions were held and recognized by the researcher. The researcher acknowledged these beliefs as the lens through which the data was viewed.

Summary

The research design and methodology were described in Chapter Three. The purpose of the research was presented in the introduction and the research questions followed. The population and sample selection were described and justified. The choice of a mixed method study was explained and the case study and survey designs were presented. A description of the data analysis process followed, with assurances of credibility and consistency and the researcher's biases and assumptions shared.

Through the filter of the researcher's biases and assumptions and assessment theory, the data findings were presented in Chapter Four. The process of case study data analysis, the emergence of themes, and the development of the survey were discussed. Data results were related to the research questions and the purpose of the study. In Chapter Five, the research results were presented, limitations discussed and emerging questions and implications for future research were revealed.

CHAPTER FOUR - RESULTS

Introduction

The purpose of this study was to examine teachers' perceptions of assessment and how those perceptions impact teaching practices. A mixed methods design was used to understand the values and perceptions of public school teachers. According to Yin (2009) mixed methods designs "can enable [researchers] to address broader or more complicated research questions than case studies alone" (p. 64). In this study, a collective case study was employed in order to gather detailed responses of three fifth grade teachers regarding their perceptions of assessment and instruction. To enrich the study, an online survey was conducted throughout a Midwest state to collect information from a wide variety of teachers regarding their perceptions of the value and usefulness of assessment as related to instructional practice. Assessment theory, which supports the cyclical nature of assessment and instruction, provided the conceptual framework through which to view the data.

These research questions were considered throughout the study:

1. What is the link between student assessment and teaching practices of teachers?
2. What do teachers consider when making initial instructional decisions?

3. What do teachers consider when making instructional revisions?
4. What are teachers' perceptions regarding student assessment?
5. How can teachers optimize student assessment to improve teaching practices?

Case study participants were interviewed. Documents [school accountability report card, district report card, annual performance report, and assessment data] were gathered and reviewed to reveal a more complete understanding of each participant's school setting. Each participant's interview was transcribed, transcripts were chunked by question, then by common strands of response, and finally by theme. Information from documents was reviewed, compared and considered in order to present a well-rounded description of each participant's experience. As a result three themes emerged: the value of different assessment types; the influence of different assessment types on teaching practice; and the accuracy of assessments as indicators of student achievement.

Based on the three themes that emerged from the collective case study data, an online survey was developed and made available to teachers throughout the state. Six hundred fourteen completed surveys were submitted, out of eighty-two thousand eight hundred eighty-five certificated educators (MODESE, 2009a). The survey consisted of three sections, one section for each theme. Each section contained

nine assessment types to rank on a five - point Likert scale. The results of the survey were compared and analyzed for patterns and trends.

Organization of the Chapter

The purpose of this chapter was to provide a summary of the data collected. Included in Phase I was the description of the case study population and participants, and an explanation of the process used to collect, code and categorize data from the case study participants. In Phase II a description of the online survey population was provided, followed by the rationale for the survey questions. This was followed by the three overarching themes (the value of different assessment types, the influence of different assessment types on teaching practice, the accuracy of assessments as indicators of student achievement) with data from both Phase I and Phase II to support each theme. A coding system was created to aide in reporting case study interview data in a confidential fashion so that the anonymity of the participants would be assured: Mrs. Tracy, female fifth grade teacher one (FT1); Mr. Daniels, male fifth grade teacher two (MT2); and Mr. Johnson, male fifth grade teacher three (MT3). Additional information regarding the coding system used to indicate the location of interview data by line and page number is available in Appendix D. Document data was coded as (DOC). (see Appendix E).

*Phase I: Qualitative Case Studies**Participants and Demographics*

Each of the participants in the case study was a public school fifth grade teacher in a Midwestern state with at least three years teaching experience. Every public school in this Midwestern state is required by law to make public its District Report Card and School Accountability Report Cards (MODESE, 2009b). These documents contain statistical information including the status of Annual Yearly Progress, district and building enrollment, the school's status regarding Title I, student to classroom teacher ratio, and the average regular and total salaries of teachers (MODESE).

Likewise, districts must submit data for an Annual Performance Report (MODESE, 2008e). This data includes attendance; high school graduation rate; student achievement performance on the state achievement test; the percent of students taking advanced courses and, or vocational courses; college and post-secondary vocational placements; and the average ACT score of the district's students (MODESE). Together the District Report Card, School Accountability Report Card and Annual Performance Report provide insight into the environments in which each participant works.

Participants met the criteria chosen to ensure experience with the Midwestern state's high-stakes achievement test. Fifth grade students in this Midwestern state are required to take the state test in the areas of communication arts, mathematics and science. Participants

were also required to have at least three years experience as a classroom teacher in order to have informed perceptions of the assessment and instruction process. Each of the teachers participating instruct fifth grade students in the content areas tested on the state test, and have at least three years of teaching experience. Data representing each participant and the demographic information considered for the participants' school are included in Table 1.

Table 1

Demographics: Participants' School Districts

<u>Year</u> 2007-2008	<u>Participant</u>		
	<u>Mrs. Tracy</u>	<u>Mr. Daniel</u>	<u>Mr. Johnson</u>
Average Teacher Salary; Total Salary	\$30,146; \$32,671	\$40,080; \$43,704	\$38,215; \$42,224
District K-12 Enrollment	471	2,938	2,093
Building Level Enrollment	256	471	325
Title 1 School	Yes	Yes	No
Achieved AYP	No	Yes	No
APR Standards Met	13	14	14
Student/Classroom Teacher Ratio	15/1	18/1	19/1
Attendance Rate Met	Not Met	Met	Not Met

Note: From Missouri Department of Elementary and Secondary Education (2009b)

Mrs. Tracy

The average salary range for teachers in Mrs. Tracy's district is \$30,146 to \$32,671 per year. The average salary range is from the average base salary to the average total

salary which includes extended-contract salary, Career Ladder supplement and extra-duty pay (DOC-2). (see Appendix E) Mrs. Tracy shared:

This is my fifth year teaching.... My first two years we were departmentalized and I taught fifth and sixth grade Language Arts. The last three years I have been teaching a fifth grade self-contained class. (FT1-1-1)

The district enrollment in Mrs. Tracy's district is four hundred seventy-one students (DOC-1). (see Appendix E) The building in which she teaches has an enrollment of two hundred fifty-six students. The building does offer Title I services to at-risk students, but did not meet the expected Adequate Yearly Progress percentage for students scoring in the proficient or advanced levels on the spring 2008 Missouri Assessment Program (MAP) tests (DOC-2). The district also failed to meet the expected attendance rate percentage for the 2007-2008 school year (DOC-1). The district met thirteen Annual Performance Report standards which qualified the district to receive a distinction in performance award from the governor of the state (DOC-3). (see Appendix E) Class size in the building is fifteen students per classroom teacher (DOC-2).

Mr. Daniels

The average base salary to average total salary range for classroom teachers in Mr. Daniels' district is \$40,080 to \$43,704 (DOC-4). (see Appendix E) Mr. Daniels commented:

This is my fifth year as a teacher. I started a new career several years ago. I have also been a high school [assistant] soccer coach for the past five years. I am retiring as soccer coach this year because it is too much of a drain on the classroom. I want to be focused on the classroom. I am also involved in the [district] education association. I am working on my master's degree in elementary administration. I teach all subjects, but for the past three years I have also been class within a class. I have a special education teacher that I work with... we pretty much work as a co-teaching group. Last year school went to ability grouping in fifth grade math and communication arts... so because I have the special education teacher... I have the lowest functioning math and the lowest functioning communication arts... homeroom is mixed. (MT2-1-1)

District enrollment in Mr. Daniels' district is two thousand nine hundred thirty-eight students, with four hundred seventy-one students in his building (DOC-4). His building offers Title I services for at-risk students (DOC-4). Annual Yearly Progress and attendance rate percentage expectations were met in the building (DOC-4). The student to classroom teacher ratio in the building is eighteen to one (DOC-5). (See Appendix E) The district met fourteen Annual Performance Report standards and will receive the distinction in performance award from the governor of the state (DOC-6). (See Appendix E)

Mr. Johnson

Classroom teacher's average base salary to average total salary range in Mr. Johnson's district is \$38,215 to \$42,224 (DOC-7). (see Appendix E) Mr. Johnson stated:

This is my sixth year of teaching. I spent my first four years in a small district teaching fourth and fifth grade classes. This is my second year in a larger district teaching fifth grade. (MT3-1-1)

The larger district, where Mr. Johnson teaches, has an enrollment of two thousand ninety-three students (DOC-7). His classroom is in a building with an enrollment of three hundred twenty-five students (DOC-7). That building does not provide Title I services, and did not achieve Adequate Yearly Progress in 2007-2008 (DOC-7). The classroom teacher to student ratio in the building is nineteen to one (DOC-8). (see Appendix E) Mr. Johnson's school district met fourteen Annual Performance Report standards in 2007-2008 (DOC-9). (see Appendix E) The district earned a distinction in performance award from the governor of the state (DOC-9).

Case Study Protocol

Participants were invited to participate in the study and to make his or her mailing address available. Once the participant accepted the invitation to participate, he or she was mailed a letter of introduction, interview questions, and a letter of informed consent on which was included contact information to request research results,

and space to indicate a date, time, and preferred location for the interview.

Interviews

Interviews were conducted at a location requested by the participant and anonymity was assured to allow him or her to speak openly, honestly and freely about his or her perceptions of assessment and teaching practices. Two hours were allowed for each interview session. Participants were required to read and sign the letter of informed consent (see Appendix C) prior to the start of the interview. Observations were noted for each interview session to provide additional descriptive information to enrich the interview results. With consent from the participants, the interviews were audio-taped. The audio-tapes were transcribed word for word to capture the verbal data accurately. Transcripts were sent to participants by email to review for accuracy.

Documents

Each participant's district data was collected for the purpose of additional insights as interview data was analyzed and compared. Each district's District Report Card and Annual Performance Report, and the participant's School Accountability Report Card were reviewed (MODESE, 2009b). Participants were assured all data and documentation including notes, district artifacts, audio-tapes and transcripts, would be kept in a secured location for three years and then destroyed.

Process of Analysis

Few "fixed formulas" (Yin, 2009, p. 127) exist for the analysis of case studies. However, Yin identifies four strategies for analyzing case study data, one of which is theoretical propositions, or theories offered for consideration. In this study the theoretical proposition, teachers' perceptions of assessment impact teaching practices, shaped the method of data collection and analysis. This theoretical proposition developed from assessment theory, which links assessment to instruction.

Interview data was displayed in word tables for cross-case analysis (Yin, 2009). Patterns of responses within the word tables led to acknowledgement of similarities and differences in the responses of case study participants. Triangulation of the case study data was achieved through the multi-case design and the review of data from district and building documents. Documents were reviewed and data was collected in a chart format for comparison and analysis. The review of this data coupled with interview data provided data triangulation.

Themes

Transcriptions of the interviews were chunked by question, then by common strands of response and finally by theme. The themes were then analyzed through the lens of the theoretical proposition. The three overarching themes that emerged were the value of different assessment types, the influence of different assessment types on teaching

practice, and the accuracy of assessments as indicators of student achievement.

Phase II: Quantitative Survey

Online Survey Population

The online survey was made available to all educators in the Midwest state. Participants were invited to participate in the survey via email from district administrators and state regional instructional facilitators. The survey was available to educators twenty-four hours a day, seven days a week for twenty-three consecutive days. The survey was designed to take no more than five minutes to complete in an attempt to accommodate the busy schedules of educators. Six hundred and fourteen educators' completed surveys were submitted.

Rationale for Survey

As the case study unfolded, it became apparent that a state-wide survey of educators regarding the three emerging themes would be of interest. In the review of related literature it was discovered that a mixed method exploratory design was useful to strengthen qualitative research by adding a quantitative component (Cresswell, 2008; Yin, 2009). Therefore a simple online survey was developed and made available to gather information regarding the three overarching themes that emerged from the case study. (see Appendix F) Methodology triangulation for the study was achieved by considering survey results in addition to the case study results (Bryman, n.d.).

Themes

Data from the mixed method study was viewed through the lens of assessment theory, or the recognition of the cyclical nature of instruction and assessment. The three overarching themes that emerged from the case study were the value of different assessment types, the influence of different assessment types on teaching practice, and the accuracy of assessments as indicators of student achievement. These themes provided the basis for the online survey. Data from both methods was reported using an integrated approach and organized by theme. The case study included three participants; the online survey included six hundred fourteen participants. All charts were developed using Excel.

Value of Assessments

Participants were asked to define teaching practices. Of the three participants, both Mr. Johnson and Mrs. Tracy included assessment as a teaching practice. Mr. Johnson mentioned assessment directly by adding, "... how they are assessed to be sure students are learning" (MT3-2-1), while Mrs. Tracy implied assessment in her comment, "... assure that they learn all they can" (FT1-2-1). Mrs. Tracy reinforces the idea of assessment as a teaching practice. She included, "assessing student learning, [and] giv[ing] them timely feed-back" (FT1-3-3) when listing commonly used teaching practices.

When asked to describe commonly used student assessment, participants shared a wide range of assessment types. Mr. Daniels included worksheets used after a lesson, the Gates reading assessment, the Missouri Assessment Program (MAP) tests, and district created common assessments (MT2-5-1). Mr. Johnson limited his discussion to formative assessment. He commented, "[I] use formative assessments frequently... just to see if [the students] are getting it. If not, I go back and see how it was taught and provide additional instruction" (MT3-5-1). Mrs. Tracy listed the following assessments: exit tickets, or an open response question used to determine student understanding at the end of a lesson; weekly MAP [practice] assessments; Stanford Achievement Tests version 10; STAR reading assessments; STAR math assessments; end of reading unit benchmark tests; and math topic check-ups (FT1-5-1).

As the participants considered revisions to instruction two of the teachers, Mr. Johnson and Mrs. Tracy, mentioned the use of assessment results as providing important information to guide the revision process. Mr. Johnson stated:

Formative assessments are going to be the biggest piece. They are meant to inform instruction as you go... do the students truly have it before they take the test... and not just for the test's sake, but so they know it may be important to other concepts. (MT3-11-1)

When questioned about the benefits of student assessment, Mr. Daniels responded:

... the daily, weekly kind of informal assessment... has a value... it should drive your instruction. I think [standardized] assessments such as the MAP have their value, [but] there is a real danger of becoming too focused on too narrow of a goal. There's a benefit of student assessment if you are going to use it as a tool. (MT2-13-1)

Mr. Johnson addressed the benefits of student assessment, "... the formative assessments are your practice... what you need to work on, what you need to get better at... I think testing's great, I think it is what you prepare for" (MT3-13-1). Mrs. Tracy's addition to the benefits of student assessment was, "You know if they 'Get it' and know if they are able to apply what they learned to different situations' (FT1-13-1).

After considering the benefits of student assessment, participants were asked what they perceived as the negative effects of student achievement. Mr. Daniels stated:

... student assessment... put[s] too much pressure on all levels of the educational system... when we put assessment out there merely as hoop that is to be jumped through that's a problem. It is not used properly, [it is] either used to identify people who are failing or it is used to identify which school districts are failing, or it is just dismissed as

something we gotta' do... and so, it is either over-valued or under-valued. I think assessments can easily become a negative when they become the sole means of determining the worth of a particular teacher or building or community. [Assessments] tend to drive you to teach some things when you would rather teach other things. (MT2-14-1)

Mr. Johnson's response was:

... assessments can provide stress for the students. I think a lot of that has to do with the environment and how the teacher perceives the assessment themselves and how they project that onto the students. Many teachers have a negative view of testing especially with MAP testing, NCLB [No Child Left Behind] and everything associated with it. (MT3-15-1)

Mrs. Tracy added:

A negative effect of student assessment would be lowering the self-esteem of IEP [Individual Education Plan] students. Also, if you do not present assessment in a positive way it can cause stress on students. (FT1-15-1)

In the online survey, theme one was presented to respondents as follows: Please indicate the value you assign each item. The following choices were available: *strongly value, value, no opinion, do not value, strongly do not value*, and *no response*. The responses were collected and organized within the inQsit™ (Fortriede, 2008) survey and

testing program under uniform conditions. The percentages of *strongly value* and *value* were summed, and the sums of the percentages were sorted from lowest to highest in order to compare the most highly valued assessment types of the survey respondents. The results are contained in Figure 1.

Likewise the percentages of *do not value* and *strongly do not value* responses were summed, and the sums of the percentages were sorted from lowest to highest in order to compare the least valued assessment types of the survey respondents. The results of this comparison are found in Figure 2.

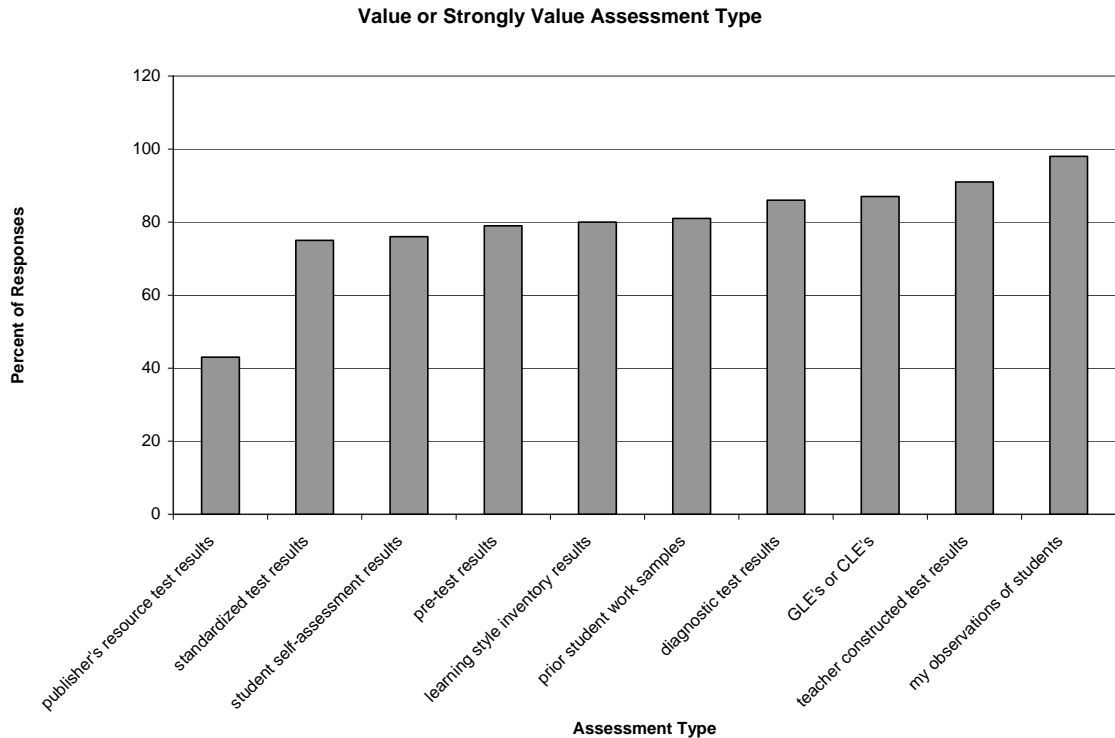


Figure 1. Assessments valued.

Although the most strongly valued assessment types are inversely listed compared to the most strongly not valued assessment types, the inverse relationship did not hold true on a one-to-one basis for all assessment types. Clearly, respondents to the survey hold teacher observations of students and teacher constructed tests as the most valuable assessment types, while perceiving publisher's resource tests and standardized tests as the least valuable.

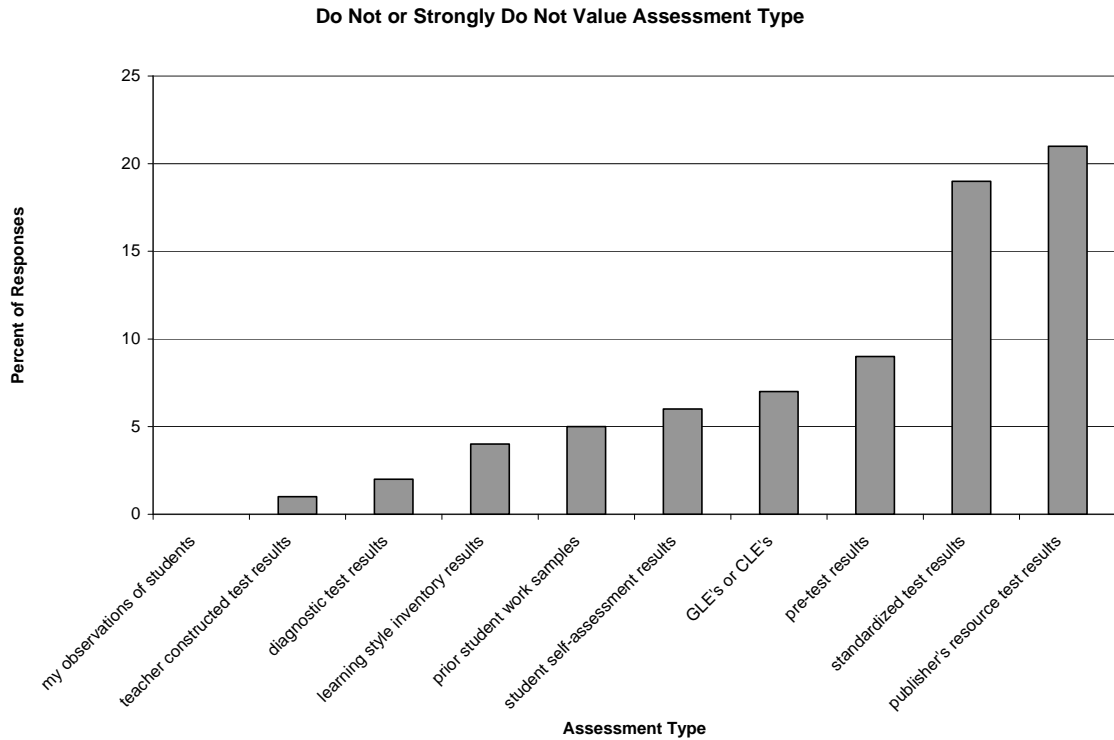


Figure 2. Assessments not valued.

Influence of Assessment on Practice

The focus of this study was the perception teachers have of assessment and its impact on resulting practices.

Throughout the interview process the link between student assessment results and the instructional process was referenced. Mr. Johnson mentioned assessment to monitor student understanding early in his interview, as did Mrs. Tracy (MT3-2-2, FT1-2-2). Mr. Daniels described assessment as not only a tool to check for knowledge, but as a means of checking the depth of student knowledge (MT2-4-3). He stated, "We're trying to do more constructed response [open questions] to get to a higher level. We're trying to get up to those synthesis and analytical levels that you want to get to" (MT2-5-7). Mr. Johnson related using assessment to know what to teach next:

... use formative assessments frequently... just to see if they are getting it, if not go back and see how it was taught and provide additional instruction, use formative assessments to guide planning the instruction. (MT3-5-1)

When specifically asked about the link between student assessment and their teaching practices, Mr. Johnson replied:

In order to have quality instruction, quality teaching practices, it is important to use quality assessments so you know what students' strong points are and what their weak points are so you can address them. Provide for remediation and interventions in the classroom. (MT3-6-1)

Mrs. Tracy agreed that she perceived a link between student assessment and her teaching practices (FT1-6-1). Mr. Daniels answered:

Very definitely... our assessments for... ability grouping are driving where those kids start with math and communication arts. We move them periodically throughout the year if we feel they are either placed too high or placed too low... We have to do different things with different kids... assessments inform our selection of instructional material and inform the way we deliver the material. (MT2-6-1)

When asked what information they use when planning instruction, one participant responded, "The GLE's... authentic materials... are [students] aural learners, are they a visual learner, what else is going on in their life besides school, what hasn't worked in the past?" (MT2-7-1) Mrs. Tracy listed her teacher manual, the Internet, prior experience, and veteran teachers' ideas and opinions. (FT1-7-1) Mr. Johnson stated, "One of the biggest things that goes into consideration is time... GLE's... district curriculum... " (MT3-7-1).

The participants then shared the process used to plan instruction. Mr. Daniels shared:

The process is one of making the plan and then revising the plan based on what really happens... just planning, revision, constant assessment, constantly thinking about how it really went versus how you wanted it to

go, and then adjusting your plan for the next day.

Constant assessment on the part of the teacher, of just every day thinking about it... and it doesn't have to be a real formal process. (MT2-8-22)

All three participants used assessment to determine whether instructional practice needed to be revised. Mrs. Tracy reported that she revises instruction for re-teaching if the class average on an assessment falls below seventy percent. (FT1-10-1) Mr. Johnson and Mr. Daniels had similar criteria regarding whole class re-teaching. (MT2-10-3, MT3-10-1) Mr. Johnson explained further:

If there's just two, three, four kids that don't get it then you give the other students some kind of enrichment activity... then go back and revisit it [the concept] with them [students who need re-teaching] in a small group. (MT3-10-11)

All three participants said they rely on assessment data to determine the need for and the content of instructional revisions (MT2-11-1, MT3-11-1, FT1-11-1).

Each participant reported, based on their experience, that student understanding increased when instruction was revised (MT2-12-1, MT3-12-1, FT1-12-1). Mr. Johnson replied:

It absolutely has [increased student understanding]. We're trying to hit Tier Two and Tier Three [levels in RtI] with the struggling learners, and the one's that are behind... we're redoing our pacing guides and allowing time for interventions in the classrooms and I

think that will be a huge benefit to the kids and a huge benefit to the teachers to have the time to go back and really use the formative assessments. (MT3-12-1)

Theme two was presented to survey respondents as follows: Please indicate your level of agreement that these items influence your teaching practices. The following choices were available: *strongly agree*, *agree*, *no opinion*, *disagree*, *strongly disagree*, and *no response*. The responses were collected and organized within the inQsit™ (Fortriede, 2008) survey and testing program under uniform conditions. The percentages of *strongly agree* and *agree* were summed, and the sums of the percentages were sorted from lowest to highest in order to compare the most influential assessment types of the survey respondents. The results are contained in Figure 3.

Likewise the percentages of *disagree* and *strongly disagree* responses were summed, and the sums of the percentages were sorted from lowest to highest in order to compare the least influential assessment types of the survey respondents. The results of this comparison are found in Figure 4.

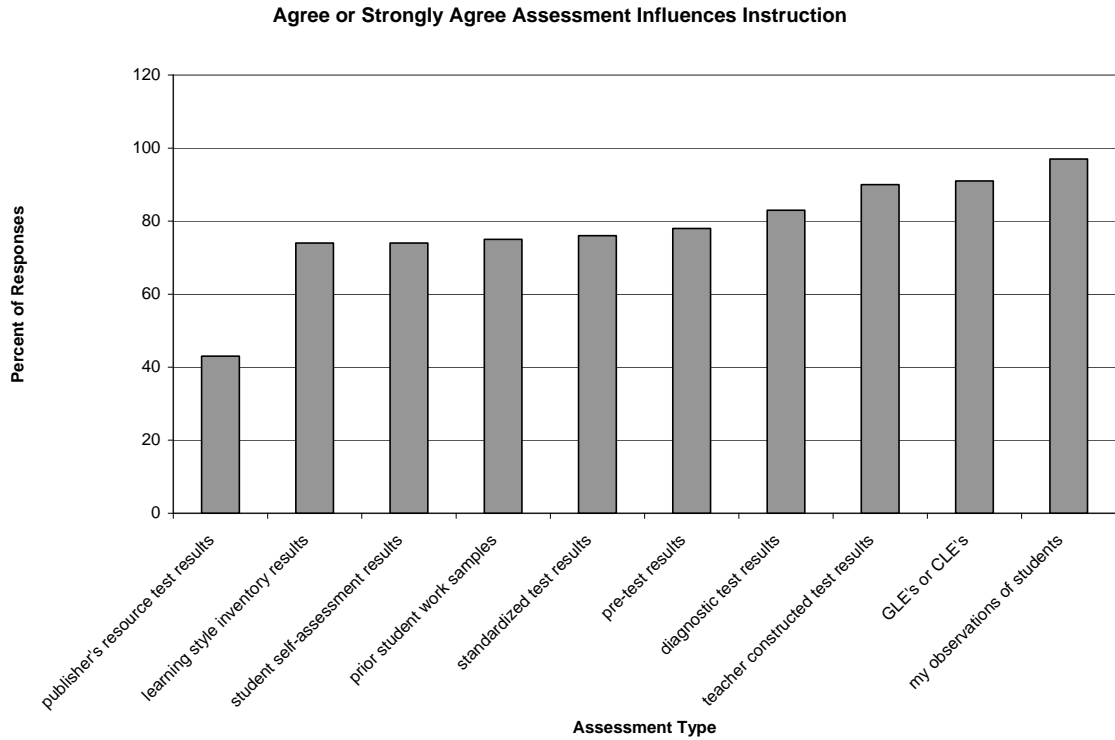


Figure 3. Assessment influences instruction.

The results of the online survey regarding theme two indicate that teachers' observations, the GLE's and CLE's, and teacher constructed tests most strongly influence classroom instruction. The assessment types that least influence instruction are publisher's resource tests and standardized tests. The results mirror the assessment types teachers most value.

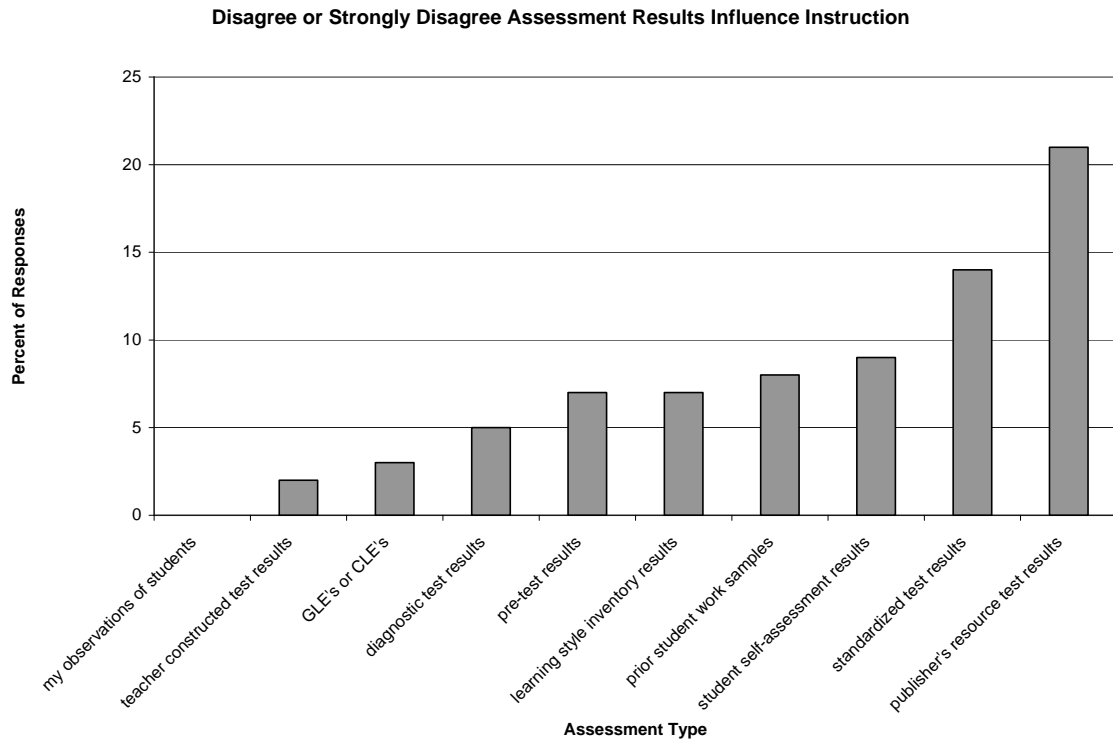


Figure 4. Assessment does not influence instruction.

Assessment as Indicator of Learning

Within the context of responses to the interview questions a third theme emerged. All three participants defined assessment as an indicator of student learning (FT1-4-1, MT2-4-1, MT3-4-1). Mr. Daniels stated, "Yes, we definitely look at the MAP scores every year... [assessment is] a valuable tool in helping us to say what don't [students] know yet. So before we start with this we need to teach them that again" (MT2-16-1). Mr. Johnson replied, "... student information is vital when planning instruction... "

(MT3-16-1). Mrs. Tracy defined assessment as "determining what students have learned" (FT1-4-1).

However, the participants also expressed concern that assessment results are sometimes misused, and decisions are sometimes made about student learning and instruction without the "foundation" (MT3-16-15) of quality assessment results. Mr. Daniels expressed his concern:

I think the negative effects are that [assessment results are] not used properly. . . used to identify people who are failing... used to identify which school districts [are] failing... as a community we really need to think about what we want to do with assessment and what we are really trying to achieve. What do we want to use this tool for? I'm not sure we really know.

(MT2-14-6, MT2-20-14)

Mr. Johnson posited, "Without your [assessment] data you're just another person with an opinion" (MT3-16-3).

The third theme was presented to survey respondents as follows: Please indicate your level of agreement that these items are accurate indicators of student learning. The following choices were available: *strongly agree*, *agree*, *no opinion*, *disagree*, *strongly disagree*, and *no response*. The responses were collected and organized within the inQsit™ (Fortriede, 2008) survey and testing program under uniform conditions. The percentages of *strongly agree* and *agree* were summed, and the sums of the percentages were sorted from lowest to highest in order to compare the assessment types

considered to be the most accurate by the survey respondents. The results are contained in Figure 5.

Likewise the percentages of *disagree* and *strongly disagree* responses were summed, and the sums of the percentages were sorted from lowest to highest in order to compare the assessment types identified as least accurate by survey respondents. The results of this comparison are found in Figure 6.

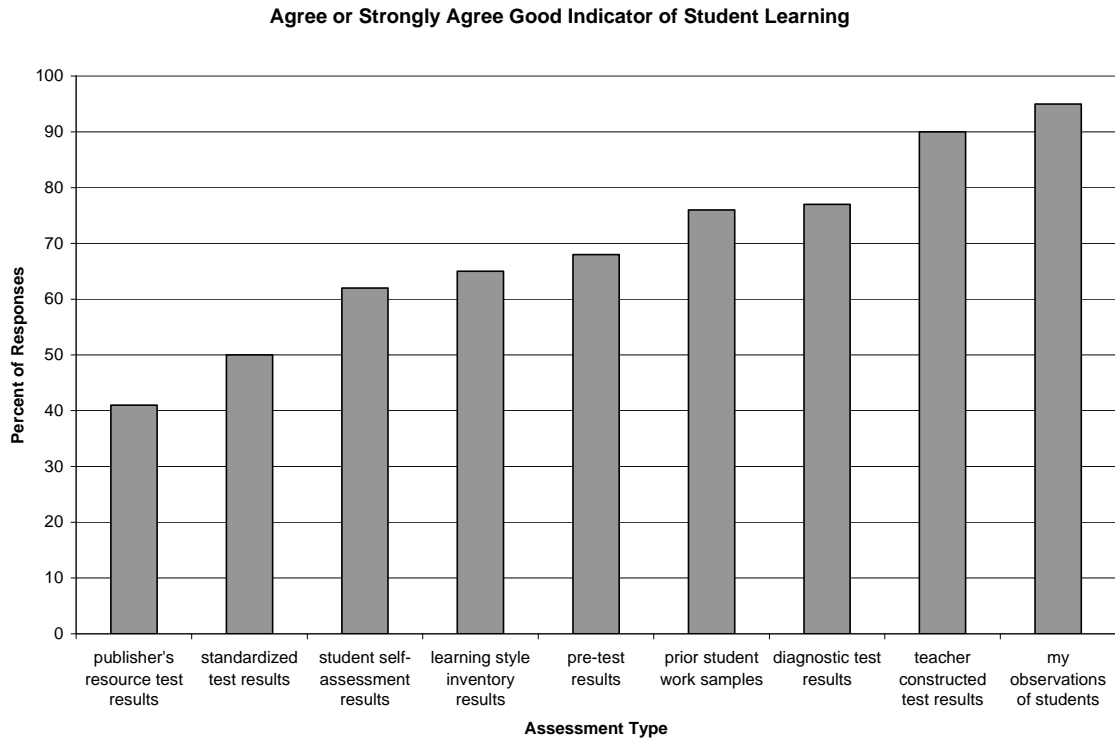


Figure 5. Assessment as indicator of learning.

The results of the online survey regarding theme three indicate that teachers' observations and teacher constructed tests are considered the most accurate indicators of student

learning. The assessment types that teachers believe are the least accurate indicators of student learning are publisher's resource tests and standardized tests. The results mirror the results of the assessments types teachers most value and the assessment types that most influence instructional decisions.

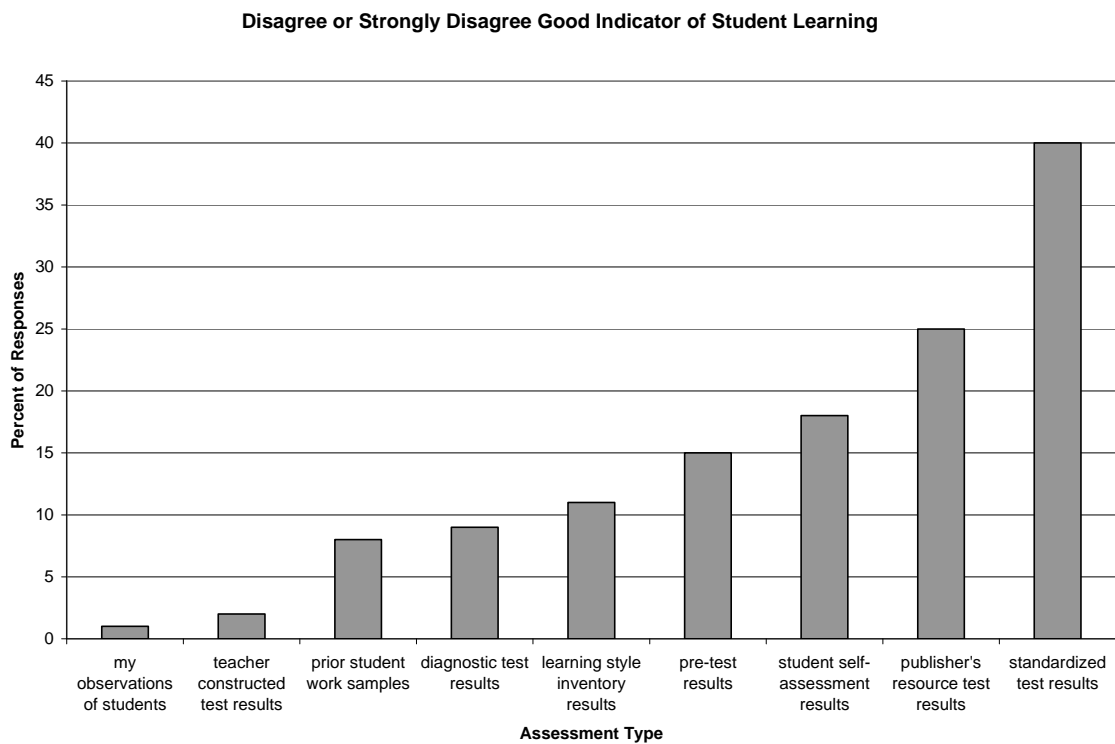


Figure 6. Assessment not indicator of learning.

Summary

In Chapter Four the compilation of data from several sources was presented. The sources included interview transcripts, school documents, and survey responses. A description of the demographics of the case study

participants and their respective school districts was followed by a description of the protocol of the case study and process of the case study data analysis. The resulting overarching themes were discussed in light of the data collected.

As a result of the case study data, a Likert survey, centered on the case study themes, was developed and disseminated. Survey data was charted by percentage and examined for trends. The results of the survey data were then considered in reference to the themes and the theoretical proposition resulting from the case study data, and vice versa. The process of the mixed method data analysis consisted of "merging" and "integrating" the results of both sets of data (Cresswell, 2008, p. 552). A summary of the findings, limitations of the study, conclusions, recommendations for future research, implications for practice, and summary were presented in Chapter Five.

CHAPTER FIVE - DISCUSSION

Introduction

The purpose of this study was to determine teachers' perceptions of student assessment and how those perceptions impact teaching practices. Concerns of preparing students for state accountability tests can overshadow facilitating student learning of district developed curriculum. Wagner (2008) discovered in his research that due to the high accountability expectations of No Child Left Behind (NCLB), "teaching to the test is the *only* curriculum" in most high poverty schools (p. 3). Wagner continued that America's public schools are preparing students for accountability assessments at the expense of preparing them to be productive adult citizens in the twenty-first century. In this high-pressure, time-starved environment it is important to consider teachers' perceptions. As one participant in the study shared, "You can tend to get people teaching to the test. They do tend to drive you to teach some things when you would rather teach other things" (MT2-14-33).

Educational researchers have recommended using assessment as a tool to check the level of student understanding in order to guide the next steps of instruction (Fisher & Frey, 2007; Popham, 2001 & 2003; Schmoker, 2006; William, 2005) Considering this recommendation, assessment theory was chosen as the lens

through which to examine teachers' perceptions of assessment and teaching practice. Assessment theory, the recognition of teaching and learning as a cycle of assessment, reflection, instructional planning, implementation, and so on, provides a framework for the implementation of best practices in assessment and instruction (Fisher & Frey, Popham, Schmoker, and William).

For this mixed method study, the collective case study participants were recruited based on the following criteria: had at least three years of teaching experience; employed as a fifth grade teacher in a public school; taught some combination of communication arts, mathematics, and science. Three teachers fitting the criteria were selected as participants. Multiple case studies provided a wider perspective of teachers' perceptions for consideration. Data from interviews with each participant and school documents provided well-rounded data for consideration. For the survey portion of the study, a brief online survey was distributed across the state. The survey was disseminated to public school educators in a Midwestern state via email by regional instructional facilitators at the state's regional professional development centers and by district administrators across the state. The survey was available for twenty-three consecutive days, twenty-four hours a day. Six hundred fourteen completed surveys were submitted and considered in the data analysis. Triangulation was ensured through the use of data triangulation within the collective

case studies, and methodology triangulation through the collective case study in conjunction with the survey (Creswell, 2008).

Summary of the Findings

The collective case study data, interview transcripts and school documents, were analyzed, and data was chunked by question, then by common strands of response and finally by theme. The themes were then analyzed through the lens of assessment theory. Three themes emerged: value of assessments, influence of assessment on instruction, assessments as indicators of student learning.

The problem to be solved in this study was: How do teachers' perceptions of assessment [value of assessment and assessments of indicators of student learning] impact teaching practices [influence of assessment on instruction]? Through the interview process responses to the original research questions provided data for analysis. The questions were:

1. What is the link between student assessment and teaching practices of teachers?
2. What do teachers consider when making initial instructional decisions?
3. What do teachers consider when making instructional revisions?
4. What are teachers' perceptions regarding student assessment?

5. How can teachers optimize student assessment to improve teaching practices?

The survey data centered on the three themes was charted by percentage, examined for trends, and compared for similarities and differences. The results of the survey data were then considered in reference to the research questions, themes and theoretical relationships resulting from the case study data, and vice versa. This reciprocal process was one of integration of data from the two methodologies (Cresswell, 2008).

Each research question was considered from the perspective of the transcript data and the survey results.

- 1. What is the link between student assessment and teaching practices of teachers?*

Classroom teachers administer both assessment and instruction to students. Survey respondents confirmed that assessment has an influence on their instructional decision-making. The greatest percentage of responses indicated that teacher observations of students, careful attention to the GLE's and CLE's (grade level expectations and course level expectations) and teacher constructed test results were the assessments most heavily influencing instruction.

Standardized test results fell in the lower half of the types of assessments ranked as influencing instructional decisions. These results complimented the transcript data from the interviews. One participant stated, "in order to have quality instruction, quality teaching practices, it is

important to use quality assessments so you know what students' strong points and weak points are... using the formative assessment and the comprehensive assessment at the end shows you data of true student learning" (MT3-6-1). The participants expressed concern, on the other hand, that assessment results are sometimes misused, and decisions made about student learning and instruction without the "foundation" (MT3-16-15) of quality assessment results. One participant commented:

I think the negative effects are that [assessment results are] not used properly... [they are] used to identify people who are failing... used to identify which school districts [are] failing... as a community we really need to think about what we want to do with assessment and what we are really trying to achieve. What do we want to use this tool for? I'm not sure we really know. (MT2-14-6, MT2-20-14)

Another participant claimed, "Without your [assessment] data you're just another person with an opinion" (MT3-16-3).

2. What do teachers consider when making initial instructional decisions?

The largest percentage of survey respondents believed that their personal observations of students have the greatest influence on instructional decision-making, followed closely by GLE's and CLE's (grade level expectations and course level expectations) and teacher constructed tests. The next most influential piece

identified by teachers for impacting instruction was diagnostic testing, followed by pre-test results and then standardized tests. The assessment type with the least impact on instruction was publisher's resource tests.

These results supported the transcript data collected. Mr. Daniels and Mr. Johnson both cited the GLE's as influential in their instructional planning (MT2-7-1 and MT3-7-3). All three participants agreed that teacher observation was valuable. One participant commented:

It is not the kind of thing you will get out of a book or out of [a formal] assessment or out of a file. It's just looking at what's going to work for this kid, what hasn't worked in the past, and the more you know about that the easier it is to figure out how you are going to deliver your instruction. (MT2-7-24)

3. *What do teachers consider when making instructional revisions?*

Survey respondents indicated they rely primarily on teacher observations to trigger instructional revision. The immediate processing of information continued to outweigh the *expert* information gleaned from standardized or publisher's resource tests. In fact when considered from the point of view of the greatest disagreement on what types of assessment would be used to indicate a need for revision of instruction, respondents selected publisher's test results as most unlikely to influence their decision, followed by standardized test results. Although case study participants

did not make these statements directly the culmination of the participants' comments support immediate teacher created assessment, whether in the form of observation or classroom test, as the assessment types most likely to influence them to make instructional revisions on a regular basis. In addition, participants indicated they consider the following: "objectives... methods of delivery... is the material too difficult... students are not engaged" (FT1-11-1, MT2-10-6)

4. *What are teachers' perceptions regarding student assessment?*

Mr. Daniels commented:

The daily, weekly kind of informal assessment that goes on certainly has a value and the value of that is it should drive your instruction... your instructional practice... your selection of instructional materials... how you teach on a daily basis. If the kids aren't getting it you should do something different. I think standardized assessments such as the MAP have their value, [but] I think there is a real danger in becoming too focused on too narrow of a goal, but at the same time I think there is a value in setting a goal, setting a standard, and trying to get people to that standard. I just think you have to be careful that you're not making the standard unrealistic or unattainable... There's a benefit of student

assessment if you are going to use it as a tool. (MT2-13-1)

The survey results supported Mr. Daniels' thoughts. Once again results showed that teachers value teacher observation and teacher created tests and believe that those assessment types are the best indicators of student learning. The survey respondents indicated that at the other extreme they do not value publisher's resource test results and standardized tests and believe that those assessment types are not good indicators of student learning.

5. How can teachers optimize student assessment to improve teaching practices?

When asked to describe their personal level of expertise in making instructional decisions, participant responses ranged from "novice" (MT2-17-1) to "high level of expertise" (FT1-17-1). The moderate respondent stated, "I am knowledgeable of what needs to be done... the process. I don't always have the expertise to know all the different ways to teach something" (MT3-17-1). Another participant stated:

When I was in teacher school, learning to become a teacher, I recall learning what all the terms meant... I'm not sure I actually had a situation where I practiced taking all of those pieces and putting them together. We learned how to analyze the reading level of a piece of fiction. We learned how to figure out a reading level. We learned how to do this and how to do

that. We learned about formatives and summatives... but it's just like classroom instruction... you get a lot of the theory but you don't get too much of the *why do you use it*. If [only] there was a way to help teachers who are learning to be teachers, or teachers who are new teachers, to understand how those tools can be used to get a more complete picture of a child's intellectual level or cognitive level. (MT2-18-1)

When asked what types of training would be helpful to increase teachers' expertise in using assessment to inform instruction one participant advised:

I think a course in data analysis would be very beneficial. That's something that in my education wasn't stressed, or talked a lot about. Whenever you get into teaching... you're kind of flying blind... being trained on differentiating instruction... RtI interventions... how to use the textbook to deliver [an] intervention. (MT3-18-1)

Mrs. Tracy added training in "grade-level collaboration between teachers" (FT1-20-1) as an essential for effectively using assessment to inform instruction. Another participant noted:

Professional learning community collaboration is difficult for a lot of teachers. I think it comes down to self confidence... when you put your [students'] scores right next to seven other teachers it's pretty plain and simple to see if you taught it well... you

can go hide in your closet and continue the same thing or you can seek out help and make yourself better for your students. (MT3-19-27)

Case study participants pointed out the need for teacher collaboration to analyze assessment data. This is an interesting juxtaposition to the assessment types most valued by teachers, that most influence instructional practice, and are perceived as the best indicators of student learning, which are teacher observation and teacher constructed tests.

In summary, in this study three overarching themes emerged related to teachers' perceptions of assessment and practice. The themes were: value of assessments, the influence of assessments on instruction, and assessments as indicators of student achievement. In addition, the need for professional development linking assessment and instruction was revealed.

Limitations of the Study

The limitations of this study were related to the design chosen by the researcher and the geographic area of the study as listed below.

1. The collection of data was limited to one academic semester.
2. The location of the study was a Midwest state.
3. The online survey data was limited to the respondents who chose to complete and submit the survey.

4. The researcher relied on all respondents to answer all questions thoughtfully and honestly.
5. Researcher bias was monitored by the committee of educational advisors.

Conclusions

Within the context of the limitations of the study, the perceptions of assessment and practice of three fifth grade teachers from a Midwest state were viewed through the lens of assessment theory. As a result, three themes emerged: value of assessment, influence of assessment on practice, and assessment as an indicator of student learning. A Likert survey based on the three overarching themes was developed to garner data from a larger population of educators in the state. From the case studies and the survey, data was integrated and analyzed resulting in the following conclusions.

Theme One

1. Teachers value formative assessment, especially teacher observation and teacher constructed tests, over other assessment types.

Case study participants acknowledged some value in the MAP test. Mr. Daniels' school uses MAP results as part of the process of ability grouping students, and to identify weaknesses of incoming fifth grade students. However, the participants also noted the negative effects of the state test, citing the pressure of accountability expectations on students and educators to perform well and the unreasonable

expectations placed on IEP students. Survey respondents selected teacher observations as the most valued assessment type, while publisher's resource tests and standardized tests were identified as the least valued assessment types.

Theme Two.

2. Assessment influences instruction, both as teachers instruct students to prepare them for a particular assessment and as teachers use assessment results to determine students' level of understanding when planning instruction.

Two perspectives emerged regarding influences on instruction. One perspective deals with influences from outside the classroom. These would include federal and state expectations, or annual yearly progress, GLE's and CLE's. The second perspective deals with influences inside the classroom such as student engagement, formative assessment results, and teacher observations. In both the case studies and the survey both perspectives were indicated as very influential when planning instruction. Standardized assessments were indicated as influential by a moderate percentage of survey respondents and not at all influential by a large percentage of respondents. Once again publisher's resource tests were not viewed to be influential in planning instruction.

Theme Three.

3. Assessments that measure specific student learning with immediate feedback are viewed as more indicative of

student learning than assessments that measure general student learning with delayed feedback.

Survey results indicated that respondents strongly disagreed that standardized tests and publisher's resource tests were good indicators of student learning, while strongly agreeing that teacher observation of students, teacher constructed tests, and diagnostic tests were good indicators of student learning. Participants in the case study did not directly discuss this question. However, it was clear from other responses that formative assessment was more commonly used to gauge student learning. Standardized test scores were used to place students in ability groups and to identify *holes* in prior grade level learning. One participant commented that standardized assessments should not be considered singly as a measure of student learning, but should be considered as one snapshot of a student's learning.

Recommendations for Future Research

Accountability of education is measured by student achievement assessments. Instruction is reported to be the single greatest determinant of student learning (Schmoker, 2006). Although this direct link is known, there have been few studies of teachers' perceptions of assessment and related practice. In 2000, Neesom reported teacher feedback from questionnaires regarding teacher perceptions of expectations regarding assessment, and found that teachers felt bound to what they perceived as governmental

expectations to teach to annual achievement tests. The government had not intended this to be the teachers' perception, and Neesom called for lead educators to help communicate that message.

Although Neesom's study was a decade ago on another continent, it would appear from the results of this study that similar perceptions are held by the teachers of this Midwestern state. The findings of this study reveal that many of the same misconceptions and concerns that were reported a decade ago are still prevalent today. Therefore, questions developed in the mind of the researcher over the course of the study.

What impact would a stratified [administrator, teacher, student] training initiative addressing assessment purposes and results have on student learning? This question could be addressed through a multi-year mixed method study of a school building implementing high-quality job-embedded professional development focused on assessment for learning and assessment as learning, and comparison of student achievement data as the initiative was implemented.

How would additional study and application of assessment results in a pre-service teacher program impact first year teaching experiences? An experimental/pilot study of the effects of intensive training of selected pre-service teachers in the use of assessment for learning on self-measurement of success after the first year of teaching compared to those who did not receive the intensive

training. A collective case study methodology would be revealing for this type of investigation.

Implications for Practice

Research on teachers' perceptions of assessment and teaching practice is limited. In her study of summative and formative assessment, Neesom (2000) found that although teachers highly value formative assessment they felt compelled to give more attention to summative [achievement] assessment. Neesom called for head teachers [principals] to communicate clearly to teachers that formative assessment to monitor student learning and guide instruction was expected and encouraged.

Bloom and Broder (1950) reported a half-century earlier than the Neesom (2000) study that formative assessment of student learning was vital in instructional planning. More recently educational researchers carry on the call for the use of what we now know as assessment for learning (Black, 2005; Chappius, et al., 2005; Reeves, 2000; Wiggins & McTighe, 2005). Popham (2006, 2004, 2003, 2001) posited that the mysterious aura around assessment runs deep. Participants in the study supported this notion. Two of the three teachers interviewed for the study stated they needed more training in using assessment results to guide instruction (MT2-18-10, MT3-19-1) and the survey results pointed out that teachers are more comfortable with their own observations and results from teacher constructed tests than prepared tests. The survey also revealed that teachers

lack confidence in their own ability to make inferences based on standardized or publisher's resource test results.

In an attempt to reveal the truth about assessment, Popham (2004, 2006) has repeatedly shared easy to read and understand descriptions of what every educator, patron and student needs to know about assessment. Popham recommended that educators select application-based books on assessment to be studied and discussed in small collaborative groups. Once those educators understand the applicable concepts of assessment, Popham suggests they begin to educate others about assessment. Through a better understanding of assessment, and application of assessment results, teachers will have the tools to select appropriate assessments and exploit assessment results to the fullest.

Summary

This mixed method study revealed the beliefs and opinions of three fifth grade teachers regarding assessment and instructional practice, and a snapshot of six hundred fourteen Midwest educators' opinions of various types of assessment. The data collected was viewed through the lens of assessment theory, the belief that assessment and instruction are not linear concepts but instead form a circle of events. As the case study data was analyzed three themes emerged: value of assessment, influence of assessment on instruction, and assessment as an indicator of student learning.

Interview transcripts, school documents, and survey results provided data for analysis for the study. The teachers openly shared their perceptions of assessment, instruction and how the two are linked. The teachers also shared successes and failures they have experienced while striving to use assessment and instruction to best meet the needs of students.

As a result of this study, further questions were raised regarding teachers' perceptions of assessment and instruction. The importance of clearly understanding the link between assessment and instruction related to student learning was highlighted. The case was made that while accountability is required, educational leaders must clearly communicate to teachers, patrons and students that the true objective of assessment and instruction is student learning.

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Appendix A

Correspondence

1. Letter of Introduction.....110

Letter of Introduction

<Date>

<Title> <First Name> <Last Name>

<Position>

<School District>

<Address>

Dear <Title> <Last Name>,

Thank you for agreeing to participate in my research study. I look forward to meeting you on <date> <time> to collect your perceptions and thoughts on assessment and teacher practice. Teachers' perceptions of assessment impact teaching practices which in turn impact student achievement. NCLB has raised the stakes for students, teachers and school districts regarding student achievement. It is beneficial to consider perceptions and resulting actions that impact student achievement.

I have allowed two hours for the interview process and sharing of documents that link assessment and instruction in your district.

Enclosed is a list of the interview questions for your review and consideration. Your participation in this study is greatly appreciated, and is voluntary on your part. If you wish to withdraw from the study you may do so at any time without negative consequences. If you have any questions or concerns, please contact me by phone (at 417-743-4800-work, or 417-353-6954-home) or by email (at groverk@clever.k12.mo.us).

Sincerely,

Kathy J. Grover
Doctoral Candidate
Lindenwood University

Appendix B

Interview Questions

1. Interview Questions.....112

Interview Questions

Professional Experience

1. Tell me about your professional experiences as a teacher.

Research Question 1: What is the link between student assessment and teaching practices of teachers?

2. How do you define teaching practices?
3. Please describe commonly used teaching practices.
4. How do you define student assessment?
5. Please describe commonly used student assessments.
6. Do you perceive a link between your students' assessments and your teaching practices?

Research Question 2: What do teachers consider when making initial instructional decisions?

7. What information do you use when planning instruction?
8. What process do you use when planning instruction?

Research Question 3: What do teachers consider when making instructional revisions?

9. What would cause you to revise your instructional practice?
10. What information do you consider when making revisions to instruction?
11. In your experience has revising instruction increased student understanding?

Research Question 4: What are teachers' perceptions regarding student assessment?

12. What, in your opinion, are the benefits of student assessment?
13. What do you perceive as negative effects of student assessment?

Research Question 5: How can teachers optimize student assessment to improve teaching practices?

14. In your opinion, is student assessment information useful when planning instruction?
15. Describe your level of expertise in making instructional decisions based on student assessment results.
16. What types of training would be helpful to increase teachers' expertise in using assessment to inform instruction?

Appendix C

Informed Consent

1. Letter of Informed Consent.....	114
2. Informed Consent Form.....	116

Letter of Informed Consent

<Date>

Dear Participant,

I would like to invite you to participate in a research study entitled, "Student Assessment: A Qualitative Study of Teachers' Perceptions and Resulting Practices." I am completing this study in partial fulfillment of the requirements for a doctorate in Instructional Leadership through Lindenwood University. Below you will find a summary of the study and what would be required of you should you consent to participate.

NCLB mandates assessment of public school students. Annual Yearly Progress reports keep track of the percentage of students scoring at varying levels each year. To school patrons this report becomes their district's "report card," and to teachers the assessments associated with them become high-stakes assessments. As a result teachers feel pressure to prepare students for these assessments. How that pressure to perform is perceived by teachers and translated into classroom practice deserves serious consideration.

Researcher: Kathy J. Grover, Lindenwood University, Doctoral Candidate, (417- 353-6954), kgrover@lindenwood.edu

Dissertation Supervisors: Dr. Terry Reid, Lindenwood University, treid@lindenwood.edu; Dr. Sherry R. DeVore, Lindenwood University, SDevore@lindenwood.edu

Purpose of the Study: The purpose of this study is to determine teachers' perceptions of student assessment and how those perceptions impact teaching practices through the following questions:

1. What is the link between student assessment and teaching practices of teachers?
2. What do teachers consider when making initial instructional decisions?
3. What do teachers consider when making instructional revisions?
4. What are teachers' perceptions regarding student assessment?
5. How can teachers optimize student assessment to improve teaching practices?

Procedures: I will conduct a two-hour interview of those who consent to participate in this study. The interview will consist of several open-ended questions, while some questions have been constructed for the study, the interview process may lead to additional discussion that is relevant to the pre-designed questions. All interview conversation will be audio-taped, transcribed and sent to the participant for review and approval. Participants will have the option of responding to each question. I will also ask for copies of any documents you have used that link instruction and assessment. Participants may withdraw from the study at any time without negative consequences.

Confidentiality: Participants' and district names and identifying information will not be published. Pseudonyms will be used for each participant and district. All data and documentation (including notes, district artifacts, audio-tapes and transcripts) will be kept in my possession in a secured location for three years. After three years all data and documentation will be destroyed.

Risks and Benefits: There are no known risks associated with your participation in this study. The study should provide insight into the link between assessment and teachers' instructional planning.

If you are willing to participate in this study, please sign and return one of the accompanying consent forms in the enclosed, stamped envelope. Please be sure to indicate a convenient time (between October 29, 2008 and December 14, 2008) and place for the interview. The additional copy is for your records. Please contact me if you have any questions regarding the study, or if you wish to receive the results of the study.

Sincerely,

Kathy J. Grover
110 Cherry
Clever, MO 65631
Doctoral Candidate
Lindenwood University

Enc: Informed Consent, Stamped Envelope

Informed Consent

I, _____ have read the Letter of Informed Consent and agree to participate in the study being conducted by Kathy J. Grover entitled, "Student Assessment: A Qualitative Study of Teachers' Perceptions and Resulting Practices." I understand that:

- my responses will be used for this dissertation research and may be used in future publications.
- I am participating voluntarily and may withdraw from the study at any time without negative consequences.
- my identity and the identity of my school district will be kept confidential.

I have read the information above, have had all questions regarding my participation in this study addressed to my satisfaction, and voluntarily agree to participate in this study.

Signature of the Participant

Date

~~~~~  
To be completed by Participant:

\_\_\_\_\_  
Date and Time of Interview

\_\_\_\_\_  
Interview Location Address

\_\_\_\_\_  
Participant's Phone Number

Appendix D

*Data Codes*

1. List of Data Codes.....118

List of Data Codes

|                  |                                                          |
|------------------|----------------------------------------------------------|
| FT1              | Fifth Grade Teacher, Mrs. Tracy, Female                  |
| MT2              | Fifth Grade Teacher, Mr. Daniels, Male                   |
| MT3              | Fifth Grade Teacher, Mr. Johnson, Male                   |
| DOC              | School Documents                                         |
| FT1- <u>1</u> -1 | Underlined section indicates the page number of the data |
| FT1-1- <u>1</u>  | Underlined section indicates the line number of the data |

Appendix E

*Documents*

1. School Documents.....120

School Documents

Documents collected included:

Mrs. Tracy

1. District Report Card (2007-2008)
2. School Accountability Report (2007-2008)
3. Annual Performance Report (2008)

Mr. Daniels

4. District Report Card (2007-2008)
5. School Accountability Report (2007-2008)
6. Annual Performance Report (2008)

Mr. Johnson

7. District Report Card (2007-2008)
8. School Accountability Report (2007-2008)
9. Annual Performance Report (2008)

Appendix F

*Survey*

1. Perception and Practices Survey.....122

Perceptions and Practices Survey

|   |                                                                                                             |                       |              |                   |                     |                              |
|---|-------------------------------------------------------------------------------------------------------------|-----------------------|--------------|-------------------|---------------------|------------------------------|
| 1 | <b>Please indicate the value you assign each item.</b>                                                      | <b>Strongly value</b> | <b>Value</b> | <b>No opinion</b> | <b>Do not value</b> | <b>Strongly do not value</b> |
|   | Standardized test results                                                                                   |                       |              |                   |                     |                              |
|   | GLE's or CLE's                                                                                              |                       |              |                   |                     |                              |
|   | Diagnostic test results                                                                                     |                       |              |                   |                     |                              |
|   | Pre-test results                                                                                            |                       |              |                   |                     |                              |
|   | My observations of students                                                                                 |                       |              |                   |                     |                              |
|   | Learning style inventories                                                                                  |                       |              |                   |                     |                              |
|   | Prior student work samples                                                                                  |                       |              |                   |                     |                              |
|   | Publisher's resource test results                                                                           |                       |              |                   |                     |                              |
|   | Teacher constructed test results                                                                            |                       |              |                   |                     |                              |
|   | Student self-assessment                                                                                     |                       |              |                   |                     |                              |
| 2 | <b>Please indicate your level of agreement that these items influence your teaching practices.</b>          | <b>Strongly agree</b> | <b>Agree</b> | <b>No opinion</b> | <b>Disagree</b>     | <b>Strongly disagree</b>     |
|   | Standardized test results                                                                                   |                       |              |                   |                     |                              |
|   | GLE's or CLE's                                                                                              |                       |              |                   |                     |                              |
|   | Diagnostic test results                                                                                     |                       |              |                   |                     |                              |
|   | Pre-test results                                                                                            |                       |              |                   |                     |                              |
|   | My observations of students                                                                                 |                       |              |                   |                     |                              |
|   | Learning style inventories                                                                                  |                       |              |                   |                     |                              |
|   | Prior student work samples                                                                                  |                       |              |                   |                     |                              |
|   | Publisher's resource test results                                                                           |                       |              |                   |                     |                              |
|   | Teacher constructed test results                                                                            |                       |              |                   |                     |                              |
|   | Student self-assessment                                                                                     |                       |              |                   |                     |                              |
| 3 | <b>Please indicate your level of agreement that these items are accurate indicators of student learning</b> | <b>Strongly agree</b> | <b>Agree</b> | <b>No opinion</b> | <b>Disagree</b>     | <b>Strongly disagree</b>     |
|   | Standardized test results                                                                                   |                       |              |                   |                     |                              |
|   | Student self-assessment                                                                                     |                       |              |                   |                     |                              |
|   | Diagnostic test results                                                                                     |                       |              |                   |                     |                              |
|   | Pre-test results                                                                                            |                       |              |                   |                     |                              |
|   | My observations of students                                                                                 |                       |              |                   |                     |                              |
|   | Learning style inventories                                                                                  |                       |              |                   |                     |                              |
|   | Prior student work samples                                                                                  |                       |              |                   |                     |                              |
|   | Publisher's resource test results                                                                           |                       |              |                   |                     |                              |
|   | Teacher constructed test results                                                                            |                       |              |                   |                     |                              |



Appendix G

*Approval Form*

1. Notice of Final Oral Presentation.....124

PLEASE POST

Notice of Final Oral Presentation

DATE: February 18, 2009, at 9:00 a.m.

Clever High School Library

TO: School of Education

This is to verify that Kathy J. Grover has presented her Doctor of Education Capstone Dissertation to the Doctor of Education Degree Capstone Dissertation Committee


Capstone Project Title:

Student Assessment: An Exploratory Mixed Methods Study of Teachers' Perceptions and Resulting Practices

Date of Capstone Dissertation Completion: April 15, 2009

Grade (Pass/Fail): Pass

  
\_\_\_\_\_  
Dr. Terry Reid, Dissertation Chair      June 23, 2009  
Date

  
\_\_\_\_\_  
Dr. Sherry DeVore, Committee Member      June 23, 2009  
Date

  
\_\_\_\_\_  
Dr. Dennis Cooper, Committee Member      June 23, 2009  
Date

VITA

Kathy J. Grover currently serves as Assistant Superintendent of Curriculum and Instruction for the Clever R-V School District, in Clever, Missouri. Teaching experiences have included grades 7 - 12 mathematics and college level mathematics and education courses. Areas of professional interest include educational leadership, curriculum, instruction, and assessment.

Academic studies have resulted in an Education Specialist Degree from Lindenwood University, a Master of Education Degree in secondary mathematics from Missouri State University, and a Bachelor of Science in secondary education with emphasis on mathematics from Missouri State University.