

THE PERCEPTION OF ENGLISH LANGUAGE ARTS TEACHERS ABOUT
INSTRUCTIONAL CHANGES FOLLOWING THE IMPLEMENTATION OF THE TEXAS
ASSESSMENT OF KNOWLEDGE AND SKILLS TEST

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Accountability in education has been expanding for the past twenty years. As standards for curricular areas continued to develop, educational shareholders desired a way to measure student achievement contextualized by the established standards. Since 1964, policies expanded federal involvement with education, and with the No Child Left Behind Act in 2001, high-stakes testing became a significant part of public education. In Texas, testing transitioned in 2003 to the Texas Assessment of Knowledge and Skill (TAKS) test, an assessment that determines grade advancement for students, ratings for school districts, and additional compensation for some teachers. Along with the increasing expectations for student achievement, the need for effective instruction also increases. This dissertation studies how English language arts (ELA) teachers in four North Texas suburban high schools perceive instructional change following the implementation of TAKS. One hundred twenty-one teachers ($n=121$) were surveyed using an instrument broken into seven categories: student-centered instruction, student interest, instructional communication, time, classroom environment, teacher knowledge, and assessment. Participants were separated into two groups, teachers with one to six years of experience with a district or seven or more years with a district. Using a rating scale for each statement on the survey instrument, participants indicated the direction and magnitude of change or indicated no change occurred. When comparing an overall

average frequency percentage for each possible rating for each category, the two highest percentages for both surveyed groups indicated no instructional change since the implementation of TAKS. However, when considering specific statements about professional growth and instructor knowledge, both groups were likely to rate a change as positive. Whereas, if the statement suggested instructional areas constricted by time, participants for both groups were likely to rate a change as negative. Additionally, an ANOVA indicated no significant difference between either of the participating groups.

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TABLE OF CONTENTS

LIST OF TABLES.....	iv
CHAPTER 1: INTRODUCTION	1
Context of the Problem.....	10
Statement of the Problem.....	12
Theoretical Base.....	15
Research Methods.....	19
Research Questions	20
Definition of terms.....	21
Summary.....	23
CHAPTER 2: REVIEW OF THE LITERATURE	26
Higher Standards and Accountability.....	26
Research on the Expansive use of High-Stakes Testing and Its Impact on Students.....	34
Research on Effective Instruction and Teacher Performance.....	39
Teacher Perception of Instructional Changes.....	47
Summary.....	55
CHAPTER 3: METHODOLOGY	57
Participants.....	58
Sample and Sampling Procedures.....	58
Research Design.....	61
Instrumentation.....	62
Validity.....	63
Exploratory Factor Analysis.....	65
Reliability.....	69
Variables.....	70
Data Analysis.....	70
CHAPTER 4: RESULTS	72
Comparative Data Based on Experience.....	74
Results of Participant Perception about Student-Centered Instruction.....	75
Results of Participant Perception about Student Interest.....	80
Results of Participant Perception about Instructional Communication.....	85
Results of Participant Perception about Time.....	88
Results of Participant Perception about Classroom Environment.....	89
Results of Participant Perception about Assessment.....	95
Results of Participant Perception about Teacher Knowledge.....	98
Comparison between Districts.....	101
CHAPTER 5: DISCUSSION.....	104
APPENDICES.....	122
REFERENCES.....	136

LIST OF TABLES

Table 1: Timeline of Federal Involvement in Public Education.....	28
Table 2: Identifying Schools Not Making AYP and School Improvement:	
Percentage Reporting by School Improvement Status, Fresno.....	31
Table 3: Instructional Strategies that Affect Student Achievement.....	41
Table 4: Decreased Instructional Practices.....	50
Table 5: Teaching Untested Topics:	
Percentage Reported by School Improvement Status.....	51
Table 6: Demographics of Participating Schools.....	59
Table 7: Correlation Matrix for Survey Items.....	67
Table 8: Pattern Structure Rotated Factor Matrix.....	68
Table 9: ANOVA Summary Comparing Experience.....	74
Table 10: Clearer and Understandable Learning Objectives.....	75
Table 11: Time Spent Considering Student Needs.....	76
Table 12: Lesson for Student Exploration.....	77
Table 13: Student Control.....	78
Table 14: Student Pace with the Curriculum.....	79
Table 15: Opportunity for Student Reflection.....	79
Table 16: Considering Student Interest.....	81
Table 17: Decisions based on Student Needs.....	81
Table 18: Student Enjoyment of the Curriculum.....	82
Table 19: Student Attitude.....	83
Table 20: Improved Quality of Assessments.....	84

Table 21: Autonomy with Assessments.....	85
Table 22: Importance of Classroom Communication.....	86
Table 23: Changing Methods of Classroom Communication.....	86
Table 24: Communication of Learning Objectives.....	87
Table 25: Time for Effective Communication.....	88
Table 26: Independent Exploration of Concepts.....	89
Table 27: Time Communicating Important Concepts.....	90
Table 28: Developing a Classroom Dialog.....	91
Table 29: Personalizing Communication.....	92
Table 30: Comfortable Classroom Environment.....	92
Table 31: Increased Use of Performance-based Assessments.....	93
Table 32: Increased Use of Metacognitive Assessments.....	94
Table 33: Student Use of Assessment Feedback.....	95
Table 34: Awareness of Assessment Needs.....	96
Table 35: Assessments Producing Higher-level Thinking.....	97
Table 36: Construction of Classroom Assessments.....	98
Table 37: Content Knowledge.....	99
Table 38: Pedagogical Knowledge.....	100
Table 39: Professional Development.....	101
Table 40: ANOVA Summary Comparing Districts.....	102
Table 41: ANOVA Summary Comparing Districts 1, 3 &4 with District 2.....	102
Table 42: Total Average Percentage for Each Value.....	107

CHAPTER 1

INTRODUCTION

The purpose of this investigation is to study the perception of 9th, 10th, and 11th grade English language arts (ELA) teachers about their instructional changes following the implementation of the Texas Assessment of Knowledge and Skills (TAKS) test. The TAKS constitutes the most recent high-stakes assessment of public school children in Texas. To determine the effectiveness of education in producing achieving students, methods of accountability have emerged along side development of curricular standards. Testing has become a frequently used measurement for accountability, and English, along with mathematics, has been a consistently tested content area. During the past two decades, national standards were adopted in curricular areas such as English, mathematics, science, and social studies, along with an emerging system of accountability for both students and teachers (Jennings, 2003). With the reauthorization of recent federal legislation, by 2007 all states were to develop and implement a system of measuring student achievement in English Language Arts and mathematics, with efforts to expand similar measurements into the content areas of science and social studies. Such measurements have developed into high-stakes tests that not only determine the academic advancement of the student, but are also used to determine the effectiveness of the teacher and to rate school districts (Darling-Hammond, 2004; McNeil, 2000; Berliner, 2006).

Dewey (1916) posited, “How one person’s abilities compare in quantity with those of another is none of the teacher’s business. It is irrelevant to his work” (p. 24).

Categorizing students based on a defined measurable standard can present complications for education. Undoubtedly, students bring their previous experiences into public classrooms, and with present numerous and efficient methods of information gathering and sharing, experiences that were once isolated from a child's local environment become easily accessible by using the appropriate means for collecting information. With the use of today's ever-advancing technology, students now have greater opportunity to engage in new, enriching experiences (Briggs-Cummings, 2001). Although students presently live in a vastly changing age of information, classrooms remain a reflection of the defined social classes found in every American city and neighborhood (Berliner, 2006). Despite the legislative efforts to desegregate education racially and financially, inequities remain an obstacle for administrators, teachers, and students. Resource allocation has not resolved the achievement gaps that exist between race, gender, and class. As Berliner suggests, "Although the power of schools and educators to influence individual students is never to be underestimated, the out-of-school factors associated with poverty play both a powerful and limiting role in what can actually be achieved" (p. 950). When schools, classrooms, or teachers produce unsuccessful results defined by low test scores or high dropout rates, reform becomes a traditional remedy. Higher standards and accountability are subsequent components found with many proposed policies of educational reform. As Sonia Nieto and Patty Bode write in *Affirming Diversity* (2008),

A concern for equity is a common reason cited for "high stakes" testing, that is, for linking test scores to the success of schools, teachers, and students. Certainly, equity is a significant concern because, as we have seen, schools for poor children of diverse backgrounds are often inferior to others; however, there is little evidence to support the contention that standardized tests lead to greater achievement. (p. 124)

Personal experiences of students outside of their schools are not being addressed or, in many instances, even considered within their classroom curricula. This lack of attention results in disconnectedness that has not previously existed in the modern classroom (Williams, 2002). Additionally, mandated standards that rarely challenge all students are replacing the teachers' professional and autonomous responsibility of developing their own classroom standards (Costigan & Crocco, 2004; McNeil, 2000). Students are products of the constructs of the classroom including instruction. If instruction is minimized to cover only tested material, then students will minimize what they learn to what is to be tested. This minimization effect can be observed in David Berliner and Audrey Amrein's (2002) eighteen-state investigation of the relationship between state-required test scores and other "commonly used tests that overlap the same domain as state tests: the ACT, SAT, NAEP and AP tests" (p. 1). Results of this investigation indicate that in states that use high-stakes testing for graduation, no gain or negative long-term performance was reported for the other four overlapping measurements of student learning. The lack of transferability from one testing environment to another raises concerns about the single emphasis placed on one particular test. As the emphasis of high-stakes assessment continues to solidify, disagreement among groups will not only exist about the most effective instructional methods that lead to student achievement, but also about the content of what needs to be included in the curriculum.

Educational systems have depended on instruction to prepare students, a practice that remains true in today's high-stakes classrooms. Teachers whose instructional methods produce higher achieving students are highly desired in public education. With

variables such as race, gender, and poverty affecting student achievement, much research in education has focused on characteristics of teaching that consistently result in gains with student achievement. From the review of the literature, this study categorized teaching into four general areas. Effective communication, student-centered instruction, timely assessments, and knowledge of the instructor are consistent components of effective instruction. By surveying 9th-11th grade ELA teachers, this study revealed any negative or positive instructional changes adopted by the participants as result of the implementation of TAKS.

High-stakes accountability systems emerged with the establishment of national curricular standards in most content areas found in public education. As a response to the widespread public perception that something is seriously remiss in our educational system, in 1981, Secretary of Education T. H. Bell created the National Commission on Excellence in Education. In 1983, *A Nation at Risk*, authored by the national commission, reported that public education in America was doing a poor job meeting educational expectations in many areas of the curriculum. As suggested in the national report, secondary school curricula were largely ineffective because of the lack of direction. From 1964 to 1997, a 30% increase of students transitioned from specialized vocational or preparatory programs to a generalized, diluted curriculum (*A Nation at Risk*, 1983). The report continued to suggest that public education was not sufficiently meeting the expectations with the content, pupil expectations, instructional time, and quality of teaching. Concerns emerged among educational stakeholders, especially policymakers and business leaders. Following a 1989 educational summit convened by President George H.W. Bush, a shift from state to federal control of educational standards

became evident, supplemented by legislation that required accountability for public education (Conley, 2003; Jennings, 2003). The result was a set of national standards for all content areas, expanded graduation requirements, and, more recently, a stringent system of institutional checks and consequences, outlined by the 2001 No Child Left Behind legislation (Abernathy, 2007; Conley, 2003; Costigan & Crocco, 2004; Nieto, 2008, Berliner, 2006).

Present stakes of accountability in public education exceed all previous levels of rigor. States are required to develop learning objectives and align assessments that measure progress in mathematics and reading at Grades 3-8; however, many states continue to assess student achievement through 11th grade (Johnson & Johnson, 2002). By 2007, mandated tests in science accompanied math and reading. In Texas, the Texas Education Agency (TEA) reports,

As mandated by the 76th Texas Legislature in 1999, the TAKS will be administered beginning in the 2002-2003 school year. The TAKS measures the statewide curriculum in reading at Grades 3-9; in writing at Grades 4 and 7; in English Language Arts at Grades 10 and 11; in mathematics at Grades 3-11; in science at Grades 5,10, and 11; and social studies at Grades 8, 10, and 11. The Spanish TAKS is administered at Grades 3 through 6. Satisfactory performance on the TAKS at Grade 11 is prerequisite to a high school diploma. (retrieved at <http://www.tea.state.tx.us/assessment.html> on March 10, 2008)

Although the No Child Left Behind Act, in order for school districts to receive federal funding, requires the employment of only highly qualified teachers by the end of the 2006-2007 school year, specific types of instructional methodology are excluded from the mandates. Local education agencies can determine which types of instructional strategies are the most effective approaches, resulting in a transition in the locus of instructional decision-making. As less instructional autonomy is possessed by the classroom teacher, many effective instructional strategies commonly used by teachers may be compromised

or altogether eliminated. Teachers are central to the issue because they remain the most important agent in producing student achievement (Brophy & Good, 1983). According to research by Robert Marzano, Debra Pickering, and Jane Pollock (2001), there is a direct relationship between student success and teacher effectiveness (p. 3). However, student achievement may be limited if teachers lose the opportunity to make instructional decisions.

Because of its breadth, parameters of effective instruction are difficult to define; however, it embodies categorical practices that, when implemented in the classroom, promote student achievement (Imig & Imig, 2006; Burden & Byrd, 2007). When used effectively, communication becomes an essential element of effective instruction clearly conveying learning goals, personal expectations, and contextual information that lead to student achievement. Effective communication establishes the classroom environment as summarized by Paul Burden and David Byrd (2007) in their *Methods of Effective Teaching*,

The classroom environment is more than just the physical space of a classroom. It encompasses the interactions between the teacher and students, as well as the expectations for learning and achievement and the expectations and norms for learning and behavior. Positive classroom environments are associated with a range of important outcomes for students related to motivation, achievement, and safety. (p. 10)

Student-centeredness, another category of effective instruction, bridges students to the content while developing efficacy. The classroom becomes a desirable place that allows students to explore the content from their personal connections, resulting in positive effects on student achievement (Van Secker & Lissitz, 1999). Content-knowledge, an essential element when defining an effective teacher, requires that instructors demonstrate mastery in content areas by successfully completing specific certification

exams, and by continuing to develop their content knowledge through professional development (Burden & Byrd, 2007; Imig & Imig, 2006; Allen, 2003). The command of content leads to contextual relationship building by competent teachers. Assessment and feedback, when delivered in a timely, clear, and constructive manner, also support gains in student achievement. Phyllis Jones, Judy Carr, and Rosemarie Ataya report (2007), “Implementation of high-quality assessments in classrooms and schools involves creating a balance of rich assessment information about the strengths and needs of students, the curriculum, and the school through a continuous process of vision, exploration, inquiry, and dialogue” (p. 1). Quality assessments provide students with invaluable information about their own personal strengths and weaknesses regarding the content, performance, or product assessed. The more students are involved with the development of assessments, the deeper and more heightened is their understanding of the desired outcome (Stiggins, 2001).

The aforementioned four categories assist in framing an understanding of effective instruction – instruction anchored in pedagogical abilities that result in student achievement. As student achievement is the measure of both the standards movement and effective instruction, there is an opportunity for one to compliment the other. The demands of high-stakes testing places pressure on teachers to foster performance from students at a higher level and with greater regularity than ever before. Through his policy analysis of the No Child Left Behind Act, David Conley (2003) explains that educational control has shifted to the federal government, leaving educators concerned about their students and unclear about their changing responsibilities. He suggests, “Teachers have great difficulty perceiving how they can ever achieve the goals states profess for

standards-based systems of education, assessment, and accountability. They express concern that a generation of students will be lost to the new standards” (p. 164). The agencies requiring increased accountability refer to effective teaching as paramount in improving student test scores. Test scores become the measurement of effective teaching (Darling-Hammond, 2004; Imig & Imig, 2006; Kohn, 2004; Nieto & Bode, 2008; Berliner, 2006). Consequently, Imig and Imig (2006) have concluded that, “In large measure, because of the uncertainty of the research evidence available, the policy community has come to embrace a single criterion for determining who is or is not an effective teacher – the ability of the teacher to realize and maximize student achievement gains on various assessments of student achievement” (p. 172). Additionally, proponents of effective teaching practices suggest that such practices produce a richer, elevated student performance (Abernathy, 2007). Arthur Costigan and Margaret Smith Crocco in *Learning to Teach in an Age of Accountability* (2004) imply that some teachers perceive the new accountability system as a sign of structure. They suggest, “In certain cases, teachers believe these new requirements bring welcome structure to a decentralized national school system” (p. 29). The inconsistency between the two groups results from the ambiguous definition of how effective instruction should be measured, thus, creating a paradox about the importance of high-stakes testing. Mandating agencies use the test as a curricular agent that drives the scope and sequence of a variety of different subjects in many school districts, whereas many educators use the test for instructional direction, considering first effective teaching practices that promote learning, eventually leading to better test performance.

According to the proponents of high-stakes testing, student achievement on state assessments equals academic success. However, although state assessments only consider a limited portion of curricular standards for each subject, student success with the content remains the purpose of the required tests. As curricular expectations change for state assessments, likewise classroom instruction must respond to new student achievement expectations. In a California study about the impact of high-stakes testing on the teacher agency, Kimberly Williams (2002) reports that California legislation, enacted in 1999, led to a high-stakes accountability system with the intent to “improve student achievement by affecting change within the core technologies of schooling – issues of curriculum, assessment, and instruction – which are most central to the teacher’s role in education” (p. 1). School administrators often quickly correlate an increase in student test scores with effective instruction by knowledgeable teachers. Conversely, this leads many public school officials to relate a decline in student test scores with inadequate instruction by ill-equipped teachers. Regardless of the direction of the change in scores, consideration should also be given to the multiple variables beyond instruction that could contribute to both the increase and decline in student scores. As reported by Conley (2003) misalignment between standards and tests, inefficient testing methods, and the quality of the test being administered often receive little consideration as contributors to student success or failure. Opponents of high-stakes testing are also quick to express concerns about the lack of consideration testing gives to student development. Cultural differences, socioeconomic challenges, and limited English acquisition all prevent students from showing achievement gains determined by mandated tests (Darling-Hammond, 2004; Berliner, 2006; Nieto & Bode, 2008). Raising standards of

accountability is not a comprehensive method to determine student achievement and failure. As David Berliner (2006) suggests, “So all education efforts that focus on classrooms and schools, as does NCLB, could be reversed by family, could be negated by neighborhoods, and might well be subverted or minimized by what happens to children outside of school” (p. 951). There are many variables that potentially impact student achievement well beyond the classroom.

Context of the Problem

In Texas, high-stakes testing has quickly become a permanent part of the educational landscape. Yearly, teachers struggle to prepare their students for the Texas Assessment of Knowledge and Skills exam (TAKS), the high-stakes measurement used by the Texas Education Agency (TEA) to determine the progress of each independent school district. The TEA uses the data to report adequate yearly progress (AYP) to the United States Department of Education. Additionally, the data are used within an accountability rating system, which categorizes school districts as exemplary, recognized, academically acceptable, or academically unacceptable (Texas Education Agency). As the test is central to the curriculum, teachers focus on preparing students to be successful on the test. The curriculum narrows in order to focus only on the potentially tested material (McNeil, 2000). The narrowing of the curriculum reduces instruction to a rudimentary process. Additionally, as Linda McNeil researched, testing not only narrows the curriculum, but also potentially produces classrooms that become adversarial to learning.

The continuous emphasis of high-stakes became a concern for me after relocating to Texas in 1999. After teaching in Oklahoma for five years, I moved to a high school

with approximately 2,300 students in a suburban Dallas school district. As I began my teaching career in Texas, the district's emphasis on, at that time, the Texas Assessment of Academic Skills exam (TAAS) was immediately apparent. Similar to TAKS, the TAAS measurement was created as a method by which the productivity of independent school districts in Texas could be evaluated, a method grounded in the belief of accountability. Subsequently, as with TAKS, TAAS results were used by the TEA to categorize schools. However, an important distinction between TAAS and TAKS is the level of academic advancement attributed to its results. Although students must achieve a specific score on TAKS to be able to advance to the next grade level or to graduate, TAAS scores were not afforded that level of significance. Thus, TAAS skills were viewed as supplemental to the curriculum and became an integral part of the traditional classroom instructional practices.

Even with TAAS as the instrument of measurement, I, as a teacher, was concerned about the emphasis the school and district placed on a single assessment. After the transition from TAAS to TAKS in 2003, the atmosphere of the school at which I was employed also was transformed. Not only did the emphasis on standardization escalate, but the attitudes of teachers and students also began to change. After multiple conversations about the new test with various faculty members and students, and following multiple faculty and departmental meetings that singly emphasized improving test results, I became interested in investigating the perception of teachers about the possible impact TAKS has had on their classroom instruction. In conversation, teachers have suggested several opinions about changes that have resulted from the emphasis of TAKS. Many found TAKS as an inconvenience, intruding on what they had already

determined as effective instruction or, at the very least, what had worked for them. Others valued the implementation of testing as a method of holding unproductive teachers accountable for their lack of instructional preparation. Teachers and administrators had very different perceptions of TAKS. Administrators suggested TAKS was a necessary component that fit with the policies intending to improve public education, whereas, many teachers viewed TAKS as an additional element of deconstructing what was already limited teacher autonomy.

An additional concern for me has been the exodus of teachers from my school. After beginning the doctoral program at the University of North Texas in 2004, which helped to reaffirm my understanding of the purpose of education, I came to believe the relationship between high-stakes testing and classroom instruction is worthy of investigating. Additionally, I believe that instructional changes, if any, made by teachers because of the introduction of the TAKS may positively or negatively affect what is commonly reported in educational research as effective pedagogy.

Statement of the Problem

High-stakes assessments, as part of mandated educational reform, measure student achievement as a finite value. Policymakers, administrators, educators, and parents view the high-stakes as the standard that guides the curriculum. In a letter to the different state educational agencies, Education Secretary Margaret Spellings explains that “Under the NCLBA, schools are held accountable for the achievement of all students, not just average student performance. Ensuring that schools are held accountable for all students' meeting State [*sic*] standards represents the core of the bipartisan Act's goal of ensuring that no child is left behind” (M. Spellings, personal communication, July 24,

2002). Her statement is clear about expectations surrounding NCLBA; however, uncertainty remains regarding the best approach that districts should employ in order to confront this task.

Due to the comparison among district, state, and regional student scores, many school officials search for a formula that produces high-achieving students, as defined by the tested outcomes. As Conley (2003) reports, “These comparisons make many educators uncomfortable. Some argue that the measures being used are not reflective of the complexity of teaching and learning or of a school’s or district’s overall education program and goals” (p. 165). If adequate yearly progress (AYP) yields minimal or no gain in student achievement, the U.S. Department of Education holds states accountable. In turn, state educational agencies holds local districts accountable for the inadequacies noted. In an effort to increase test scores, districts seek to employ teachers who use teaching practices that produce gains in student achievement (Conley, 2003; Sunderman, Kim & Orfield, 2005). However, because a source other than the school or district itself evaluates student achievement, the result is potentially a narrowed curriculum and an oversimplified definition of student achievement (McNeil, 2000). State agencies use student achievement data to determine the subject matter that should be emphasized within the curriculum, essentially limiting a curriculum to the tested content (Kohn, 2004; McNeil, 2000; Williams, 2002). Concentration of instruction focuses then on the emphasized subject matter, requiring teachers to adjust instructional methods in order to cover a considerable amount of content at a very rapid rate. A primary focus of the teacher becomes what specific content needs to be taught within a given period of time. Additionally in high-stakes classrooms, teachers focus on test preparation, testing skills,

and student management skills. Because of class time devoted to test preparation in high-stakes classrooms, the time necessary for constructive learning or inquiry-based projects is significantly compromised, as, for some students, complex concepts do not receive the amount of instructional time necessary to develop conceptually (Johnson & Johnson, 2003; Cordes, 2004; McNeil, 2000). The narrowing effect of mandated assessments becomes part of the instructional decisions of teachers. As Kimberly Williams (2002) mentioned, “Testing influences teachers’ use of professional expertise to make pedagogical decisions” (p. 10). Others point to the potential marginalizing effect high-stakes testing has on students and teachers by creating an accountability system that reinforces class privilege and cultural preferences (Nieto & Bode, 2008). Results of testing become categorical, disaggregating students into subpopulations and disseminating scores into specific hierarchical ranges. Proponents fear that categorical labeling of student scores eventually result in similar labels of students as learners.

The desire for improvement in public education has produced a movement for increased standards and a system of accountability that has continued to change over the previous twenty years. Policymakers at all levels have created and enacted policies and legislation that, by design, would produce equitable resources and better schools. Additionally, legislators began to hold public education accountable by demanding higher achieving students ready to contribute to a national, growing economy. Methods of assessing student achievement have been implemented in every state in an effort to determine school districts’ adequate yearly progress. Accordingly, the enacted policies and legislation have required teachers and students to adjust. Curricular changes are necessary to meet the demands of the evolving standards, resulting in the adaptation of

classroom instruction. High-stakes accountability has led to teachers modifying their instructional methods, with the desired implications to be positive rather than negative for student achievement. This study investigates the presence of negative or positive instructional change, if any, perceived by teachers who teach a curriculum assessed by a high-stakes exam.

Theoretical Base

The purpose of education and the accountability of its agents are part of an ideological struggle among groups of educational practitioners, theorists, and philosophers, notably essentialists and progressivists. Educational theorists and researchers agree that effective instruction is vitally important to educational success. Part of the disagreement centers on determining how to quantify effective instructional outcomes. Progressivists argue for classrooms that allow students to construct and reconstruct experiences are necessary learning environments, helping to shape life-long learners. This type of curriculum becomes limitless (Dewey, 1929). Students engage in the process of learning by developing a relationship between previous experiences and new experiences; a pedagogy characterized by inquiry activities, problem-based strategies, and peer dialog (Nieto & Bode, 2008). Conversely, essentialists promote a framework of universal values that need to be a part of a traditional classroom curriculum. By evaluating past failures, a curriculum evolves to consider new instructional focus with a refreshed direction for student achievement (Bobbitt, 1918). As Chester Finn (2004) explained the essentialist perspective,

We no longer settle for promises but demand results and aren't satisfied with more programs if they don't lead to learning. Rather than gauging the education system's value by how much money goes in the door we ask whether the kids coming out have acquired the requisite skills and knowledge. (p. 1)

Both groups would endorse instruction that provides students the opportunity to experience the dynamics of the learning process and the acquisition of new knowledge; however, there is disagreement regarding how to determine whether a system is failing to provide these elements.

Essentialism has strongly encouraged a system of standardization and accountability. By striving for a fundamental curriculum that would promote international competitiveness, essentialists “often with the ear of policy makers, have long controlled the agenda for public schooling in American” (Imig & Imig, 2006. p. 168). Standardized testing is ever-present as an instrument for determining accountability based on quantified measures of student achievement throughout Grades 3-11.

Life is full of exams, judgment calls and forms. By the time most people reach the age of 20 they have already taken a driving test, filled out a credit card application, signed a lease, and submitted a W-2 form to the IRS. None of these activities is fun. All can be stressful, but they are all part of a life that we accept. In order to provide a quality education for every child in America, we must first test them to find out which children are not learning at the level or pace necessary to keep up (U. S. Department of Education, 2002).

According to the progressives, this rigorous system of accountability removes the inquisitiveness of the student by minimizing the curriculum into predetermined chunks of content (McNeil, 2000; Eisner, 2001; Johnson & Johnson, 2002). A network of testing simplifies education to a specific amount of information students must know in order to achieve. Consequently, the progressives believe this deconstruction of curriculum and instruction results in classrooms shaped into predictive environments that facilitate passive acquisition of knowledge. Students gain little from an educational climate that functions on the premise of limited inquisitiveness. John Dewey (1929) describes such

environments by writing, “The child is thrown into a passive, receptive, or absorbing attitude. The conditions are such that he is not permitted to follow the law of his nature; the result is friction and waste” (p. 251).

Conversely, essentialists such as William Bagley suggest that focus of education is student learning, and teachers are responsible for moving students, through instruction, to measurable ends (Imig & Imig, 2006). Instruction significantly influences student learning, and the essentialists hold that accountability systems prioritize content and emphasize instruction. With a well-defined system of expectations and standards, teachers have a better understanding of what to teach and how to teach it. Classrooms transform into environments with clear direction for student achievement with measurements that can be employed to determine whether students are learning the curriculum and whether teachers are effectively meeting the established standards. Proponents remain resistant to such a systemic process to learning and evaluation. They argue that essentialists are ignoring that learning in high-stakes testing environments is minimized by external educational and non-educational pressures, such as poverty or trendy classroom strategies (Kohn, 2004; Nieto & Bode, 2008). Higher standards and increased educational accountability are intended to positively affect student achievement by identifying and closing the learning gaps. As Elliot Eisner (2001) concludes, “The aim was then, as is today, to systemize and standardize so that the public will know which schools are performing well and which are not. There were to be then, and there are today, payments and penalties for performance” (p. 367). With the pressure of accountability on administrators and teachers, the search continues for a system of instruction that consistently produces the desirable level of achievement. Eisner (2001)

also adds “First, one of the consequences of our approach to reform is that the curriculum gets narrowed as school district policies make it clear that what is to be tested is what is to be taught. Tests come to define our priorities” (p. 369). As the educational focus narrows, the instructional focus will also naturally narrow.

The struggle within accountability dialogue between state agencies and local administrators continues. Accountability pressures trickle down from educational agencies to district personnel to building administrators to teachers to students, and eventually to parents, resulting in a perceived level of quality of a school’s performance, accompanied with labels that further demoralize or distinguish districts, schools, teachers, students, and parents. “The call for increased school accountability raises questions about the degree to which schools can actually influence student performance and, therefore, should be held accountable for that performance” (Jamentz, 2001, p. 14). Because of concern for potentially low student performance and the pending consequences resulting from a system of accountability, teachers believe school districts rarely trust them to make important decisions about classroom instruction (Costigan & Crocco, 2004). The current system of accountability appears to affect teachers’ instructional autonomy. High-stakes accountability leads to high-stakes instruction; instruction that considers not only the learning needs of the students, but also the emphasis of the district based on its yearly progress. With a high-stakes system of accountability and a loss of teacher autonomy as perceived by many teachers, there develops a teacher and student disconnectedness with the curriculum, eventually affecting the instructional methods employed in the classroom.

Research Methods

As the current accountability system shifts what has been instructional decision-making commonly given to teachers to district level administration, an analysis of how classroom teachers perceive their instructional changes compels this study. After participating with curriculum and assessment alignment in U.S. history and developing instructional guidelines for newly hired U.S. history teachers, the researcher's interest intensified regarding how other teachers perceived their classroom instruction following the implementation of TAKS. The researcher observed among his colleagues that teacher autonomy regarding instructional decisions was being limited for newly employed teachers and veteran teachers at the school.

To determine the perception of teachers about their instructional changes following the implementation of TAKS, this study focused on surveying 9th, 10th, and 11th grade English language arts (ELA) teachers from five suburban school districts in the Dallas metro area. The five districts chosen possess similar demographics regarding the size of secondary schools, size of ELA staffs, and resources afforded to both teachers and students. An equal number of secondary schools were chosen randomly from each of the districts, and an online survey (Appendix A) was electronically mailed to each school's ELA teachers. ELA teachers were chosen as the participating population because this curricular area, along with mathematics, has consistently been a part of the evolving system of accountability assessment. In the survey, teachers responded to a series of statements, related to four general areas of instruction. They were asked to assign a value to the degree of change they perceive in a specific instructional area. The rating system of the survey, based on a scale of 1 to 5, asked participants to assign a positive value to

any perceived positive change they have made after the implementation of the 2003 TAKS. The higher the value assigned, the more positive the participant perceived the change. Conversely, a negative scale using the same values was used by participants to rate negative change. The higher the negative value, the more negative the participant perceived the change. If participants perceive no change, a zero was assigned to that statement.

Prior to using the online survey, a pilot study was conducted to determine the reliability of the instrument. Five suburban districts with similar demographics to the five chosen to participate in the study were used in the pilot study. ELA teachers from secondary schools of the districts in the pilot study were contacted using electronic mail and asked to complete the survey. Following the collection of a minimum of seventy-five completed surveys, analysis determined the reliability of the survey instrument, and a factor analysis determined any necessary change with the content of the instrument.

Once the analysis of the survey instrument was completed and an adequate number of participants in the study responded, descriptive statistics were used to report the findings from the data.

Research Questions

This research questions that guided the current study included:

- (1) What are the perceptions of secondary English language arts teachers regarding the ways the high-stakes testing environment in Texas public schools has affected their instructional practices in terms of classroom communication?

- (2) What are the perceptions of secondary English language arts teachers regarding the ways the high-stakes testing environment in Texas public schools has affected their instructional practices in terms of student-centered instruction?
- (3) What are the perceptions of secondary English language arts teachers regarding the ways the high-stakes testing environment in Texas public schools has affected their instructional practices in terms of pedagogical and content knowledge?
- (4) What are the perceptions of secondary English language arts teachers regarding the ways the high stakes testing environment in Texas public schools has affected their instructional practices in terms of timely assessment and feedback?
- (5) Do the perceptions of secondary English language arts teachers with one to six years of teaching experience differ from the perceptions of secondary ELA teachers with seven or more years of experience regarding their classroom instructional methods in classroom communication, student-centered instruction, pedagogical and content knowledge, and timely assessment and feedback since the implementation of the Texas Assessment of Knowledge and Skills (TAKS) test in 2003?

Definition of Terms

The following terms are defined as they are referenced in the present study. These definitions are developed through the review of the literature, as presented in

Chapter 2, as well as my use or explanation of the constructs as they relate to this study.

The definitions for the purpose of this study are:

- *High-stakes assessment* is a type of mandated assessment implemented as a part of a state's system of educational accountability and used to determine a student's advancement in grade-level or graduation from public education. In this study, the Texas Assessment of Knowledge and Skills (TAKS) test will be the high-stakes test on which the research focuses.
- *Effective instruction* is a type of instruction that employs: (a) student-centered strategies, (b) mastery of both pedagogical and content knowledge of the instructor, (c) clear verbal and nonverbal communication that is inviting to the learner, and (d) timely, substantive assessment and feedback to the learner.
- *Adequate yearly progress (AYP)* is the standard of measurement used by the U.S. Department of Education to evaluate the progress of public school districts regarding the required provisions outlined in the 2001 No Child Left Behind Act. For this study, AYP will be used as a term of accountability that has been applied to the five participating Texas school districts.
- *Instructional methods* are a variety of strategies used by classroom teachers that purposefully direct student learning. This study will report teacher perception of changes in their instructional methods.

- *Student-centered instruction* focuses on the student. Decision-making, organization, and content are largely determined by the needs and perceptions of the student. In many respects, the goal of this type of teaching is the development of the student's cognitive abilities.
- *Classroom communication* includes both verbal and nonverbal methods used by teachers as a part of their classroom instruction. For this study, classroom communication is a category of effective instruction included on the teacher perception survey.
- *Instructional assessment/feedback* include formative and summative information that diagnostically serves as a directional measurement for classroom instruction. For this study, assessment/feedback is a category of effective instruction included on the teacher perception survey.
- *Content knowledge of the instructor* is the level of mastery a classroom teacher possesses about the specific content area in which he/she instructs.
- *Pedagogical knowledge of the instructor* is the level of mastery a classroom teacher possesses about the different aspects of teaching.

Summary

The researcher sought to determine the perception of secondary ELA teachers about any changes in their instructional practice following the implementation of TAKS

in 2003. This research reports the perceptions of 9th, 10th, and 11th ELA teachers about the impact the TAKS has had on specific areas of their personal classroom instruction.

Presentation of the data analysis is organized according to the four primary categories of effective instruction, and general themes, as perceived by teachers, regarding the instructional influence of high-stakes testing are discussed. The conclusions of this study contribute to the body of knowledge central to instructional methodology and curricular change and implementation. Additionally, the study results provide information about teacher perception for administrators who commonly use only one source of data to make site-based decisions about instruction and curriculum. This is an important problem, as effective instruction significantly influences student achievement. If testing constraints placed on teachers are perceived to impact effective instruction negatively, student learning may be compromised. The researcher contends that this study will help teachers, administrators, and other public interest groups better understand teacher perceptions about instructional change as a result of high-stakes tests such as TAKS. With this information, educational groups can cooperatively emphasize effective instructional techniques by considering the perceived influence testing has on instructional decisions made by teachers.

A critical review of the literature that supports the framework for this study is found in Chapter 2. Research areas included in this section are effective instruction, higher standards and the emergence of rigorous accountability systems, the expansion of high-stakes testing, the effects high-stakes testing has on particular student groups, and the relationship between high-stakes testing and classroom instruction, including its impact on teachers. A comprehensive review of the aforementioned research provided

information about topics specific to this study. Chapter 3 explains the specific research methodology used for this study, elaborating the survey research, data collection procedures, and data analysis procedures. Chapter 4 provides an analysis of the data collected from the survey instrument. Chapter 5 summarizes the ramification of the data from Chapter 4 and offers insight to future related research.

CHAPTER 2

LITERATURE REVIEW

Chapter 2 of this proposal provides the reader with a critical review of the literature that framed this study. An examination of the standards movement in education provides an understanding for the present accountability system and the increased use of high-stakes assessments. The expansive implementation of high-stakes testing is reviewed by reporting how several states have historically used high-stakes assessments. Also reviewed is the literature regarding the effect high-stakes testing has on minority students and low socio-economic status (SES) students. A review of research on effective instructional practices is included. Finally, the chapter concludes with a review of research on teachers' perceptions about instructional changes resulting from high-stakes testing.

Higher Standards and Accountability

Accountability and standards are areas that have become increasingly entrenched in public education. Since its beginning, public education has always followed a set of standards, goals, and expectations, but more recently, a standards-based movement has sought to specify the content of the curriculum taught in classrooms (Cordes, 2004). Local, state, and national organizations have struggled with creating, refining, and implementing a specific set of standards that are important in the classroom. A set of content standards hopes to provide direction for the curriculum and instruction, to assist administrators, teachers, parents, and students to develop a more distinct vision of texts, lessons, and methods used with classroom instruction (Alexander, 2003).

A consistent method for assessing student achievement has been a problem in education. Geographical, social, and cultural differences have presented obstacles for the process of standardization, particularly assessment of the standards. Local boards, administrators, and educators have often prioritized educational standards differently from state or federal education officials (Conley, 2003). Local priorities have differed within the same state, and most certainly when compared with other national localities. Historically, educational equity has presented a challenge for a growing multicultural population, and continuous legislation has attempted to remedy the problem. As many school districts failed to provide the equity necessary in school facilities, a national philosophy of educational reform began to replace the local control of education (Williams, 2002).

Following the success of *Sputnik*, a Soviet satellite launched into orbit in 1957, a concern emerged surrounding American education. In an effort to compete, Congress passed the National Defense Education Act (NDEA) of 1958, which primarily stimulated mathematics and science education. Other areas benefiting from NDEA were technical education, secondary languages, and geography. In 1965, President Lyndon Johnson signed the Elementary and Secondary Education Act (ESEA) (Conley, 2003), opening the door for more extensive federal involvement with public education. At that time, the ESEA was the most significant federal legislation that attempted to address equity in American classrooms. Since 1958, the role of the federal government has increasingly grown, challenging the former sanctity of local and state sovereignty, in an effort to confront the problems of students living in poverty. The growing federal role initiated by ESEA pushed for a national set of educational standards in many of the core areas of the

curriculum; however, national standards historically only provided guidance for states to develop their own specific standards. Table 1 illustrates the increasing role of the federal government with education.

Table 1

Timeline of Federal Involvement in Public Education

Year	Federal Involvement	Purpose
1958	National Defense Education Act	A congressional response to the Soviet's Sputnik, legislation was passed to advance science and mathematics education.
1965	Elementary and Secondary Education Act	Legislation created during President Lyndon Johnson's administration, the ESEA was intended to begin the process of addressing the educational needs of students in poverty.
1983	A Nation at Risk was published	A national committee on education, appointed by President Ronald Reagan, determined that American schools were not adequately addressing student needs.
1989	National Education Summit	As a part of President George H.W. Bush's initiative with educational reform, the summit established five national education goals to be achieved by the year 2000.
1996	Second education summit	During President Bill Clinton's administration, this summit expanded the national standards established in the previous summit, particularly focusing on poor urban schools.
2001	No Child Left Behind Act	As the most significant reform to ESEA, NCLB became part of President George W. Bush's education plan for students who were not adequately served by public education.

Source: "Who Governs Our Schools?" by David T. Conley, 2003, Teachers College Press, New York: NY.

As the federal role continued to increase, additional federal education reform efforts reemphasized the need for higher standards and more accountability (Conley, 2003).

With the National Education Summit in 1989, and more recently the No Child Left

Behind Act in 2001, it is clear that the federal role in public education has instituted a determined movement towards standard-based education. As suggested in the introduction of the Goals 2000: Educate America Act (1994):

By initiating, supporting, and sustaining coordinated school reform planning and implementation, Goals 2000 focuses improvement efforts on high expectations and achievement results for all students. This results-focused comprehensive effort is known as standards-based education reform. Standards-based reform drives institutional changes toward improved teaching and learning and high student performance by connecting otherwise fragmented systems. (p. 4)

Most recently, the No Child Left Behind Act (NCLB) (2001) implements a structured accountability system and a consequential step program for poor-performing school districts. This legislation requires all states to develop and implement an assessment plan that will assess student mastery of the required standards (Wilson, 2004). As outlined in section 1111 of the No Child Left Behind Act, “The State shall have such academic standards for all public elementary school and secondary school children, including children served under this part, in subjects determined by the State, but including at least mathematics, reading or language arts, and (beginning in the 2005–2006 school year) science, which shall include the same knowledge, skills, and levels of achievement expected of all children” (p. 21). By 2004, 47 states used a state assessment tool to measure student performance in English Language Arts (ELA) and mathematics (Cordes, 2004). Several states use assessments for all core curricula, which include ELA, math, science, and social studies. High achievement standards increase the level of responsibility on teachers to ensure that their students can successfully master the content

specified in the assessments, regardless of lack of resources or language barriers (Johnson & Johnson, 2002). Teachers are required to focus their curriculum and instruction on the primary content assessed by the state test, and as an additional responsibility, many districts require teachers to disaggregate test data to determine the students who might need individualized assistance in an effort to be successful on the test (Costigan & Crocco, 2004; Kohn, 2000).

Educators have adapted curriculum and instruction to adjust to the growing importance of standardization and accountability. Content standards are evident and state legislatures, local school boards, and school administrators voice the increased expectations of student achievement to teachers. The emphasis on higher scores from state mandated standardized tests has created the need for accountability dialogs among state agencies, community leaders, and school administrators (Jamentz, 2001). No individual or school wants to carry the label of poor-performing, and in an effort to avoid this type of categorization, principals and teachers, as change agents, must often modify or completely change the climate and instructional culture of their schools (Busch, 2003; Johnson, 2002). In a study of 29 schools from a large suburban school district in Texas, Steven Busch (2003) compared the ratings received by schools using the TAAS test and the outcomes of the schools using the Organizational Health Inventory. The study concluded by suggesting a school's educational climate rather than a more rigorous accountability system is a more effective target for school reform (Busch, 2003). The increased emphasis on testing and higher expectations have created a high-stakes atmosphere in public classrooms, requiring teachers and students to adapt continuously in order to meet the new standards and expectations. Additionally a field study conducted

by Gail Sunderman, James Kim, and Gary Orfield (2005) collected data about school perceptions regarding changes and adaptations resulting from the implementation of NCLB. Part of their research concentrated on teacher perceptions of the rating system used by California. As seen in Table 2, regardless of the current label carried by the school, teachers believed that identifying schools that have not made AYP does not lead to school improvement.

Table 2

*Identifying Schools Not Making AYP and School Improvement:
Percentage Reporting by School Improvement Status, Fresno*

To what extent do you disagree or agree with the following statement? Identifying schools that have not made AYP will lead to school improvement.							
School Improvement Status	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total Agree	Total Disagree
Fresno Need Improvement	3.3	16.5	30.3	28.0	21.9	19.8	49.9
Fresno Adequate Improvement	3.2	14.4	40.3	26.6	15.5	17.6	42.1

Source: "NCLB Meets School Realities: Lessons From the Field" by G. Sunderman, J. Kim, and G. Orfield, 2005, Gorwin Press, Thousand Oaks, CA, p. 87.

Although districts, administrators, and teachers do not want their school to be identified as low performing, the categorization of low performing does not necessarily serve as a motivating factor for improvement.

The ideological debate about increased accountability of public education is considerably polarized, leading to similar differences when discussing the impact of high-stakes assessment on the quality of instruction in the classroom. Proponents of standards-based education endorse the need for clear, unmistakable performance goals that each student should master prior to graduation (Wilson, 2004). As essentialists point out,

“content matters and the focus of schooling should be on student learning” (Imig & Imig, 2006, p. 168). Proponents of standardization also argue that clear standards help to clarify the direction of the curriculum, removing the inconsistent guessing for educators who adhere to the standards. According to Chester Finn, an advocate for a more rigorous accountability system and former counselor to the secretary of the U.S. Department of Education, educators are adverse to tests because they want the public to believe the educational system is succeeding. As a result, educators “shun clear, timely reliable information about how schools and students are performing, placing the image of the schools above the welfare of the students” (Finn, 1997, p. 36). With higher standards and rigorous accountability, teachers know what content to emphasize and assess in their classrooms, allowing them to adapt instructional methods that promote student success when measured by state assessments (Alexander, 2003). Higher standards and accountability require teachers to be more involved with their curriculum, leading to more invested time with lesson development and content alignment. In a survey of 257 Massachusetts teachers, Kenneth Vogler (2002), a professor of Educational Studies at the University of Tennessee at Martin, studied the influence of state mandated tests on instructional practices. He discovered that teachers increased their practice of 33 instructional strategies (Appendix B) following the implementation of the Massachusetts Comprehensive Assessment System (MCAS). Teachers attributed this change to “an interest in helping their students attain higher MCAS scores” (p. 39). A stronger system of accountability focuses instruction in order to benefit student achievement. Class time becomes more efficiently used and academically serious (Cordes, 2004). With a system of clear standards and a measurement for accountability, teachers motivate themselves

and their students to become more aware of the curriculum's content, instructional classroom time, and successful mastery of the standards (Alexander, 2003).

Conversely, opponents of high-stakes accountability and standardization suggest that the aforementioned instructional changes do not account for the varied instructional needs of the students. There are too many non-instructional factors influencing the students who are in the classrooms, and a system of standardization cannot comprehensively consider the vastness of cognitive variety (Cordes, 2004). Factors such as single-parent families, parent's educational background, type of community, and poverty rate strongly influence test scores, and consequently, are minimized or marginalized by the standardization process. David Berliner (2006), Professor of Education at Arizona State University, remarked in his study of the effect of poverty in school reform, "It seems to me that in the rush to improve student achievement through accountability systems relying on high-stakes tests, our policy makers and citizens forgot, or cannot understand, or deliberately avoid the fact, that our children live nested lives" (p. 951). Pressure to cover the content at a rapid rate requires teachers to adapt their instructional strategies, providing little opportunity for student inquiry (Costigan & Crocco, 2006; Williams, 2002). The fast pace necessary to cover the emphasized content by a specific testing date reduces instruction to focus on potentially tested content or remediation of previously taught content. As a result, in states with many tests, or where tests had a variety of consequences associated with them, teachers engaged in fewer constructivist teaching practices (Cordes, 2004). High-stakes classrooms have often produced teacher-centered, fast-paced instruction based on prescribed criteria or, in some instances, a scripted curriculum. Teacher instruction becomes preoccupied with the test,

and mandated expectations replace teacher expectations (Johnson & Johnson, 2002; Kohn, 2000; Williams, 2002).

Standards are an essential part of public education, a point with which most educators agree. However, the ability of national standards accompanied by a high-stakes system of accountability to address the educational needs that result from various social environments is debatable (Berliner, 2006; Johnson & Johnson, 2002; Nieto & Bode, 2008). The transition of federal involvement in education has progressed rapidly in the past decade, and with the accountability system established from the No Child Left Behind Act, many states and local communities are adapting their role in educational decision-making (Conley, 2003). As accountability intensifies, the culminating change would be most necessary in the classroom, beginning with the quality of instruction provided by teachers. Although for many states, high-stakes assessments, since the implementation of NCLB, are relatively new additions to what already existed as their accountability system, several states have had high-stakes assessments in place prior to 2001. Many of those assessments became the framework for the type of accountability outlined in the No Child Left Behind Act.

Research on the Expansive use of High-Stakes Testing

and Its Impact on Students

The No Child Left Behind Act mandated that all states adopt a minimum of two standardized tests by 2004, one in English Language Arts and the other in mathematics, and by 2005-2006, states should have adopted an additional measurement in science. Each test is administered at the 3rd, 7th, and 11th grades with the results to be used to determine adequate yearly progress for each state. Federal legislation left the states with

the responsibility to develop the content objectives, create the assessment, and determine the testing dates.

Some states such as California, Texas, Louisiana, and Georgia had already started the standardization process. In 1999, California passed the Public Schools Accountability Act establishing the state's initial accountability system (Williams, 2002). In 1998, Louisiana appointed a committee to review the state's education progress. From the state's School Accountability Advising Committee, a more rigorous approach to public school accountability resulted in the adoption of the Louisiana Educational Assessment Program (LEAP) (Johnson & Johnson, 2003). For Louisiana schools, a formula including student attendance, performance on the LEAP test, and performance on the Iowa Basic Skills test was used to determine the effectiveness of the school. In Texas, from 1991 to 2003, the Texas Assessment of Academic Skills (TAAS) test evaluated student performance in reading, writing and mathematics, measured teacher effectiveness based on student test scores, and rated schools and school districts using three categories – exemplary, recognized, and acceptable. After the passage of NCLB, Texas adopted a more rigorous test in 2003, transitioning from TAAS to the Texas Assessment of Knowledge and Skills (TAKS) test. This test is not only more content specific, including assessments in ELA, mathematics, science, and social studies, but the test is also used to determine the academic advancement of students. Along with the Professional Development Appraisal System (PDAS), used to evaluate teachers, district administrators can additionally use TAKS as part of the teacher appraisal system (Texas Education Agency). PDAS consists of nine professional domains, including appropriate evaluation of student assessment needs. The disaggregation of TAKS data becomes a

part of determining the assessment needs of students, and additionally, the TAKS assessment becomes the determining factor regarding whether those needs were met.

Georgia began its testing programs in 1991 with the Georgia High School Graduation Test. The GHSGT required each student to take an end of course exam in English/Language Arts, Science, Math, Writing, and Social Studies. Students were required to take the exams first in their junior year and are then allowed to retake the exam five times during the rest of their high school career until they pass. If students do not pass each test, they cannot receive a diploma (Georgia Department of Education, 2008).

As states struggled to develop assessments that would meet the criteria outlined in the NCLBA, a resistance to the testing movement began. States not only interpreted this legislation as an unfair use of federal appropriations, but many states additionally challenged the system of accountability and measurement, framed by the act, as a haphazard, inadequate attempt to produce higher achieving students. In 2005, Connecticut filed a lawsuit challenging the lack of appropriations for testing materials, arguing that the federal mandates were not being properly funded (*School District of the City of Pontiac et al. v. U.S.*, 2008). More recently, in January 2008, the 6th Circuit Court of Appeals in Cincinnati, Ohio decided, based on a lawsuit filed by the National Education Association along with eight school districts, that federal funding was insufficient for the mandates outlined in NCLB. A key argument in both the Cincinnati and Connecticut cases, focuses on the Unfunded Mandate Provision of the act (*School District of the City of Pontiac et al. v. U.S.*, 2008). As the push for high-stakes accountability continues to expand, many states continue to challenge appropriations that

accompany the mandates outlined in the act. The decision from the 6th Circuit was addressed by the Department of Education in a letter from Secretary Margaret Spellings to chief education officers in the states. Secretary Spelling wrote, “I strongly disagree with the Sixth Circuit's decision and am exploring all legal remedies to overturn the decision. NCLB is not an unfunded mandate but rather a compact between a state and the federal government that asks the state and its school districts, in exchange for receiving substantial federal dollars, to demonstrate results” (M. Spellings, personal communication, January 18, 2008). As the decision is relatively recent and limited to the states found only in the 6th Circuit, the impact it may have on the accountability found in NCLB is not yet felt nation wide. The legal battle continues between state-level educational decision-making and federal funding requirements, based on the accountability standards in NCLB.

Resistance to the expansive use of high-stakes testing was not only isolated to state-level legal challenges, but it also began to develop among educational scholars, educators, and school administrators. As Linda Darling-Hammond (2004) writes, “The Harvard Civil Rights Project, along with other advocacy groups, has warned that the law threatens to increase the growing dropout and pushout rates for students of color, ultimately reducing access to education for these students, rather than enhancing it” (p. 4). Many opponents of the expansion of high-stakes testing fear that students become casualties to the marginalization of test results, which is contradictory to the rationale of federal legislation that manifested high-stakes accountability. In *Raising Standards or Raising Barriers? Inequality and High-Stakes Testing in Public Education*, Kornhaber and Orfield (2001) refute the idea high-stakes tests can be an indicator for economic

productivity. Their research indicates blacks and Hispanics are two groups that have continuously struggled with the cultural restrictiveness of higher accountability standards. Students of poverty and race have emerged as the groups who have limited success with high-stakes testing, warranting many to advocate the cultural and economic bias of standardization. Research on high-stakes testing of specific ethnic groups has led Audrey Amrein and David Berliner (2006) to conclude, “More important for understanding high-stakes testing policy is that high school graduation exams are more likely found in states with higher percentages of African Americans and Hispanics and lower percentages of Caucasians as compared to the nation” (p. 10). The authors suggest that many students from these ethnicities find less connectedness with the tested material, making it more difficult to perform at the expected level. Considerable time relearning material and practicing test-taking strategies become part of the typical school day for many of these students. As reported by Nieto and Bode (2008), “Students now spend entire days, sometimes weeks, taking standardized tests. On top of the actual testing days, a great deal of time is spent on teaching children how to take tests, time that could be better spent in teaching, and the students’ learning, actual content” (p. 124).

In order to combat the marginalizing effect found with many high-stakes tests, effective instruction becomes an essential part in helping traditional low-performing groups make measurable gains in student achievement. However, a study by James Popham (2007) suggests that many of the tests created and implemented for accountability are “instructionally insensitive” (p. 146). The insensitive nature of many of the presently-used accountability tests prevent the tests from adequately representing “the degree to which students’ performances on that test accurately reflect the quality of

the instruction that was provided specifically to promote students' mastery of whatever is being assessed" (p. 146). Students of poverty are most affected by the insensitive nature of high-stakes assessments. Environmental variables such as cultural devaluation and limited resources present potential obstacles to instructional gains made by students in the classroom (Orfield & Kornhaber, 2001; Berliner, 2006; Nieto & Bode, 2008). Because of this type of deprivation, high scores on accountability tests cannot be attributed exclusively to effective instruction. Regardless of the circumstances in which students live, effective teachers remain the most influential component in achieving student success (Marzano et al., 2001; Burden & Byrd, 2007). The methodology and strategies used by effective teachers are paramount when determining the influence of instruction on student achievement for all students.

Research on Effective Instruction and Teacher Performance

Effective classroom instruction is an important factor when considering student performance as assessed by current accountability systems. The increase of performance expectations among cross-curricular standards has led to an emphasis among educators to determine what methods of teaching are most effective to increase student achievement.

As Burden and Byrd report (2007):

Over the years, there have been calls to improve the quality of teaching, the quality and substance of the K-12 curriculum, and the performance of students on standardized tests. School districts and teachers always feel some degree of pressure from the local school district, the state and federal governments, professional organizations, legislators, and the public in general. Occasionally, there are major education reports with information about student performance, and then there are new calls for improving teacher education and the quality of teaching. Effective teaching is expected. (p. 4)

Instruction has far-reaching effects on classroom factors other than just the strategies and practices used by the teacher. Both student and teacher morale can be linked to

instruction. Instruction includes visual human interaction in classroom exchanges and not as observable motivational factors that motivate student desire and initiative.

Effective instruction begins with a well-prepared teacher - a teacher “who embodies the dimensions of caring and competence, who brings knowledge and expertise to teaching, including both disciplinary knowledge and professional understanding; who is resilient and flexible in the face of professional demands; who is disposed to being a lifelong learner; and who maintains an ethical stance toward this work” (Costigan & Crocco, 2004, p. 12).

Our understanding of what is effective instruction has continued to evolve over the years. A single element does not make the teacher effective. As Robert Slavin (1994) indicated, “Teachers must attend to ways of adapting instruction to students’ level of knowledge, motivating students to learn, managing student behavior, grouping students for instruction, and testing and evaluating students” (p. 1). There is a cluster of fundamental instructional techniques that a teacher must employ in the classroom. As instructional components are implemented and researched, a framework of understanding regarding the effectiveness of each becomes evident. Effecting student achievement is not typically associated with one event, often seen with testing, but rather a transformation within the student.

A well-prepared teacher seeks out and utilizes instructional strategies and pedagogical methods that assist students in developing a connectedness with what is taught. By using a meta-analysis of selected instructional strategies, Robert Marzano, Debra Pickering and Jane Pollock (2001) determined that nine instruction categories

considerably affect student achievement. Table 3 shows the nine categories and their effect size with student achievement.

Table 3

Instructional Strategies that Affect Student Achievement

Category	Ave. Effect Size (ES)	Percentile Gain	No. of ESs	Standard Deviation (SD)
Identifying similarities and differences	1.61	45	31	.31
Summarizing and note taking	1.00	34	179	.50
Reinforcing effort and providing recognition	.80	29	21	.35
Homework and practice	.77	28	134	.36
Nonlinguistic representations	.75	27	246	.40
Cooperative learning	.73	27	122	.40
Setting objectives and providing feedback	.61	23	408	.28
Generating and testing hypotheses	.61	23	63	.79
Questions, cues, and advance organizers	.59	22	1,251	.26

Source: "Classroom Strategies that Work: Research-Based Strategies for Increasing Student Achievement" by R. Marzano, D. Pickering, and J. Pollock, 2001, Alexandria VA: Association for Supervision and Curriculum Development, p. 7.

As indicated by the research, effective instruction is multifaceted; however, there are consistent themes that help categorize it for classroom application. Many studies have indicated a strong relationship between a teacher's verbal ability and student achievement (Bowles & Levin, 1968; Ehrenberg & Brewer, 1995; Ferguson, & Ladd, 1996; Greenwald, Hedges, and Laine, 1996). A study by Karen Zumwalt and Elizabeth Craig (2005) regarding indicators of teacher quality concluded that for elementary students, "higher teacher verbal scores were associated with higher gains for students" (p. 177). The ability to communicate is essential when considering effective classroom instruction (Polk, 2006). Communication includes, but is not limited to, a teacher's ability to develop a rapport with his/her students, a teacher's method of lesson implementation, and

a teacher's technique of classroom management. Clear communication is fundamental in effective classroom instruction. As Jeremy Polk (2006) suggests:

Although content is a paramount component of systemic effectiveness, its delivery must be effective or else the information and its quality cannot be consumed. It is this informational conveyance through an agent, such as the teacher, that guarantees that the superb content is communicated to the students. Communication is at the heart of a quality classroom environment. (pp. 24-25)

Communication is not isolated to content. Teachers must also be able to communicate clearly desired learning and behavioral expectations (Marzano et al., 2001; Porter, 2002).

With a better understanding of academic expectations, students are willing to engage in classroom learning activities that result in gains in student achievement (Harris, 1998).

Much of a teacher's classroom structure is precipitant from clear communication about content, classroom expectations, and organization of behavioral reinforcement. Jere Brophy (1983) suggested, in an effort to create a supportive classroom climate, an effective teacher possess an ability to establish meaningful and caring relationships attributable to communications skills. As Brophy's research indicated, "To create a climate for molding their students into a cohesive and supportive learning community, teachers need to display personal attributes that will make them effective as models and socializers: a cheerful disposition, friendliness, emotional maturity, sincerity, and caring about students as individuals as well as learners" (p. 268). The breadth of verbal and nonverbal communication skills is difficult to fit into a nice, specifically defined category. Effective instruction depends on genuine relationships that are established between the teacher and student; concluding that the ability for an effective teacher to instruct effectively depends significantly on the ability to communicate.

From the literature, student-centered classrooms emerge as another theme of effective instruction. Teachers who implement instructional methods that consider specific student learning needs produce gains in student achievement (Marzano et al., 2001). Additionally, the research of Marzano, Pickering, and Pollock (2001), focusing on student-centered instruction, show the teaching of critical thinking skills, and the use of hands-on laboratories with science students have an effect size for student-centered instruction of 1.07 (p. 9). Although the research group's focus was primarily with instructional strategies rather than the holistic breadth and depth of instruction, student-centered activities were commonly found as effective within each strategy (Marzano et al., 2001). Determined as an area that considers much more than merely the academic needs of students, student-centered instruction, similar to communication, is necessary in effective classroom instruction. If students are central to instruction, student efficacy is stronger, and, as a result, students apply meaning to the curriculum, creating a realization about their potential control over content and instruction (Haskell, 2001). The learning process cannot be absent of the learner. As Ding and Sherman (2006) indicated, "Although effective teaching is fundamental to learning, over emphasis on the importance of teaching methodology in the process of learning may imply that we should ignore the dynamic learning process in which students are the significant players, not just teachers" (p. 45). Students who play an active role in the learning process learn more, and teachers who develop student-centered instructional methods can potentially produce larger gains in student academic growth (Burden & Byrd, 2007; Ding & Sherman, 2006). Effective instruction blends the needs of the learner with the learning process. "In particular, novices had difficulty during interactive teaching compared with the

proficiency of experts. Other notable features of the experts included using student responses as springboards for discussions, obtaining a good balance between content-centered and student-centered instruction, and limited use of textbooks” (Ayers, Sawyer & Dinham, 2004, p. 145). Good instruction that includes “useable, substantive, and engaging lessons in two or three different classes each day is one of the most wearying aspects of new teachers’ work” (Costigan & Crocco, 2004, p. 122). Although a challenge for many educators, student-centered instruction is an essential component of effective instruction.

Professional, instructional knowledge has a multifaceted meaning that considers both pedagogy and content, with both types of knowledge essential when framing specific categories for effective instruction. For a more comprehensive review of the essential knowledge for effective teachers, one can reference the research of Paul Burden and David Byrd. In their text *Methods for Effective Teaching: Promoting K-12 Student Understanding*, the authors note that content knowledge is not sufficient and teachers must possess professional knowledge, pedagogical knowledge, and pedagogical content knowledge (Burden & Byrd, 2007). All influence the development of effective instructional techniques. “A teacher may have less experience in teaching but she/he could be very effective in teaching. Conversely, a teacher who might have solid content knowledge might be a very ineffective teacher” (Ding, 2006). A teacher who only possesses content knowledge may not be able to address additional instructional needs of the classroom. The abilities to communicate effectively and to consider the learning needs of students are included as part of the professional knowledge of teaching. With continuous experience, all three develop in conjunction with one another. As high-stakes

tests are now in place to assess the content knowledge of the student, many researchers believe the more the teacher knows about his/her subject, the more this transfers into student knowledge about the subject (English, 2000). Research has attempted to use standardized test results of students to determine the impact of teacher content and pedagogical knowledge on increasing student scores. Imig and Imig (2006) report, “Testing became the way to satisfy the demand for greater school accountability, and it was probably inevitable that score results were now associated with particular teachers” (p. 173). Results are inconclusive about which knowledge area has the most, if any, influence on student test scores.

Hence, even with value-added modeling, treating test scores as the main predictor of teacher quality may produce an inadequate assessment of teacher performance. Moreover, focusing on test scores reveals the outcomes of teachers’ work but ignores the underlying factors that contribute to the outcomes – leaving unclear the extent to which content knowledge and pedagogical knowledge affect test results. (Torff & Sessions, 2005, p. 531)

In isolation, neither content knowledge nor pedagogical knowledge can result in effective teaching. Unified, both types of knowledge are essential components in order to achieve the type of instruction that has a significant impact on student achievement.

Substantive classroom assessments become a part of effective classroom instruction; however, in a system of high-stakes testing, many classroom assessments assume the role of practice exams prior to the actual standardized test. “Although there are many issues that need attention in schooling, we search for the silver bullet and believe that, if we get our standards straight and our rubrics right and make our tests tough enough, we will have an improved school system” (Eisner, 2001, p. 369).

Classroom assessments have begun to mimic high-stakes assessments. Quality classroom assessments should provide the opportunity for students to reflect personally on strengths

and weaknesses, helping to shape potential future performances. As the research of Richard Stiggins (2001) on student-involved classroom assessments indicates, sound, effective classroom assessments must have a clear purpose that considers clear assessment targets, proper methods, appropriate samples, and elimination of bias and distortion. A variety of assessment techniques should be in the classroom, allowing different ways for students to demonstrate their mastery of the material. Assessments become an essential part of effective instruction; however, the current system of accountability is quickly removing decisions about assessment from the classroom (Costigan & Crocco, 2004). Although classroom assessments only capture a fraction of what students are learning, standardized tests have become the assessment of student achievement for accountability organizations. This loss of instructional autonomy does not come without criticism. As Jamentz (2001) writes:

For the last two decades, educators and researchers have made many attempts to invent new assessments designed to provide a richer and more accurate picture of student performance. They envision, and in some cases have developed, assessments that measure performance in relation to absolute standards and ask students to demonstrate that they can solve complex problems like those they will face in the world outside school. Many have argued that these measures should replace, or at least be used in conjunction with, traditional testing programs. (p. 14)

Learning is broad and complex suggesting that one standardized measurement cannot adequately assess the process. Effective instruction will use a variety of quality assessments that provide students multiple ways to show what and how they have learned (Jones et al., 2007).

Effective teaching remains the most important component in student achievement. Consistent with the requirements of NCLB, highly qualified teachers are desired by districts and are essential in classrooms. Teachers who communicate clearly, who are

well equipped with content and pedagogical knowledge, who provide substantive feedback and timely assessments, and who develop student-centered classroom learning environments possess the qualities that most dramatically affect student gains in achievement. However, as the accountability system becomes more rigorous and as testing becomes more emphasized, the potential to compromise some of the aforementioned methods of effective teaching become a necessity for the sake of instructional time.

Teacher Perception of Instructional Changes

With increased accountability standards, classroom instruction is the component that will lead to gains in student achievement and higher test scores. The review of the literature for this section will report how teachers perceive the effect of high-stakes testing on instructional decision-making, teacher autonomy, and instructional methodology.

Because of high-stakes accountability, curricular decisions based on test scores are more often made at the district level, leaving little autonomy for curricular decisions to be made by classroom teachers (Williams, 2002; English, 2000, Conley, 2003). The growing lack of teacher autonomy with curricular decisions has negatively affected many new and veteran educators, frustrating their creativity and questioning their pedagogical expertise (Johnson & Johnson, 2004). In an ethnographic study of the effects high-stakes testing has had on the curriculum landscape of public schools in Texas, Massachusetts, and New York, Lisa Daniels (2002) reported that many teachers felt categorized by the systemic implementation of high-stakes testing and believed the importance of their professional opinions had been devalued. Teachers perceived themselves to be at the

mercy of the test and so made instructional decisions based on rising or falling test scores, rather on than the individual instructional needs of the students.

Testing also affects content decisions of classroom instruction. In order to cover the tested content, instructional decisions of the teachers must reference the state mandated objectives. As reported by Costigan and Crocco (2004), many educators believe high-stakes testing has minimized the higher-level content found in previous state objectives, reducing the effectiveness of the curriculum. “The dumbing down of teacher work that these new regimens often produce is undermining the very factors that induced bright new teachers to enter the field. Dealing with pressures of testing without abandoning the profession could be a task confronting many of them in coming years” (Costigan & Crocco, 2004, p. 129). As testing is more emphasized, teachers circle test-dates on their calendars as target dates for an instructional endpoint. Covering content at such a rapid rate often times results in a student’s mere exposure to specific information with little or no extended time for further exploration. This limited exposure to complex concepts has negative implications if the material is later assessed by the high-stakes measurement. Audrey Amrein and David Berliner (2002), in their previously noted study of 18 states’ use of high-stakes testing, reported that in many cases student learning remained unchanged or actually decreased in high-stakes classrooms. The effectiveness of the curriculum is minimized and many enrichment opportunities for students are limited or completely removed. Teachers believe this standardization process is creating a barrier between them and their students. As reported in Linda McNeil’s *Contradictions of School Reform*, many teachers think testing is affecting their time to develop the necessary relationships that lead to student achievement. In her analysis of the

specialized magnet programs that are part of the Houston Independent School District, McNeil (2000) reports a narrowing of the district's curriculum because of the pressures of testing. She writes, "Under the TAAS system of testing, teachers report that there are fewer and fewer venues in which they do authentic teaching, even though officially only three subjects – math, reading, and writing – are tested" (p. 242). Using a narrowed set of standards, many teachers are finding themselves limited and rushed when considering best practice strategies for instruction.

As an advantageous result of the increased emphasis on accountability, some teachers, who otherwise would neglect their professional self-reflection, are required to be more involved in site-based curricular changes, continued professional development, and methodological reflection (Vogler, 2002). Professional development and instructional training are often created within the context of raising test scores. Frequently, the acquisition and implementation of effective strategies are central to the training; however, a realistic plan of classroom use and an operational assessment of effectiveness are commonly absent. Because much of the professional emphasis is placed on disaggregating test data and implementing instructional strategies to improve test scores, teacher dialog about classroom needs is often missing (Abernathy, 2007; Costigan & Crocco, 2004, Darling-Hammond, 2004; Johnson & Johnson, 2004; Williams, 2002). Instructional changes and curricular modifications frequently become test data-driven rather than research-based. As an intended consequence of the more rigorous accountability system, many teachers indicate that they have increased the use of best practice strategies that lead to higher gains in student achievement. In his survey of Massachusetts teachers, Kenneth Vogler (2002) indicates that teachers, in an effort to

increase their use of effective strategies (Appendix B), had to decrease their use of traditional instructional and assessment strategies. However, for each traditional strategy, more than half of those surveyed reported their use of the strategy remained the same prior to and after the implementation of the MCAS. Table 4 shows a reduction in four commonly used instructional strategies.

Table 4

Decreased Instructional Practices

Instructional Practice	Mean	SE	% decrease	% large decrease	Total % decrease	% same
Multiple-choice questions	2.99	0.05	16.9	02.4	19.3	61.7
Textbook based assignments	2.97	0.03	12.9	00.4	13.3	77.0
True-false questions	2.73	0.05	23.6	05.5	29.1	65.0
Lecturing	2.65	0.04	35.5	02.3	37.8	57.0

Source: "The Impact of High-Stakes, State-Mandated Student Performance Assessment on Teachers' Instructional Practices" by K. Vogler, 2002, *Education 123(1)*, p. 45.

As high-stakes assessments continue to become a driving force with curricular and instructional decisions, teachers will continue to adapt their instructional strategies. The level of teaching experience influences the adoption and implementation of strategies. According to Vogler's study, teachers with 13-19 years of teaching experience were most likely to increase their use of instructional strategies. As intended with the revision of standards and increased expectations of student performance, teachers are responding by trying to find the most effective classroom instruction.

Although highly effective teachers will adopt new strategies as an effort to promote student achievement, the problem remains that high-stakes testing requires instructors to cover a significant amount of content within a finite amount of instructional time. Additionally, as the pressure to do well on tests increases, teachers become more

selective about their instructional approach. For example, teachers often cannot afford classroom time for lessons that promote independent, self-guided student inquiry so they deselect these items from the curriculum (Codes, 2004; Williams, 2002). In the study by Sunderman, Kim and Orfield (2005), teachers from both adequately progressing schools and low performing schools indicated that pressure to meet AYP resulted in the de-selection of specific material for instruction. Table 5 represents the teacher perceptions about the change in content specifications in order to meet AYP.

Table 5

Teaching Untested Topics: Percentage Reporting by School Improvement Status

To What extent do you agree or disagree with the following statement?

The AYP requirements have caused some teachers to de-emphasize or neglect untested topics.

School Improvement Status	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total Agree	Total Disagree
Fresno Need Imp.	46.0	28.2	16.1	4.8	4.8	74.2	9.6
Richmond Need Imp.	34.2	26.8	26.5	6.7	5.7	61.0	12.4
Fresno Adeq. Prog.	54.0	24.5	12.2	5.4	4.0	78.5	9.4
Richmond Adeq. Prog.	39.5	31.0	14.4	10.7	4.4	70.5	15.1

Source: "NCLB Meets School Realities: Lessons From the Field" by G. Sunderman, J. Kim, and G. Orfield, 2005, Gorwin Press, Thousand Oaks, CA, p. 91.

Although teachers think testing has significantly reduced the curriculum, instruction can continue to provide opportunities for higher-level thinking, but, because of time constraints, there is difficulty affording the necessary concentration on a deeper content. With this reduction, students then lose the opportunity to construct meaningful, personal

connections with the content (Cordes, 2004). Because of their personal experiences, students will always be naturally curious about the content, yet many students need instructional assistance to transition their curiosity from natural inquisitiveness to a classroom learning experience. Authentic learning environments include the instruction that assists this transfer of learning to occur; however, instructional time limits and a reduction in content can present significant challenges for teachers and students (Haskell, 2001). Because of limited instructional time and the minimization of the curriculum to include only potentially tested material, many student experiences remain unconnected with classroom concepts (Kohn, 2000).

One of the few guarantees in education is that the classroom will consist of a diverse group of learners who bring their own perspectives, interests, and needs with them. Many critics of standards-based education suggest that this is the naivety behind standardization. Learning cannot be standardized nor measured adequately at some fixed point along a student's learning journey (Kohn, 2000). However, diversification of the curriculum is as much of a possibility within a standards-driven curriculum as it would be in a completely autonomous curriculum (Nieto & Bode, 2008). Time, however, remains an adversary to instruction, as a lack of time causes the removal of labs, projects, and performances from instruction. More frequently, teachers and students must learn to adapt to the pace of instruction rather than instruction being a reflection of student needs (Cordes, 2003).

Without a doubt in high-stakes accountability systems gains in student achievement are the desired outcome. Students learn a significant amount of content, and for some students, they are able to learn the necessary amount and respond successfully

on standardized measurements, which is often the only consideration when determining student achievement (English, 2000, Imig & Imig, 2006; Popham, 2007). Careful consideration must be given before higher test scores can be equated with student achievement. As much of the literature suggests, student scores do not translate into student achievement (Amrein & Berliner, 2002; Berliner, 2006; Popham, 2007; McNeil, 2000; Darling-Hammonds, 2004; Kohn, 2004, Nieto & Bode, 2008; Costigan & Crocco, 2004; Johnson & Johnson, 2004). Student results become the data used by state education agencies, local school districts, and site-based leadership in order to determine the success of students, teachers, and instruction (Conley, 2003; Abernathy, 2007). Test scores are then used to consider multiple levels of ratings for schools, the achievement gaps among various populations of students, and sanctions that may be levied against the school or specific teacher. As teachers consider the possible sanctions/benefits that may result from low or adequate performance, many believe teachers will be unfairly rewarded or punished because of student scores (Sunderman et al., 2005). Implicit in this concern are the unconsidered variables that affect student performance other than instruction. Opponents of high-stakes testing argue that accountability rating systems are rigid and cannot account for environmental factors such as poverty or limited language acquisition; however, teachers will continue to be evaluated based on their students' test scores.

As student scores become a purposeful source of data, curricular decisions that only rely on student scores provide limited effectiveness. If data are misinterpreted, errors can not only misrepresent student achievement, but also lead to inappropriate instructional changes and improperly used resources. As reported by Linda McNeil

(2000), if student data are used inappropriately, the effectiveness of classroom curriculum and instruction becomes unproductive and potentially propels students into dropping out. Linda Darling-Hammond (2004) summarized the effects of the “Texas Miracle,” a term given to the success reported by the Houston ISD with its large population of poverty students, as:

The model for the federal No Child Left Behind Act, boosted test scores in part by keeping many students out of the testing count and making tens of thousands disappear from school altogether. The “disappeared” are mostly students of color. At Sharpstown High School in Houston, a freshman class of 1,000 dwindled to fewer than 300 students by senior year – a pattern seen in most high-minority high schools in Houston, including those rewarded for getting their test scores “up.” The miracle is that not one dropout was reported. (p. 21)

Amrien and Berliner (2002) provide additional information of the drawback of restructuring curriculum to improve test scores. For many states that implemented a rigorous accountability system through high-stakes testing, the study reported that sixty-seven percent of the states indicated a decline in American College Testing Program (ACT) scores and a fifty-six percent decline in Scholastic Aptitude Test (SAT) scores.

Additional studies have compared the relationship between high-stakes testing and student performance on the National Assessment of Educational Progress (NAEP) assessment. Many states either reported a decline in NAEP scores or were unable to show consistent improvement among assessed groups (Amrien & Berliner, 2002). Consequently, when analyzing specific NAEP data, 86% of Texas 10th graders were successful at passing the Texas state test compared to only 55% of Massachusetts 10th graders passing the Massachusetts state test; however, Massachusetts students far outpaced Texas on the National Assessment of Educational Progress assessment (McMillan, nd, 3). If state mandated standards only measure student achievement

assessed by the state-created high-stakes assessment, then there is a strong probability that minimal achievement gains will result; gains that very well may jeopardize student achievement as measured by other reliable and valid national assessments.

Summary

A national movement to increase educational standards led to expanded federal legislation requiring rigorous methods of measuring accountability, consequently leading to the common use of high-stakes tests. With the federal mandates framed within the 2001 No Child Left Behind Act, the increased use of high-stakes testing has become the standard form of assessment, requiring states to develop measurements for English Language Arts and mathematics by 2004 with an additional measurement for science by 2005-2006. As a consequence of high-stakes assessments, marginalization of students, specifically students of poverty, has frequently emerged in the research. Drop out rates in many states have risen as a product of marginalization, and in response, the Department of Education has called for a uniform method to be used by states when collecting data and reporting dropouts. Additionally found in this chapter is a review of effective instructional strategies, categorized into four areas – verbal and nonverbal communication, student-centered lessons and strategies, content and pedagogical knowledge of the instructor, and substantive, focused assessments. Effective instruction is an essential part of this study, as the review of the literature reports curricular and instructional decisions that teachers make because of high-stakes testing. Positively or negatively, teachers indicate that the emphasis of higher test scores has changed their instructional methods, and at times, has reshaped the content that becomes important in

the curriculum. As data collection of student scores is a rich source of information, misinterpretation of the data can be misleading and result in poor educational decisions.

From the research, it is evident that increased accountability measured by state mandated assessments has raised the stakes for student achievement. Curricula changes have attempted to address a testing emphasis, potentially changing instructional methods used by teachers. This study explored the perception ELA teachers have about their instructional changes resulting from an increased emphasis on high-stakes testing in Texas following the implementation of TAKS in 2003. Data compared teacher perceptions between two teacher groups in suburban North Texas – teachers with five or more years of teaching experience with teachers who have fewer than five years of teaching experience. Much information is reported about the impact of testing on student and teacher self-efficacy as well as the narrowing effect it has on curriculum; however, this study concentrated on the changes in effective instruction as perceived by teachers who have experienced a change with the high-stakes testing phenomenon.

CHAPTER 3

METHODOLOGY

The research questions that guided the current study included:

- (1) What are the perceptions of secondary English language arts (ELA) teachers regarding the ways the high stakes testing environment in Texas public schools has affected their instructional practices in terms of classroom communication?
- (2) What are the perceptions of secondary ELA teachers regarding the ways the high stakes testing environment in Texas public schools has affected their instructional practices in terms of student-centered instruction?
- (3) What are the perceptions of secondary ELA teachers regarding the ways the high stakes testing environment in Texas public schools has affected their instructional practices in terms of pedagogical and content knowledge?
- (4) What are the perceptions of secondary ELA teachers regarding the ways the high stakes testing environment in Texas public schools has affected their instructional practices in terms of timely assessment and feedback?
- (5) Do the perceptions of secondary ELA teachers with one to six years of teaching experience differ from the perceptions of secondary ELA teachers with seven or more years of experience regarding their classroom instructional methods in classroom communication, student-centered instruction, pedagogical and content knowledge, and timely assessment and feedback since

the implementation of the Texas Assessment of Knowledge and Skills (TAKS) test in 2003?

Participants

Secondary ELA teachers from four suburban school districts in the Dallas area were selected to receive the survey. Districts comparable in student population and diversity to the four districts chosen for the study were used for the pilot study. Because high-stakes testing in Texas has continuously assessed ELA content specific standards, ELA teachers constituted the desired population to complete the survey. If curricular and instructional adaptation have occurred because of the TAKS test, it is reasonable to assume that ELA teachers were affected by this change. Using the survey instrument (Appendix A), the participants responded to statements that identify changed or unchanged areas of their instructional practice since the administration of the 2003 TAKS. By using a scale rating of +5 to -5, participants were asked to rate the degree of change for the instructional area addressed in each declarative statement. If a participant decided there was no change in an instructional practice, then the participant assigned a zero to that statement. The amount of time each participant needed to complete the survey varied between 10-20 minutes. Due to the anonymous nature of the on-line survey using the SurveyMonkey program, there was no anticipated risk to participants in this study.

Sample and Sampling Procedures

Four suburban school districts from the Dallas metro area were chosen to participate in this study. Considering the purpose of the study, I identified several demographic characteristics to include in the selection of the participating districts.

Although all classified as suburban, there were some stark similarities and differences among the five districts. Important characteristics for each district in this study are presented in Table 6.

Table 6

Demographics of Participating School Districts

School District	Total Student population	Number of high schools	2006-2007 % Student Population SED	TEA Accountability Rating of High Schools
District 1	26,429	5 – 9 th through 12 th	51.2	5 – Acceptable
District 2	27,607	4 – 9 th through 12 th	10.9	3 – Acceptable
District 3	50,771	5 – 9 th through 12 th	21.4	1 – Recognized
District 4	32,865	4 – 9 th through 12 th	72.0	4 – Acceptable

Source: “Academic Excellence Indicator System Reports” Texas Education Agency, <http://www.tea.state.tx.us/perfreport/aeis/2007/index.html>

As high-stakes testing is central to this study, student population becomes a very important consideration. Size of the district can affect elements such as student/teacher ratio, resource availability, and, perhaps most importantly, funding. The size of the district’s student population determines the number of students who will be assessed by the TAKS test. If the number of tested students is greater in a given district, a reasonable assumption would be that the district has made efforts to implement curricular and instructional changes that will increase student scores. These district level changes possibly become part of the classroom teacher’s perception about effective instruction.

Another characteristic considered germane to this study was the number of high schools in each district. Of the four chosen districts, all have multiple high schools, and only two have fewer than five high schools. The number of high schools in a district is

associated with the previous factor of student population, but it is also important when considering the number of students per teacher and elements of school climate. Although districts try to maintain an equitable use of resources, many of the high schools within a given district do not exhibit an even distribution of ethnicities or students of poverty. Often, the newer the high school, the fewer minority and socioeconomically disadvantaged students enrolled. As reported in the literature review, schools populated by a large number of disadvantaged students do not do as well when measured by high-stakes tests. The pressure to increase student scores may require instructional change from teachers who teach in schools with larger populations of disadvantaged students.

The TEA Accountability Rating was another common factor considered when selecting participating districts for the research. If the rating system accurately categorizes schools that show adequate gains in student achievement as measured by TAKS, an assumption by the researcher was that districts with high schools that have a minimum ranking of “Acceptable” would be employing highly qualified faculty members who engage in effective instruction. Additionally, the researcher assumed that several of the secondary schools that existed in each district prior to the implementation of TAKS may have engaged in curricular and or instructional revisions as a result of the 2003 TAKS scores. If this change occurred, the survey was intended to identify teachers’ perceptions of changes in their instruction.

The final factor considered in the sampling was the percentage of economically disadvantaged (SED) students served by the districts. The literature reported that this particular group of students became the most significant casualties from high-stakes testing, and even though all the districts are labeled suburban, several have a considerably

larger population of economically disadvantaged students. With this information, survey data were compared to determine whether teacher perceptions are different in districts with a larger population of disadvantaged students.

Prior to the beginning of the study, a research coordinator for each district was contacted by electronic mail in an effort to gain approval for this study and for further communication with teachers. Methods of informed consent were described for each district and limitations to communication were stipulated by each district. Before communicating with the participants, correspondence with each school's principal confirmed the principals' consent to allow the study (see Appendix C). In order to maintain the confidentiality of the participants, the reporting of the data does not use any real names, whether school or individual. The initial communication about the survey instrument informed participants of the voluntary nature of their participation and of their opportunity to discontinue their participation in the study at any time with no negative consequences regarding their status in the district (see Appendix D). In an attempt to minimize the influence participants might have had on each other, participants were contacted independently through electronic mail.

Research Design

The challenge for the research design was to determine the most appropriate method of gathering data while accurately capturing the participants' perceptions of change with their instructional methods. As explained by Robert Slavin (1984), "The purpose of research design is to determine as unambiguously as possible whether or not hypotheses are true. Good research design simply rules out the greatest possible number of alternative explanations for a particular outcome" (p. 5). In an effort to achieve this

purpose, a survey was advantageous because of its inexpensiveness, ease of distribution, and effectiveness in gathering attitudinal data from the selected population. In survey research, it is important for the survey to be reliable and valid and the population receiving the survey to be a good representative population (Slavin, 1984). To determine these qualities, a pilot study of the survey was performed using a teacher population with demographic characteristics similar to the study's target population. For data collection the survey was distributed through electronic mail to the participating school districts in a cross-sectional timeframe.

Instrumentation

The survey instrument (see Appendix A) is an original instrument created by the researcher for the purpose of this study and initially consisted of 32 items. Survey items were constructed based upon a review of literature regarding effective teaching and the impact high-stakes testing has on instructional changes. Descriptive statements were constructed from a compilation of data regarding effective instruction and classroom modifications that have been experienced by the researcher. By categorizing instruction into four areas, the instrument was designed to measure teacher perception of instructional change following the implementation of the Texas Assessment of Knowledge and Skills. Teachers assigned a value to their perception of instructional changes. If the perceived change was considered a positive change, teachers assigned a value of +1 to +5. Consequently, if the change was perceived as negative, -1 to -5 was assigned. Numbers of higher value indicated an increased degree of change. If teachers decided no instructional change occurred, they chose 0 to represent no perceived change.

The survey is divided into four general categories, each containing descriptive statements about specific areas of instruction. Items 1 through 10 are about perceptions of change in different forms of classroom communication. Items 11 through 20 are concerned with student-centered instruction. Items 21, 22, and 23 deal with pedagogical and content knowledge of teachers. The final items, 24 through 32, focus on the perception of change with classroom assessments. Although categorizing effective instruction into four general components may appear as an oversimplification, the researcher attempted to design the survey using a framework of instructional methodology supported by the literature, rather than just a list of effective teaching strategies.

Validity

To help establish preliminary face validity and content validity of the survey instrument, the researcher used two primary methods. First, a panel of higher education faculty members provided feedback regarding structure and content of the survey instrument. Three instructors from the Teacher Education and Administration department of the University of North Texas reviewed the content of the instrument, offering suggestions regarding appropriate changes to wording and methods of quantifying perception. Additionally, an instructor from the University of Memphis provided feedback about the numerical assignment to negative and positive change as well as collapsing statements in order to reduce the size of the survey instrument. A retired public school instructor of ESL TAKS students offered suggestions about clarity and obstacles she faced when taking the survey. An additional element in order to establish instrument validity was a pilot study administered to a sampling population of

seventy-eight English Language Arts teachers ($n = 78$). The participants in the pilot study provided survey data, as well as substantive feedback about the order and content of the statements.

The faculty panel members who provided feedback about the survey instrument were given the survey in its original format, using a 5-point Likert-type scale. The declarative statements were categorized into the current four categories with a total of 25 statements. Little change was suggested by the faculty review panel regarding content and order of statements. Feedback primarily concentrated on two areas: a) replace the Likert scale with a rating system in order to capture the direction of change, and b) expand the declarative statements in the categories of classroom communication and student-centered instruction in order to capture a broader perception of change. By changing the Likert scale to a rating system, participants were able to assign value to the direction of instructional change. Initially, using an agree/disagree scale suggested that the participant perceived instructional change had occurred. However, with the addition of the rating system, participants indicated whether they perceived the change to be positive or negative. In addition, Items 5, 6, 8, 13, and 15 were added or reworded to provide clarification for the participants about a particular instructional area.

In an effort to identify the population of the study, the researcher chose five suburban schools in the Dallas metro area, and by using public domain websites, individually notified the schools' ELA teachers, to solicit their participation in the pilot study. For the pilot study, approximately 450 teachers in districts comparable to the four suburban districts included in the study were contacted, and from those, 106 participated with 78 completing the entire survey. For content validity, many participants provided

feedback about wording of declarative items. Participants suggested that overlap existed between the categories, but that most statements were clear and concise.

With many surveys, validity is established with the refinement of the content found in the statements or questions. As Gall, Gall and Borg (2003) reported, “In practice, researchers tend to apply looser validity and reliability standards to questionnaires and interviews than to tests because they typically are collecting information that is highly structured and likely to be valid” (p. 223). In a further effort to refine the statements in the survey, a factor analysis was conducted to determine whether the information could be condensed into a smaller group of factors that potentially maximize the explained amount of common variance.

Exploratory Factor Analysis

Exploratory factor analysis (EFA) was conducted using SPSS 15.0 to verify and provide final definitions and structure of the obtained data (Novick & Jackson, 1974). According to Stevens (2002), EFA differs from principle component analysis (PCA) in two ways: (1) the hypothetical factors that are derived can only be estimated from the original variables, whereas in PCA, because the components are specific linear combinations, no estimate is involved and (2) numbers less than 1, called communalities, are put on the main diagonal of the correlation matrix in an EFA whereas in PCA, 1s are put on the diagonal. There will be only minor and unimportant differences in the results from a PCA and EFA (Stevens, 2002). A correlational matrix of associations was analyzed, and the principal component analysis method of factor extraction was used in an attempt to remove the shared variance from the original matrix of associations.

Multiple criteria were employed to determine the number of retained factors, including the eigenvalue greater than one rule and scree test.

This process consisted of the development of a matrix of associations based on the pilot study data. The principal component analysis of all 32 items found in the pilot study survey yielded the results in Appendix E. Eigenvalues of the data were compared, and, by applying Kaiser's rule, consideration was given to discarding any factor with an eigenvalue less than one. The analysis suggests the existence of eight factors, with component one accounting for 42% of the variance, component two accounting for 7%, component three accounting for 6%, and the remaining five factors accounting for 5%, 4%, 4%, 3%, and 3% respectively.

Although the eigenvalues indicated one primary factor explaining 42% of the overall variance, other statistical considerations were given to determine any correlations with the additional seven identified factors from the factor analysis. As a factor analysis may, at times, be misleading, it is important to consider additional correlations among the variables after the factors have been derived (Nunnally, 1978). In some cases, variables used to define factors may have simple correlations close to zero. In order to determine any additional correlations, Pearson correlations for each survey item are represented in a correlation matrix in Table 7.

Table 7
Correlation Matrix for Survey Items

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32
Q1	1.00																															
Q2	.623	1.00																														
Q3	.600	.684	1.00																													
Q4	.317	.345	.410	1.00																												
Q5	.422	.358	.441	.695	1.00																											
Q6	.364	.375	.387	.548	.630	1.00																										
Q7	.327	.339	.289	.534	.540	.733	1.00																									
Q8	.414	.381	.421	.332	.483	.689	.696	1.00																								
Q9	.121	.167	-.005	-.112	-.043	-.141	.019	.104	1.00																							
Q10	.218	.212	.242	.476	.400	.376	.526	.367	.074	1.00																						
Q11	.371	.305	.268	.492	.369	.429	.534	.392	.224	.827	1.00																					
Q12	.249	.267	.268	.519	.533	.575	.568	.391	.032	.742	.742	1.00																				
Q13	.348	.322	.335	.578	.622	.620	.574	.421	.032	.655	.614	.850	1.00																			
Q14	.208	.279	.233	.546	.586	.541	.533	.412	.076	.517	.515	.630	.648	1.00																		
Q15	.269	.291	.260	.434	.533	.519	.459	.343	-.032	.433	.473	.629	.646	.699	1.00																	
Q16	.303	.300	.284	.555	.500	.469	.585	.446	.068	.512	.520	.569	.590	.506	.563	1.00																
Q17	.233	.243	.331	.289	.441	.522	.443	.521	.029	.443	.426	.590	.577	.436	.512	.569	1.00															
Q18	.387	.391	.414	.458	.555	.447	.468	.364	.143	.407	.419	.570	.612	.435	.463	.676	.645	1.00														
Q19	.302	.233	.355	.352	.558	.473	.498	.529	.027	.543	.464	.596	.621	.425	.486	.632	.782	.724	1.00													
Q20	.459	.434	.431	.485	.499	.491	.564	.485	.033	.515	.512	.551	.545	.524	.528	.695	.534	.589	.569	1.00												
Q21	.451	.465	.420	.210	.365	.484	.452	.449	.138	.372	.348	.369	.322	.232	.241	.475	.389	.570	.546	.622	1.00											
Q22	.096	.223	.228	.241	.218	.218	.193	.329	-.206	.149	.079	.111	.091	.208	.111	.183	.189	.249	.239	.223	.339	1.00										
Q23	.176	.187	.209	.357	.353	.263	.339	.425	.094	.309	.284	.276	.251	.390	.231	.344	.098	.179	.140	.421	.187	.445	1.00									
Q24	.314	.255	.369	.369	.429	.492	.389	.317	-.059	.259	.375	.380	.446	.325	.285	.440	.526	.493	.476	.517	.426	.290	.219	1.00								
Q25	.286	.284	.299	.513	.595	.470	.439	.317	-.107	.401	.437	.514	.523	.433	.403	.469	.409	.502	.422	.447	.396	.405	.269	.539	1.00							
Q26	.296	.341	.209	.447	.479	.396	.516	.422	.121	.485	.510	.408	.406	.504	.434	.460	.353	.363	.357	.439	.360	.134	.406	.259	.519	1.00						
Q27	.245	.198	.257	.372	.368	.512	.413	.393	-.008	.408	.363	.444	.432	.288	.284	.390	.404	.350	.407	.299	.312	.068	.036	.465	.269	.422	1.00					
Q28	.253	.350	.252	.429	.446	.544	.610	.521	.169	.536	.548	.514	.501	.520	.401	.647	.483	.523	.507	.529	.454	.210	.290	.381	.390	.530	.613	1.00				
Q29	.357	.383	.384	.397	.508	.527	.507	.549	.148	.540	.493	.496	.497	.428	.328	.490	.416	.457	.546	.486	.538	.367	.356	.444	.404	.350	.508	.629	1.00			
Q30	.158	.182	.193	.363	.454	.357	.257	.369	-.001	.213	.272	.335	.261	.260	.373	.376	.297	.274	.339	.325	.285	.288	.238	.256	.450	.393	.323	.342	.223	1.00		
Q31	.202	.149	.178	.468	.428	.440	.349	.327	-.120	.359	.469	.375	.298	.369	.298	.359	.181	.233	.257	.320	.189	.210	.245	.300	.446	.441	.495	.488	.327	.471	1.00	
Q32	.426	.392	.412	.483	.383	.392	.418	.476	-.039	.358	.388	.302	.320	.372	.268	.453	.346	.455	.337	.451	.411	.455	.407	.310	.300	.436	.329	.469	.425	.189	.302	1.0

The correlations between survey items range from minor to stronger correlations; however, Q9 appears to have limited correlation with any of the other survey items.

Additional to the correlation matrix, a pattern structure rotated factor matrix is provided in Table 8. From this table, it is noticeable that specific survey items appear to be more strongly correlated with some of the lesser factors determined from the eigenvalues. However, several items show close correlations with more than one factor.

Table 8
Pattern Structure Rotated Factor Matrix

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
Q1	.119	.141	.817	.106	.120	.080	.013	.085
Q2	.138	.122	.818	.055	.121	.074	.111	.145
Q3	.122	.221	.805	.039	.113	.037	.093	-.122
Q4	.526	.051	.322	.319	.095	.340	.201	-.259
Q5	.559	.260	.333	.036	.219	.385	.123	-.143
Q6	.429	.258	.257	.090	.645	.209	.048	-.237
Q7	.448	.225	.167	.239	.601	.098	.181	.012
Q8	.236	.250	.247	.000	.739	.113	.297	.112
Q9	-.042	.049	.100	.110	-.001	-.023	-.065	.864
Q10	.406	.266	.038	.749	.106	.032	.147	.070
Q11	.386	.206	.176	.717	.087	.164	.078	.182
Q12	.629	.398	.060	.467	.140	.103	-.007	-.037
Q13	.684	.393	.177	.376	.160	.049	-.047	-.085
Q14	.734	.138	.068	.228	.211	.145	.212	.047
Q15	.763	.273	.101	.051	.122	.185	.002	.026
Q16	.420	.531	.112	.254	.171	.226	.187	.128
Q17	.350	.746	.047	.076	.276	.043	-.029	-.009
Q18	.317	.726	.286	.148	.033	.123	.087	.071
Q19	.313	.782	.084	.157	.235	.079	.036	.016
Q20	.392	.489	.329	.205	.139	.123	.272	.102
Q21	-.056	.603	.397	.133	.224	.118	.233	.164
Q22	-.095	.277	.074	-.024	.052	.159	.779	-.276
Q23	.301	-.068	.075	.107	.140	.121	.769	.153
Q24	.069	.581	.234	.191	.121	.242	.091	-.268
Q25	.329	.391	.183	.178	-.087	.516	.242	-.200
Q26	.338	.080	.161	.296	.214	.497	.211	.256
Q27	-.028	.273	.112	.454	.525	.391	-.216	-.139

(table continues)

Table 8 (*continued*)

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
Q28	.170	.342	.090	.451	.492	.305	.135	.180
Q29	.089	.393	.241	.428	.424	.074	.277	.032
Q30	.198	.283	.029	-.124	.108	.779	.121	.082
Q31	.125	-.012	.066	.393	.230	.695	.077	-.167
Q32	.092	.184	.379	.291	.255	.078	.509	-.078

After considering the eight factors indicated by the factor analysis, a scree plot was generated, which confirmed the existence of one dominant factor with seven lesser factors. Although seventy percent of the explained variance is desirable, Stevens discusses the scree plot as a method by which to determine the number of factors to retain and states: “Generally, what happens is that the magnitude of successive eigenvalues drops off sharply (steep decent) and then tends to level off. The recommendation is to retain all eigenvalues (factors) in the sharp decent *before* the first one on the line where they start to level off” (p. 389). Factor pattern coefficients were examined in order to determine the contribution of variables to the given factor. Although consideration was given to eliminate any factors less than .45, only Q9 was eliminated from the survey instrument.

Reliability

Cronbach’s alpha was conducted on the overall survey instrument, attaining a score reliability coefficient alpha of .951. However, as the factor analysis in conjunction with the structure coefficients indicated eight total factors, Cronbach’s alpha was conducted on all factors. Factor 1, which includes Q4, Q5, Q12, Q13, Q14, and Q15 of the survey instrument, yielded a reliability coefficient of .900. Factor 2, which includes Q16, Q17, Q18, Q19, Q20, Q21, and Q24, resulted in a reliability coefficient of .901.

Factor 3, which includes Q1, Q2, and Q3, yielded .839. Factor 4, including Q10 and Q11, resulted in .903. Factor 5, which included Q6, Q7, Q8, Q27, Q28, and Q29, yielded .881. Factor 6, which included Q25, Q26, Q29, and Q30, resulted in a coefficient of .716. Factor 7, composed of Q22, Q23, and Q32, yielded .696. Although Factor 7 resulted in a reliability coefficient below .70, the factor was retained for the study. However, Factor 8, including only Q9, did not yield a reliability coefficient significant enough to be retained in the study.

Variables

Considering the original survey instrument, the independent variable in the study is the implementation of the TAKS test beginning in 2003, and the dependent variable is the teacher perception of instructional changes, categorized by communication, student-centeredness, instructional knowledge, and assessment. With the data resulting from the exploratory factor analysis, the structure coefficients for each factor, and the reliability coefficient for each factor, the survey instrument was recategorized by renaming each factor based on a common theme found in the correlated questions. The reconfigured survey instrument is found in Appendix E. The dependent variable remains teacher perception of instructional change categorized by student-centered instruction (Factor 1), student interest (Factor 2), instructional communication (Factor 3), time (Factor 4), classroom environment (Factor 5), assessment (Factor 6), and teacher knowledge (Factor 7).

Data Analysis

From the pilot study, the exploratory factor analysis determined primary factors within the survey instrument, and Cronbach's Alpha established reliability. With these

items predetermined, the ordinal data gathered by the survey instrument were analyzed using frequency counts, analysis of variance, and effect size. As each statement was quantified by an assigned value from the participant, the resulting descriptive statistics were used to determine trends from the survey data. Inferences from the emerging trends, as supported by the literature, are reported and discussed in Chapter 4.

CHAPTER 4

RESULTS

The results of the data are organized by the research question:

- (1) What are the perceptions of secondary English language arts (ELA) teachers regarding the ways the high-stakes testing environment in Texas public schools has affected their instructional practices in terms of classroom communication?
- (2) What are the perceptions of secondary ELA teachers regarding the ways the high-stakes testing environment in Texas public schools has affected their instructional practices in terms of student-centered instruction?
- (3) What are the perceptions of secondary ELA teachers regarding the ways the high-stakes testing environment in Texas public schools has affected their instructional practices in terms of pedagogical and content knowledge?
- (4) What are the perceptions of secondary ELA teachers regarding the ways the high-stakes testing environment in Texas public schools has affected their instructional practices in terms of timely assessment and feedback?
- (5) Do the perceptions of secondary ELA teachers with one to six years of teaching experience differ from the perceptions of secondary ELA teachers with seven or more years of experience regarding their classroom instructional methods in classroom communication, student-centered instruction, pedagogical and content knowledge, and timely assessment and feedback since

the implementation of the Texas Assessment of Knowledge and Skills (TAKS) test in 2003?

Additionally, the reporting of data is categorical using the seven different categories constructing the survey instrument. Frequency percentages are provided for two categories of participants: Secondary ELA teachers with one to six years of teaching experience with a specific district (the “recently hired” group) and Secondary ELA teachers with seven or more years of teaching with a specific district (the “veteran” group). Longevity in the district was important in an attempt to control for other variables, such as site-based leadership or various district initiatives, which may also result in curricular changes. Therefore, a participant with one to six years of experience may have more total years of teaching experience including those in another district other than the participating district in this study. By nominally coding these two categories of participants, frequency counts were determined for each individual item from the survey instrument. Furthermore, the analysis included an ANOVA to determine any statistical significance that may exist between the results from both participating groups. The analysis also used two subsequent ANOVAs to determine any statistical significance existing between the individual participating districts as well as three districts coded together compared to a single district. As district demographics were notably different prior to the administration of the survey, the perception of instructional change by teachers within districts emerges as purposeful and interesting data to the study.

After the survey instrument was distributed electronically to each district and following the completion deadline provided in the communication to each participant, 147 surveys were submitted, of which 121 were usable ($n = 121$) and included in the

frequency tables. For the ANOVA however, the analysis only included the 101 participants who completed the entire survey. There were 77 participants in the recently hired group and 45 participants in the veteran group. Also for data analysis, districts were nominally coded using a numerical coding identical to the number structure provided in Chapter 3. From District 1 there were 14 participants, a return rate of 19%. From District 2 there were 85 participants, a return rate of 79%. From District 3, there were 18 participants, a return rate of 12%. From District 4, there were 5 participants, a return rate of 4%.

Comparative Data Based on Experience

One research assumption was that teaching experience within a district, whether pre and post or post-only TAKS implementation, might affect the perception of the participants about TAKS. Since TAKS was implemented in 2003, teachers with post-only TAKS implementation experience, (six or fewer years of experience within a specific district) may vary in their perceptions when compared with teachers who have been in the same district pre and post-TAKS implementation (seven or more years). In order to determine any significance in this difference, an ANOVA was used to compare the two surveyed groups. According to the results of the ANOVA, there is no statistical significance between the two categories of participants based on experience in the same district.

Table 9

ANOVA Summary

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4341.866	1	4341.866	1.900	.171
	Residual	226280.926	99	2285.666		
	Total	230622.792	100			

The effect size for this comparison was .0188.

When considering the frequency counts for each category of the instrument [student-centered instruction (Factor 1), student interest (Factor 2), instructional communication (Factor 3), time (Factor 4), classroom environment (Factor 5), assessment (Factor 6), and teacher knowledge (Factor 7)], an item analysis within each category was constructed.

Results of Participant Perception about Student-Centered Instruction

A common theme among statements 1-6 on the survey instrument, correlated with factor 1, was student-centered instruction. Tables 10-15 provide the frequency data about teacher perception regarding whether TAKS has changed any of these instructional elements. Part of student-centered instruction is the development of instructional learning objectives. By referencing Table 10, both groups perceived TAKS to have a positive influence with the clarity of their learning objectives.

Table 10

Clearer and Understandable Learning Objectives

Since the implementation of the Texas Assessment of Knowledge and Skills test: My learning objectives are clearer and easier to understand. ($n = 121$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years	13	4	12	14	10	18	1	4	0	0	0	76
(%)	(17)	(5)	(16)	(18)	(13)	(24)	(1)	(5)	(0)	(0)	(0)	
7 + years	12	5	7	8	4	9	0	0	0	0	0	45
(%)	(27)	(11)	(15)	(18)	(9)	(20)	(0)	(0)	(0)	(0)	(0)	
Total	25	9	19	22	14	27	1	4	0	0	0	121
(%)	(21)	(7)	(15)	(18)	(11)	(22)	(.8)	(3)	(0)	(0)	(0)	

Collectively, 21% thought the implementation of TAKS significantly positively influenced (+5) the change in the clarity of their learning objectives. In the veteran

group, no participant indicated a negative impact of TAKS on the clarity of learning objectives.

Student-centered instruction depends on the teacher having a growth relationship with his/her students. From this relationship, personal dialog and communication between students and teachers help to determine academic and personal needs of individual students. Table 11 summarizes information from participants' perceptions about how TAKS has affected the time to develop this type of personal communication.

Table 11

Time Spent Considering Student Needs

Since the implementation of the Texas Assessment of Knowledge and Skills test: I am able to spend more time considering individual student needs. ($n = 120$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years	2	5	6	8	6	19	5	6	13	2	4	76
(%)	(3)	(6)	(8)	(10)	(8)	(25)	(6)	(8)	(17)	(3)	(5)	
7 + years	2	2	7	6	4	10	1	6	1	2	3	44
(%)	(4)	(4)	(16)	(13)	(9)	(23)	(2)	(13)	(2)	(4)	(7)	
Total	4	7	13	14	10	19	6	12	14	4	7	120
(%)	(3)	(6)	(11)	(12)	(8)	(16)	(5)	(10)	(12)	(3)	(6)	

This specific element of classroom instruction elicited a wide range of responses. Many of the recently hired group suggested either no change (25%) or a negative impact (39%). However, responses from the veteran group were more evenly distributed.

Lesson preparation is central to instruction. The following statement was included in the survey to determine whether lesson planning, as a part of student-centered instruction, also changed because of the implementation of TAKS. Table 12 provides the summary of this information.

Table 12

Lessons for Student Exploration

Since the implementation of the Texas Assessment of Knowledge and Skills test: A considerable number of lessons were designed for students to explore the content. ($n = 110$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years	1	3	9	12	4	13	5	5	8	4	3	67
(%)	(1)	(4)	(13)	(18)	(6)	(19)	(7)	(7)	(12)	(6)	(4)	
7 + years	1	3	10	8	4	7	4	2	3	0	1	43
(%)	(2)	(7)	(23)	(19)	(9)	(16)	(9)	(5)	(7)	(0)	(2)	
Total	2	6	19	20	8	20	9	7	11	4	4	110
(%)	(2)	(5)	(17)	(18)	(7)	(18)	(8)	(6)	(10)	(3)	(3)	

Forty-two percent of the recently hired group perceived TAKS to have facilitated a positive change when considering lesson planning for student exploration. For the veteran group, 60% perceived a minimal to significant (+1 to +5) positive change with the number of lessons that employ student exploration. Collectively, 18% perceived no instructional change in this area.

Student autonomy is an essential part of student-centered instruction. Choices and decision-making help students determine important concepts while personalizing instruction and content. Table 13 provides a summary of the participants' perceptions of a change in student control over the material because of TAKS.

Table 13

Student Control

Since the implementation of the Texas Assessment of Knowledge and Skills test:
Students have more control over the material being covered. ($n = 110$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	0 (0)	0 (0)	5 (7)	4 (6)	4 (6)	14 (21)	5 (7)	11 (16)	8 (12)	2 (3)	14 (21)	67
7 + years (%)	1 (2)	2 (5)	2 (5)	1 (2)	2 (5)	10 (23)	9 (21)	9 (21)	3 (7)	0 (0)	4 (9)	43
Total (%)	1 (1)	2 (2)	7 (6)	5 (4)	6 (5)	24 (22)	14 (13)	20 (18)	11 (10)	2 (2)	18 (16)	110

A higher percentage of both groups rated this change negatively by assigning -1 to -5. Fifty-nine percent of the recently hired group signified a negative rating, whereas 58% of the veteran group rated it negatively. Very few of the veteran participants suggested a positive change with student control of the material, and only 19% of the recently hired participants indicated a moderate positive change (+1 to +3).

With student autonomy comes the ability for students to work with the curriculum at their pace of learning. Every individual learner is dynamic with his or her own classroom needs. Participants' perceptions of the ability for students to work at their pace with the curriculum is summarized in Table 14.

Table 14

Student Pace with the Curriculum

Since the implementation of the Texas Assessment of Knowledge and Skills test:
Students are able to work with the curriculum at their pace. ($n = 110$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	0 (0)	1 (1)	2 (3)	2 (3)	2 (3)	14 (21)	8 (12)	5 (7)	11 (16)	6 (9)	16 (24)	67
7 + years (%)	1 (2)	1 (2)	3 (7)	1 (2)	1 (2)	10 (23)	2 (4)	10 (23)	7 (16)	3 (7)	4 (9)	43
Total (%)	1 (1)	2 (2)	5 (4)	3 (3)	3 (3)	24 (22)	10 (9)	15 (13)	18 (16)	9 (8)	20 (18)	110

A higher percentage of participants suggested a negative change in the ability for students to work at their own pace with the curriculum. Although combined 22% from both groups reported no change resulted in this instructional area, 64% suggested a minimal to significant negative change.

An additional element of student-centered instruction is the opportunity for students to reflect on personal strengths and weaknesses with the curriculum. Table 15 is a summary of participants' perceptions regarding the change in opportunity for student reflection.

Table 15

Opportunity for Student Reflection

Since the implementation of the Texas Assessment of Knowledge and Skills test:
There is more opportunity for student reflection. ($n = 110$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	0 (0)	2 (3)	6 (9)	5 (7)	7 (10)	13 (19)	4 (6)	4 (6)	13 (19)	4 (6)	9 (13)	67
7 + years (%)	1 (2)	2 (5)	5 (11)	5 (11)	2 (5)	7 (16)	2 (5)	9 (21)	2 (5)	3 (7)	5 (11)	43
Total (%)	1 (1)	4 (3)	11 (10)	10 (9)	9 (8)	20 (18)	6 (5)	13 (12)	15 (13)	7 (6)	14 (13)	110

This statement resulted in a wider variety of responses from the participants. Although a higher percentage from both categories of participants feel negatively about the change, this negative rating is not as strong compared with the two statements found in Tables 13 and 14. When observing the differences between the two groups, the recently hired group negatively rated the change in the opportunity for student reflection slightly more often than did the veteran group, a 1% difference. However, both groups perceived a moderately positive change in student reflection: 26% of the recently hired group and 27% of the veteran group provided ratings between +1 and +3.

Results of Participant Perception about Student Interest

Statements 7-13 of the survey instrument measure teacher perception about changes with instructional consideration of student interests since the implementation of TAKS. Tables 16-21 summarize the data for each statement. Instruction that includes student interests must also consider the needs of students. As students bring a variety of experiences to the classroom, instruction provides opportunity for them to use their experiences to construct knowledge leading to conceptual understanding. Participants rated their perceptions of the change within their classrooms regarding the consideration of student interest with the curriculum. Table 16 provides a summary of their ratings.

Table 16

Considering Student Interest

Since the implementation of the Texas Assessment of Knowledge and Skills test:
The classroom curriculum considers the level of interest of the student. ($n = 109$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	1 (1)	2 (3)	6 (9)	2 (3)	7 (10)	12 (18)	5 (7)	7 (10)	7 (10)	5 (7)	13 (19)	67
7 + years (%)	1 (2)	1 (2)	3 (7)	5 (12)	2 (5)	10 (24)	3 (7)	8 (19)	4 (9)	2 (5)	3 (7)	42
Total (%)	2 (2)	3 (3)	9 (8)	7 (6)	9 (8)	22 (20)	8 (7)	15 (14)	11 (10)	7 (6)	16 (15)	109

Although 20% from both groups perceived no change regarding student interest level, 53% of the recently hired group rated this change negatively, and 26% rated the change positively, a 27% shift towards a negative change. For the veteran group, 47% rated the change as negative, and 28% rated it as positive.

Table 17 summarizes how the participants perceived change following the implementation of TAKS in their decision-making based on student needs.

Table 17

Decisions based on Student Needs

Since the implementation of the Texas Assessment of Knowledge and Skills test:
Many classroom decisions are made based on the needs of the students. ($n = 109$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	9 (13)	4 (6)	7 (10)	7 (10)	10 (15)	13 (19)	4 (6)	4 (6)	5 (7)	0 (0)	4 (6)	67
7 + years (%)	3 (7)	4 (9)	5 (12)	10 (24)	3 (7)	13 (31)	0 (0)	1 (2)	3 (7)	0 (0)	0 (0)	42
Total (%)	12 (11)	8 (7)	12 (11)	17 (16)	13 (12)	26 (24)	4 (4)	5 (5)	8 (7)	0 (0)	4 (4)	109

As observed in the summary, a higher percentage of both groups rated a positive change in this area. For the recently hired group, 54% perceived a minimal to significant

positive change (+1 to +5) in their instructional decisions based on student needs.

Comparatively, 57% of the veteran group also rated a minimal to significant change.

Student enjoyment of the classroom environment can be a significant barometer for student interest. If students are required to personalize the curriculum through instruction provided in the classroom, students find the classroom environment to be beneficial rather than adversarial. Table 18 illustrates the perception of the participants about the change in student enjoyment with the curriculum since the introduction of TAKS.

Table 18

Student Enjoyment of the Curriculum

Since the implementation of the Texas Assessment of Knowledge and Skills test: Students seem to enjoy the curriculum. ($n = 110$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years	5	1	2	5	8	22	4	8	6	3	3	67
(%)	(7)	(1)	(3)	(7)	(12)	(33)	(6)	(12)	(9)	(4)	(4)	
7 + years	0	3	5	5	2	18	2	3	1	2	2	43
(%)	(0)	(7)	(12)	(12)	(4)	(42)	(4)	(7)	(2)	(4)	(4)	
Total	5	4	7	10	10	40	6	11	7	5	5	110
(%)	(4)	(3)	(6)	(9)	(9)	(36)	(5)	(10)	(6)	(4)	(4)	

Thirty-six percent of all of the participants suggested that student enjoyment of the curriculum remained unchanged because of TAKS. The veteran group perceived a more positive (35%) than negative (21%) change, and the recently hired group perceived a more negative (35%) than positive (30%) change.

Statement 11 of this category considers the attitude of the students in the classroom. A curriculum that integrates student interest in lesson preparation and instruction helps to shape the attitude of students in the classroom. As learning becomes

more enjoyable, students potentially become positive learners. Table 19 summarizes the perception of the participants about the change in student attitude since the use of TAKS.

Table 19

Student Attitude

Since the implementation of the Texas Assessment of Knowledge and Skills test: Generally, students have a positive attitude about the material covered in class. ($n = 110$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	4 (6)	2 (3)	11 (16)	10 (15)	7 (10)	17 (25)	2 (3)	5 (7)	3 (4)	2 (3)	4 (6)	67
7 + years (%)	2 (4)	2 (4)	9 (21)	9 (21)	3 (7)	12 (28)	2 (4)	3 (7)	0 (0)	1 (2)	0 (0)	43
Total (%)	6 (5)	4 (4)	20 (18)	19 (17)	10 (9)	29 (26)	4 (4)	8 (7)	3 (3)	3 (3)	4 (4)	110

This statement elicited a range of responses. Combining both groups, 53% perceived a positive change in student attitude, as compared to 21% of both groups perceiving a negative change. Twenty-six percent of the participants indicated no change with student attitude towards classroom material.

Assessments are an important part of directional instruction for student achievement. Instruction that includes students' interests must also have in place appropriate measurements that assess achievement aligned with individual interest. Teachers and students must know where they are instructionally in order to plan for continual progress. Instructional alignment with assessment is a determining factor in creating quality assessments, as is determining the appropriateness of the type of measurement. Table 20 summarizes the participants' perceptions of change regarding the quality of their classroom assessments since the implementation of TAKS.

Table 20

Improved Quality of Assessments

Since the implementation of the Texas Assessment of Knowledge and Skills test:
The quality of my classroom assessments has improved. ($n = 107$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	4 (6)	7 (11)	9 (14)	12 (18)	6 (9)	21 (32)	2 (3)	1 (1)	2 (3)	1 (1)	0 (0)	65
7 + years (%)	7 (17)	5 (12)	6 (14)	8 (19)	7 (17)	8 (19)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	42
Total (%)	11 (10)	11 (10)	15 (14)	20 (19)	13 (12)	29 (27)	3 (3)	1 (1)	2 (2)	1 (1)	0 (0)	107

The results for this statement indicate a positive polarization. A majority of both groups indicate minimal to significant positive change (+1 to +5) in the quality of their assessments since 2003. Seventy-nine percent of the veteran group suggests a positive change as compared to only 2% suggesting any negative change. For the recently hired group, notably 32% suggest no change in the quality of their classroom assessments; however, 31% rate the change between +3 and +5.

A common issue as a part of the increase in educational accountability is teacher autonomy. As discussed in Chapter 2, teachers believe, in many cases, that district mandates or administrative initiatives replace their decision-making autonomy in the classroom. As teachers lose autonomy, there is potential for the loss of instruction based on student interests. Essentially, the loss of teacher autonomy with assessment begins a standardization process that compromises the inclusion and consideration of student interests in the curriculum. Table 21 provides information about how the participants rated the change found in this shift of autonomy.

Table 21

Autonomy with Assessments

Since the implementation of the Texas Assessment of Knowledge and Skills test: Many classroom assessments are created by my department or school district rather than me individually. ($n = 107$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years	1	1	5	3	4	37	4	5	2	0	3	65
(%)	(1)	(1)	(8)	(5)	(6)	(57)	(6)	(8)	(3)	(0)	(5)	
7 + years	0	2	4	2	4	20	1	4	1	1	3	42
(%)	(0)	(5)	(10)	(5)	(10)	(48)	(2)	(10)	(1)	(1)	(7)	
Total	1	3	9	5	8	57	5	9	3	1	6	107
(%)	(1)	(3)	(8)	(5)	(7)	(53)	(5)	(8)	(3)	(1)	(6)	

Collectively, 53% of those surveyed perceived no change in this area. For each group individually, 57% of the recently hired and 48% of the veterans perceived no change within this area of their instructional assessment. The remaining results are relatively widespread throughout the measuring scale, providing no specific percentage that might suggest a trend either negatively or positively.

Results of Participant Perception about Instructional Communication

Statements 14-16 of the survey instrument can be associated with instructional communication. For this category, Tables 22-24 summarize the perception of participants regarding each item about changes in their communication. Table 22 illustrates the participant's perception of increasing importance in classroom communication.

Table 22

Importance of Classroom Communication

Since the implementation of the Texas Assessment of Knowledge and Skills test:
Classroom communication has become more important. ($n = 121$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	8 (11)	7 (9)	16 (21)	15 (20)	4 (5)	19 (25)	2 (3)	3 (4)	2 (3)	0 (0)	0 (0)	76
7 + years (%)	3 (7)	6 (13)	7 (16)	9 (20)	4 (9)	19 (42)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	45
Total (%)	11 (9)	13 (11)	23 (19)	24 (20)	8 (7)	38 (31)	2 (2)	3 (2)	2 (2)	0 (0)	0 (0)	121

Both groups of participants indicated that the implementation of TAKS either positively influenced the importance of classroom communication or the importance of classroom communication remained relatively constant. A combined 31% of both groups perceived there was no change in this area, while a combined 66% believed there was a minimal to significant positive change.

Additionally, an element of instructional communication is the method of delivery from the teacher to the student. When considering changing methods of classroom communication, Table 23 summarizes the participants' perceptions.

Table 23

Changing Methods of Classroom Communication

Since the implementation of the Texas Assessment of Knowledge and Skills test:
My method of classroom communication has changed. ($n = 121$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	5 (7)	8 (12)	14 (18)	17 (22)	1 (1)	26 (34)	3 (4)	1 (1)	1 (4)	0 (0)	0 (0)	76
7 + years (%)	5 (16)	8 (18)	2 (4)	13 (29)	3 (7)	14 (31)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	45
Total (%)	10 (8)	16 (13)	16 (13)	30 (25)	4 (3)	40 (33)	3 (2)	1 (.8)	1 (.8)	0 (0)	0 (0)	121

Similar to the increasing importance of classroom communication, both groups indicated either a positive influence or relatively no change with communication methods. When comparing the two groups, the veteran participants tended to suggest a more positive change with their methods of classroom communication following the implementation of TAKS. This group collectively (76%) indicates a positive change with ratings between +1 and +5.

Learning objectives are commonly part of instructional communication. The next table summarizes the participants' perception about how the method of conveying learning objectives to their students has changed.

Table 24

Communication of Learning of Objectives

Since the implementation of the Texas Assessment of Knowledge and Skills test:
The way I communicate my learning objectives to my students has changed. ($n = 121$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	Total
1 to 6 years	12	8	14	14	9	18	0	0	1	0	0	76
(%)	(16)	(10)	(18)	(18)	(12)	(24)	(0)	(0)	(1)	(0)	(0)	
7 + years	13	5	8	6	3	10	0	0	0	0	0	45
(%)	(29)	(11)	(18)	(13)	(7)	(22)	(0)	(0)	(0)	(0)	(0)	
Total	25	13	22	20	12	28	0	0	1	0	0	121
(%)	(21)	(11)	(18)	(16)	(10)	(23)	(0)	(0)	(.8)	(0)	(0)	

Both groups indicated a positive TAKS impact in communicating their learning objectives. Although together 23% of the participants suggested TAKS had not caused any change, 21% concluded a significant positive change (+5) in communicating their learning objectives.

Results of Participant Perception about Time

The common theme association with factor 4 is instructional time, found in statements 17 and 18 of the survey instrument. Tables 25 and 26 provide the data summarizing teacher perception about whether instructional time changed since the implementation of TAKS. From teacher to student, student to teacher, student to student, there is a variety of classroom communication– verbal or nonverbal. Statement 17 in this category of the survey measures participants' perception of change in the overall effectiveness of the communication methods. Their perception of this culminating statement is illustrated in the following table.

Table 25

Time for Effective Communicate

Since the implementation of the Texas Assessment of Knowledge and Skills test:
There is less time to effectively communicate with the students. ($n = 121$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	2 (3)	3 (4)	4 (6)	5 (7)	4 (6)	29 (39)	10 (13)	10 (13)	4 (6)	1 (1)	3 (4)	75
7 + years (%)	0 (0)	1 (2)	3 (7)	4 (9)	1 (2)	17 (38)	4 (9)	8 (18)	4 (9)	1 (2)	2 (4)	45
Total (%)	2 (2)	4 (3)	7 (6)	9 (7)	5 (4)	46 (38)	14 (12)	18 (15)	8 (7)	2 (2)	5 (4)	120

Table 25 shows a wide distribution of responses from both groups. The highest percentages for both groups reported there has been no change in the effectiveness of their classroom communication since the implementation of TAKS. For the recently hired group, 32% perceived a moderate negative change (-3 to -1) in effective communication, and 36% of the veteran group posted a moderate negative change. Comparatively, 19% of the recently hired group rated the change moderately positive (+3 to +1), and 17 % of the veteran group indicated a moderate positive change.

A component of an effective classroom is inquiry. Instruction that provides students with an opportunity to explore concepts and new ideas helps them construct knowledge based on a framework of personalized experiences. Nevertheless, inquiry requires structured instruction with time for exploration. Table 26 summarizes the perception of the surveyed participants about how TAKS has changed the amount of time their instruction allows for student exploration.

Table 26

Independent Exploration of Concepts

Since the implementation of the Texas Assessment of Knowledge and Skills test: Students spend more time independently exploring concepts found in the content. ($n = 111$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	1 (1)	1 (1)	8 (12)	6 (9)	7 (10)	14 (20)	3 (4)	10 (15)	12 (17)	3 (4)	3 (4)	68
7 + years (%)	2 (5)	0 (0)	7 (16)	3 (7)	5 (11)	10 (23)	4 (9)	4 (9)	3 (7)	1 (2)	2 (5)	43
Total (%)	3 (3)	1 (1)	15 (13)	9 (8)	12 (11)	24 (22)	7 (6)	14 (13)	15 (14)	4 (4)	5 (5)	111

Forty-four percent of the recently hired group rated this as a minimal to significant (-1 to -5) negative instructional change. For the veteran group, 42% perceived a negative change as compared to 36% of the same group perceiving a positive change.

Collectively, 22% suggested no change occurred in this area of their instruction.

Results of Participant Perception about Classroom Environment

Many components make up a classroom environment. Statements 19-24 of the survey instrument measure teachers' perceptions of change regarding specific elements of a classroom environment. The data for these statements are reported in Tables 27-32.

Concepts introduced in secondary education can be a complex part of the classroom

environment, and often this complexity requires instructional time in order to bring the student to a conceptual understanding. Table 27 shows the participants' perceptions about how TAKS has changed the amount of time dedicated to instruction of important classroom concepts.

Table 27

Time Communicating Important Concepts

Since the implementation of the Texas Assessment of Knowledge and Skills test: I feel I have more time to communicate important concepts. (<i>n</i> = 120)												
Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years	0	3	2	6	4	25	6	8	12	1	8	75
(%)	(0)	(4)	(3)	(8)	(5)	(33)	(8)	(11)	(16)	(1)	(11)	
7 + years	2	2	6	1	3	8	5	7	6	1	4	45
(%)	(4)	(4)	(13)	(2)	(7)	(17)	(11)	(15)	(13)	(2)	(9)	
Total	2	5	8	7	7	33	11	15	18	2	12	120
(%)	(2)	(4)	(7)	(6)	(6)	(27)	(9)	(12)	(15)	(2)	(10)	

Similar to previous survey statements that involved time constraints, the majority of the participants perceived either no change (27%) in their instructional methods or minimal negative change (36%) by rating the statement between -1 and -3. Comparing the two groups, there is a notable difference (16%) between the percent of participants who consider no change in instructional time devoted to important concepts. The veteran group's perceptions were more evenly distributed; whereas, 33 % of the recently hired group perceived no change in their instruction.

Classroom dialog between the teacher and his/her students are products of classroom environment. Table 28 illustrates participants' perceptions about the amount of instructional time that has changed in developing a classroom dialog since the implementation of TAKS.

Table 28

Developing a Classroom Dialog

Since the implementation of the Texas Assessment of Knowledge and Skills test:
My students and I spend more time developing a classroom dialog. ($n = 120$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years	2	2	5	11	3	22	4	10	9	3	4	75
(%)	(3)	(3)	(7)	(15)	(4)	(29)	(5)	(13)	(12)	(4)	(5)	
7 + years	0	4	10	2	3	16	3	4	2	1	0	45
(%)	(0)	(9)	(22)	(4)	(7)	(35)	(7)	(9)	(4)	(2)	(0)	
Total	2	7	15	13	6	38	7	14	11	4	4	120
(%)	(2)	(6)	(12)	(10)	(5)	(32)	(6)	(11)	(9)	(3)	(3)	

Both groups' responses followed an even distribution. The recently hired group, when compared to the veteran group, thought TAKS had more negatively affected the time used to develop a classroom dialog, a difference of 17%. Thirty-two percent perceived no change in the time they spend developing a dialog with their students. There are noticeable peaks within the categories. For the recently hired group, 32% perceived that TAKS had positively affected change, where as 22% of the veteran group rated the change as +3.

The establishment of the teacher/student relationship is essential for development of the dynamics of a positive classroom. In order to create this type of positive relationship, teachers must attempt to connect with their students through effective personal communication by creating a comfortable instructional environment. Table 29 provides information about how participants perceived changes in personalizing their classroom communication.

Table 29

Personalizing Communication

Since the implementation of the Texas Assessment of Knowledge and Skills test:
My communication has become more personal. ($n = 120$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years	4	4	5	10	6	30	4	3	6	1	3	76
(%)	(5)	(5)	(6)	(13)	(8)	(39)	(5)	(4)	(8)	(1)	(4)	
7 + years	1	3	8	4	3	15	3	5	1	1	0	44
(%)	(2)	(7)	(18)	(9)	(7)	(34)	(7)	(11)	(2)	(2)	(0)	
Total	5	7	13	14	9	45	7	8	7	2	3	120
(%)	(4)	(6)	(11)	(12)	(8)	(37)	(6)	(7)	(6)	(2)	(3)	

Thirty-seven percent from both groups believed this element of their instruction had not changed since the implementation of TAKS. Generally, the perception was more positive than negative, with 41% rating the change +1 to +5, and 24% rating the change -1 to -5.

Classroom environment can promote student learning. If students feel comfortable and safe in the classroom, instruction can be more readily received. Table 30 reports teacher perception regarding change with classroom environment since the implementation of TAKS.

Table 30

Comfortable Classroom Environment

Since the implementation of the Texas Assessment of Knowledge and Skills test:
My classroom is an environment where students feel comfortable sharing ideas. ($n = 122$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years	12	8	11	8	1	32	1	2	1	0	0	76
(%)	(16)	(10)	(14)	(10)	(1)	(42)	(1)	(3)	(1)	(0)	(0)	
7 + years	6	5	6	6	5	17	0	0	0	0	0	45
(%)	(13)	(11)	(13)	(13)	(11)	(38)	(0)	(0)	(0)	(0)	(0)	
Total	18	13	17	14	6	49	1	2	1	0	0	121
(%)	(15)	(11)	(14)	(11)	(5)	(41)	(.8)	(1)	(.8)	(0)	(0)	

Comparatively, both groups indicated a positive change or no change. Very few participants with less experience rated this statement as a negative change, and no veteran participants rated this statement as a negative change. For the recently hired group, 40% suggested a moderate to significant (+3 to +5) positive change in the comfort of students sharing ideas, compared to 37% for the veteran group. Combined, 56% rated TAKS as having a positive effect on the change with students being comfortable sharing ideas in the classroom.

Assessments are also a common component of classroom environment. The appropriateness of an assessment is important in determining mastery of instructional objectives. When students are required to master a set of criteria that provides a measurable student action, teachers often use performance-based assessments. As state assessments such as TAKS do not specifically measure a core set of student actions, a statement was included on the survey instrument to determine any increase in performance-based assessments. Table 31 provides a summary of those results.

Table 31

Increased Use of Performance-based Assessments

Since the implementation of the Texas Assessment of Knowledge and Skills test: My use of performance-based assessments has increased. ($n = 106$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years	3	5	7	15	8	19	2	0	5	0	0	64
(%)	(5)	(8)	(11)	(23)	(12)	(30)	(3)	(0)	(8)	(0)	(0)	
7 + years	0	6	8	8	6	12	0	0	1	0	1	42
(%)	(0)	(14)	(19)	(19)	(14)	(29)	(0)	(0)	(2)	(0)	(2)	
Total	3	11	15	23	14	31	2	0	6	0	1	106
(%)	(3)	(10)	(14)	(22)	(13)	(29)	(2)	(0)	(6)	(0)	(1)	

Similar to the previous two statements, a larger percentage of the participants perceived a positive increase in this area. Fifty-nine percent of the recently hired group suggested a

positive change with the increased use of performance-based assessments.

Comparatively, 66% of the veteran group also perceived a positive change within their classrooms. Collectively, 29% suggested no change in this area of their instruction.

Higher-level thinking is a product desired by most teachers of their students. Many concepts from a variety of curricular areas require students to think at a higher cognitive level. Metacognition requires a higher level of student thought that, similar to performance-based assessment, is not commonly found within the framework of state accountability testing. Table 32 illustrates participants' perceptions about their increased use of assessment methods to promote metacognitive thinking.

Table 32

Increased Use of Metacognitive Assessments

Since the implementation of the Texas Assessment of Knowledge and Skills test: My use of metacognitive assignments such as portfolios has increased. ($n = 106$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years	1	4	1	12	7	21	1	8	3	4	2	64
(%)	(2)	(6)	(2)	(19)	(11)	(33)	(2)	(12)	(5)	(6)	(3)	
7 + years	1	1	5	4	6	19	1	1	4	0	0	42
(%)	(2)	(2)	(12)	(9)	(14)	(45)	(2)	(2)	(9)	(0)	(0)	
Total	2	5	6	16	13	40	2	9	7	4	2	106
(%)	(2)	(5)	(6)	(15)	(12)	(38)	(2)	(8)	(6)	(4)	(2)	

For this statement, there is no observable negative or positive polarization with the results. Thirty-eight percent from both surveyed groups indicate no perceived change in this method of assessment. This survey statement does not provide any insight regarding whether the participant was using such assessment methods prior to the implementation of TAKS; therefore, it is difficult to determine whether those participants who perceived no change with this part of their instruction used any prior metacognitive assessment.

From the recently hired group, 30% indicated a moderate positive increase by rating the

change +1 to +2 whereas, 28% of the same group perceived a minimum to significant (-1 to -5) negative change in the use of metacognitive assessments. For the veteran group, 39% perceived the change to be positive compared to only 13% perceiving the change to be negative.

Results of Participant Perception about Assessment

As assessment (factor 6) is an important part of classroom instruction, statements 25-28 of the survey instrument measure teacher perception regarding a change in assessment since TAKS implementation. Tables 33-36 summarize the participants' perceptions of assessment.

Assessments offer valuable information to both teachers and students. A quality assessment assists teachers with appropriate instructional changes and can additionally assist students in areas of test preparation, comprehension, and test-taking methods.

Table 33 reports how participants perceived the change with students using the feedback from classroom assessments.

Table 33

Student Use of Assessment Feedback

Since the implementation of the Texas Assessment of Knowledge and Skills test: Students use the feedback provided by my classroom assessments. ($n = 107$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	4 (6)	2 (3)	7 (11)	8 (12)	10 (15)	28 (43)	1 (2)	3 (5)	1 (2)	0 (0)	1 (2)	65
7 + years (%)	2 (5)	5 (12)	4 (9)	6 (14)	6 (14)	17 (40)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	42
Total (%)	6 (6)	7 (6)	11 (10)	14 (13)	16 (15)	45 (42)	1 (1)	4 (4)	2 (2)	0 (0)	1 (1)	107

Forty-two percent reported there was no change in student use of feedback from assessments. Combining both groups, 54% suggested a moderate to significant positive

(+1 to +5) change in this area. Thirty-eight percent of the recently hired group rated a positive change of +1 to +3, and 44% of the veteran group rated the change from +1 to +4.

For teachers, assessments potentially become tools for improvement. Table 34 provides information about the increase of awareness of the participants regarding their classroom assessment needs.

Table 34

Awareness of Assessment Needs

Since the implementation of the Texas Assessment of Knowledge and Skills test: TAKS has helped to make me aware of my classroom assessment needs. ($n = 107$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years	5	4	7	8	8	24	3	0	3	1	2	65
(%)	(8)	(6)	(11)	(12)	(12)	(37)	(5)	(0)	(5)	(1)	(3)	
7 + years	2	2	7	10	5	11	0	2	1	0	2	42
(%)	(5)	(5)	(17)	(24)	(12)	(26)	(0)	(5)	(2)	(0)	(5)	
Total	7	6	14	18	13	35	3	2	4	1	4	107
(%)	(6)	(6)	(13)	(17)	(12)	(33)	(3)	(2)	(4)	(1)	(4)	

Although 33% perceived no change in this area, this statement resulted in 54% of the total surveyed population suggesting a positive change in their awareness of classroom assessment needs. Within the groups, the perceived positive change was moderate with 35% of the recently hired group rating the change +1 to +3 whereas, 53% of the veteran group used the same ratings.

As with performance-based and metacognitive assessments, there are different types of assessments that promote higher-level thinking. Teachers hope to instruct students, pushing them to achieve a higher cognitive thought process. Table 35 illustrates how teachers have perceived these assessment changes in their classrooms since the implementation of TAKS.

Table 35

Assessments Producing Higher-level Thinking

Since the implementation of the Texas Assessment of Knowledge and Skills test:
My classroom assessments are designed to produce higher-level thinking. ($n = 107$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	4 (6)	9 (14)	10 (15)	9 (14)	9 (14)	17 (26)	1 (2)	2 (3)	2 (3)	0 (0)	2 (3)	65
7 + years (%)	5 (12)	7 (17)	9 (21)	8 (19)	2 (5)	10 (24)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	42
Total (%)	9 (8)	16 (15)	19 (18)	17 (16)	11 (10)	27 (25)	1 (1)	3 (3)	2 (2)	0 (0)	2 (2)	107

Similar to previous statements in this category of the survey instrument, many of the participants suggested a positive change in this area of their instruction. Sixty-seven percent from both groups perceived a minimal to significant (+1 to +5) positive change in their assessments promoting higher-level thinking. When comparing both groups, a higher percentage of the recently hired group perceived the change to be positive. Combined, 8% rated the change as significantly positive (+5), which is equal to the total percent (8%) for any perception of negative change.

As classroom assessment changes, teachers may reevaluate the methods of constructing a quality assessment. Alignment of instruction is necessary for students to be successful with an assessment. Participants indicate the type of change with their methods of constructing classroom assessments in Table 36.

Table 36

Construction of Classroom Assessments

Since the implementation of the Texas Assessment of Knowledge and Skills test:
More consideration is given to the construction of my classroom assessments. ($n = 107$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	8 (12)	6 (9)	11 (17)	14 (21)	7 (11)	14 (22)	2 (3)	1 (2)	2 (3)	0 (0)	0 (0)	65
7 + years (%)	8 (19)	4 (9)	8 (19)	8 (19)	5 (12)	9 (21)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	42
Total (%)	16 (15)	10 (9)	19 (18)	22 (21)	12 (11)	23 (21)	2 (2)	1 (1)	2 (2)	0 (0)	0 (0)	107

Similar to the previous statement, a majority of the participants suggest a positive change with the way they construct their classroom assessments. No participants in the veteran group indicated any negative change in this area. A large percentage (70%) of recently hired participants suggest a moderate to significant (+1 to +5) positive change with 38% rating the change as +2 and +3. Combining both groups, 15% thought a significant positive change (+5) has resulted in the consideration they offer to the construction of their classroom assessments.

Results of Participant Perception about Teacher Knowledge

The increase in accountability in education requires students to master specific content evaluated by TAKS. As standards have increased for students, the amount of knowledge teachers must possess becomes an important component in producing high achieving students. The final category of the survey instrument (statements 29-31) measured perception about change in the content and pedagogical knowledge of the instructor. Tables 37-39 summarize these data.

TAKS is content specific, requiring a mastery of specific content objectives for each student. Teachers must also know this content in order to instruct at the level

necessary for mastery. Table 37 summarizes the perception of the participants about a change in knowing their content since the implementation of TAKS.

Table 37

Content Knowledge

Since the implementation of the Texas Assessment of Knowledge and Skills test: Teachers are required to know more about their content. ($n = 107$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	9 (14)	4 (6)	13 (20)	6 (9)	4 (6)	21 (32)	1 (2)	5 (7)	1 (2)	0 (0)	1 (2)	65
7 + years (%)	8 (19)	5 (12)	4 (9)	8 (19)	1 (2)	12 (28)	1 (2)	2 (4)	1 (2)	0 (0)	0 (0)	42
Total (%)	17 (16)	9 (8)	17 (16)	14 (13)	5 (5)	33 (31)	2 (2)	7 (7)	2 (2)	0 (0)	1 (1)	107

A large percentage (58%) of the total participants reported a positive change in content knowledge has occurred since TAKS began in 2003. Although 31% perceived no change in this area, 55% of the recently hired group indicated a minimal to significant (+1 to +5) positive change, and 61% of the veteran group suggested a positive change.

Accompanying the mastery of the content is the knowledge of the teacher about instruction. Less emphasized in some curricular areas may be the pedagogy rather than the teacher's grasp of the content of the subject; however, an understanding of pedagogy assists a teacher with the development of classroom instruction in the previous three surveyed categories. Table 38 indicates the results of participant perception about a change in the knowledge of pedagogy.

Table 38

Pedagogical Knowledge

Since the implementation of the Texas Assessment of Knowledge and Skills test:
Teachers are required to know more about pedagogy. ($n = 107$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	8 (12)	2 (3)	16 (25)	7 (10)	4 (6)	22 (34)	1 (1)	3 (5)	0 (0)	1 (1)	1 (1)	65
7 + years (%)	6 (14)	4 (9)	4 (9)	12 (28)	4 (9)	8 (19)	1 (2)	1 (2)	0 (0)	2 (5)	0 (0)	42
Total (%)	14 (13)	6 (6)	20 (19)	19 (18)	8 (7)	30 (28)	2 (2)	4 (4)	0 (0)	3 (3)	1 (1)	107

Similar to content knowledge, a higher percentage of participants reported a positive change in pedagogical knowledge. From both groups, 63% perceived a minimal to significant (+1 to +5) positive change with an increase in pedagogical knowledge since the implementation of TAKS. A combined thirteen percent perceived the change to be significant (+5). There is a noticeable difference (15%) between the two groups perceiving no change, and 10% of all of the participants thought the instructional change was negative.

In order to address the increasing necessity for teachers to know more about their content and instruction, many districts provide or encourage professional development. Professional development can be broad in scope, anything from instructional technology to disaggregating student data. As the accountability system continues as a part of the classroom, professional development assists teachers with their own personal professional growth. Table 39 summarizes the participants' perception of a change in required or encouraged professional development since the implementation of TAKS.

Table 39

Professional Development

Since the implementation of the Texas Assessment of Knowledge and Skills test:
Continued professional development has been encouraged. ($n = 107$)

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	total
1 to 6 years (%)	17 (26)	8 (12)	13 (20)	9 (14)	4 (6)	8 (12)	3 (5)	1 (1)	1 (1)	0 (0)	1 (1)	65
7 + years (%)	9 (21)	6 (14)	12 (29)	7 (17)	2 (5)	5 (12)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	42
Total (%)	26 (24)	14 (13)	25 (23)	16 (15)	6 (6)	13 (12)	3 (3)	2 (2)	1 (1)	0 (0)	1 (1)	107

The results indicate a positive polarization of participant perception. Eighty-one percent from both groups surveyed suggest a minimal to significant (+1 to +5) positive change in the encouragement of professional development since 2003. Of the 81%, 24% rated the change significant (+5). Within each group, 78% of the recently hired group and 86% of the veteran group perceived the change to be positive, a difference of only 4%.

Comparison between Districts

Some of the demographic information between the participating districts was notably different. Therefore, to determine any difference that may be statistically significant between the four districts, an ANOVA was used to compare the data. Combined, the four districts provided 101 completed surveys ($n = 101$), with District #1 completing 9, District #2 completing 68, District #3 completing 18, and District #4 completing 3. Table 40 contains the ANOVA table summary comparing all four districts.

Table 40

ANOVA Summary (n = 101)

Model	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12063.890	4	3015.973	1.325	.266
Within Groups	218558.902	96	2276.655		
Total	230622.792	100			

When comparing all four districts, there is no statistical significance among their responses. The effect size was .052, suggesting that being a participant from a specific district had little or no affect on perception of the various changes measured in the survey instrument. As it was evident that District #2 returned the most completed surveys, and that demographically, Districts 1,3, and 4 were similar whereas District #2 featured different demographics, a second ANOVA compared Districts 1, 3, and 4 with District #2. The summary of this comparison is found in Table 41.

Table 41

ANOVA Summary

Model	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	19.806	1	19.806	.008	.972
Within Groups	230484.704	99	2351.885		
Total	230504.510	100			

The effect size for this ANOVA was .00008, suggesting little to no affect on participant perception based on the district. Similar to the previous comparison, there is no statistical significance among the responses.

The analysis of the data revealed no statistical significance when comparing the two groups based on experience and the participating school districts. Frequency tables

for each survey statement reveal that both groups of participants generally perceived no change or a positive change, since the implementation of TAKS, in terms of instructional communication, assessments, and teacher knowledge. For the category of student-centered instruction, time, student interest, and classroom environment there were mixed responses; however, with statements generally dealing with time constraints, participants perceived a negative change since the implementation of TAKS.

CHAPTER 5

DISCUSSION

The push for accountability has created high-stakes classrooms. Teachers are facing an emphasis on higher student test scores, which may result in a change of their instruction to accommodate the pace necessary to meet the requirements of the state mandated tests. Teachers' perceptions of these changes are an important element when considering future trends of the profession. Accountability is presumed to provide direction for quality, therefore consideration of the potential changes that may result from too much emphasis on results rather than curricular content is worthy of further investigation. For more than twenty years, curricular standards have been refined and implemented nationally in public education. Essential content becomes part of the classroom curriculum and measuring systems evaluate the successful mastery of the material. Systems of accountability have become as common in education as students and teachers. Federal and state policies and agencies bring to the forefront of education the need for improved instruction, productive classrooms, and accountable participants.

Test scores are quantities assigned to brackets of student achievement and subsequently become the gauge for successful mastery of the essential content. With the continued emphasis on higher scores and successful students, curricular and instructional changes are inevitable, and hopefully, regardless of theoretical basis, beneficial to the individual and society. As curricular and instructional changes emerge, teachers adapt accordingly. Because teachers are central to implementing changes resulting from high-stakes testing, this study focused on teachers' perceptions of changes they may have made in four areas of instruction as a result of the implementation of the TAKS exam in

2003. Participants responded to a survey by rating change positively or negatively, assigning a value of magnitude to the change, or indicating that no change was noticeable. It was important to the study to find a group of participants whose curricular area has endured several years of testing prior to the implementation of the high-stakes test central to the research; therefore, English Language Arts was the curricular area chosen. Choosing a longstanding, tested curriculum such as ELA, assisted the researcher in determining whether the curricular changes noticed by the participants were less about the content measured by the test and more about the emphasis placed on the test.

From the research of literature on effective teaching, four categories emerged as consistent components of quality instruction: classroom communication, student-centered curriculum, pedagogical and content knowledge, and timely assessment and feedback. These four general categories are compartmentalized and measured by the seven factors comprising the survey instrument used in this study to collect data. Classroom communication encompasses more than just a clear lecture. Teachers who effectively communicate in a variety of ways with their students establish a classroom environment that promotes congeniality among students and between students and teacher. The literature suggested a student-centered curriculum provides opportunity for students to engage with the content. As students personalize the material, ownership between the learner and learning emerges, nurturing student confidence and initiative. Timely, substantive assessments, another element from the research, serve as not only diagnostic measures for students to recognize academic areas that need more attention, but they also serve as tools for teachers regarding instructional alignment and redirection. Finally, the research suggested that teachers must know their subject and their craft. Participants

rated their perceptions of change with instruction in these areas as a result of the implementation of the TAKS assessment in 2003.

The two groups compared in the study consisted of teachers who only had experience with one district since 2003 (the recently hired group) and teachers who had experience with one district prior to 2003 (the veteran group). The study design assumed that the teachers with experience prior to TAKS in a single district might perceive more instructional changes as compared to the teachers who have taught only within a single district since the implementation of TAKS. In other words, the researcher assumed that if TAKS implementation resulted in changes in teachers' instructional behavior in the four surveyed categories, then the veteran group, with experience in the district prior to and after 2003, would be more likely to report changes in those four areas, whereas, the recently hired group who has only been in the district since TAKS would not have the benefit of prior comparative reference.

Another researcher assumption was that district demographics also potentially might affect participants' perceptions of change. Districts with specific demographic components such as limited English speaking families or lower socioeconomic families may have required more curricular changes in order to produce higher test scores. Therefore, teachers from such districts may have perceived instructional change more often and differently than did their counterparts from other districts. From the data, there was no statistical significance between either group's ratings of change. Additionally, there was no statistical significance when comparing the different districts. Teacher perception of instructional change may not be as influenced by experience in the same

district and demographic variables as the researcher originally assumed. Rather teacher characteristics may have been most influential when participants rated each statement.

When considering all values for each statement (+5, +4, +3, +2, +1, 0, -1, -2, -3, -4, -5), the highest percentage for all statements was “no noticeable change,” indicated by selecting a 0 on the survey. Total average percentages for each value are indicated in Table 42.

Table 42

Total Average Percentage for Each Value

Teaching Experience	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5
1 to 6 years (n=77)	4.2	3.6	7.0	7.7	5.2	17.4	3.1	4.0	4.2	1.3	3.0
7 + years (n=45)	3.0	3.2	5.3	5.4	3.1	10.6	1.6	2.7	1.7	0.7	1.0

Considering their instruction prior to and post TAKS implementation when evaluating each statement of the survey instrument, an average of 10.6% from the veteran group indicated “no change” with their classroom instruction. Similarly, an average of 17.4% of the participants from the recently hired group also noted “no change” in their teaching practice because of the TAKS text. The more veteran participants may have employed the same instructional strategies or elements prior to and after the implementation of TAKS (i.e. portfolio assessments, learning objectives); therefore, they would have selected no noticeable change for that statement. Some participants from the recently hired group may have observed no noticeable change with their instruction resulting from TAKS as they were not teaching prior to TAKS. Although the largest single percentage for both groups was “no change,” when the entire range of percentages is considered,

participants from both groups did perceive a larger positive change in their instruction as a result of TAKS implementation (27.7% newly hired and 20% veterans). The magnitude and the direction (positive or negative) of the change depended on the area of instruction covered by specific survey statements. In the sections below, an interpretation of findings for each category of effective teaching will be presented.

Student-Centered Instruction

The first category of the survey was student-centered instruction. Generally, participants rated the change in student-centered instruction as negative; however when considering the statement regarding lessons designed for independent student inquiry (Statement 3), both survey groups suggested either “no change” or minimal to significant positive change. For example, 19% of the recently hired group and 16% of the veteran group indicated no change in this instructional area. However, collectively 49% rated the change +1 to +5. Conversely, student control over the material (Statement 4) and student pace within the curriculum (Statement 5) were instructional areas both groups reported as a negative change.

Often understood as an issue of control, teachers may foster student autonomy reluctantly. However, data from the study suggested that participants perceived a mixture of changes in this instructional area, resulting in no clear directional trend. Instruction that provides students opportunity to explore and personalize the curriculum requires time, an element already recognized as scarce by teachers. Since TAKS limits the amount of instructional time, participants indicated either no change or, if a change was perceived, more likely a positive change in preparing instruction that promotes student exploration. Participants may have had difficulty discerning when a change in student

attitude occurred. Although the amount of personalization a student has with instruction helps to shape the student's classroom attitudes, other variables also affect this area, so pinpointing a specific time of transformation or a specific reason for the transformation may be very difficult.

Student Interests

Also addressed in the survey were student interests (Statements 7-13). The data show a variety of responses for these instructional areas. Regarding Statement 7, the level of student interest, 46% of the participants perceived a negative change, for which there may be a variety of variables. For teachers to understand the needs and interests of their students, they must devote time in class to this task. For secondary ELA teachers, classrooms are composed of students with various levels of comprehension, and in many settings, the teacher may instruct the student for only fifty minutes a day or ninety minutes every other day. Conversely, when considering Statement 8, participants perceived "no change" (19% less experienced group and 31% veteran group) or, more likely, a positive change (54% less experienced group and 59% veteran group) in this area. In an effort to increase student scores, teachers disaggregate student data in order to determine areas that need improvement. By using this information, teachers may change their instruction in order to address areas of concern. Generally, both groups of participants perceived their instruction has not changed or changed positively in terms of considering the needs of students.

Regarding student attitudes about the material (Statement 11), primarily both groups indicated minimal or no change, as student attitude may be too subjective a

variable to assign measurement. Student-centered instruction requires time and student autonomy, both areas already suggested as compromised by TAKS.

When considering student interests and the change in quality of assessments (Statement 12), there was a noticeable difference between the groups. A larger percentage (32%) from the group with less experience perceived no change in the quality of their assessments when compared to the veteran group (19%).

Many teachers believe their professional autonomy has been compromised by the growing system of accountability, which may potentially compromise the consideration of student interest with the curriculum. With assessment, it may be logical to assume that appropriately developed assessments are no longer the responsibility of the classroom teacher, but rather a task controlled by a curricular department or at the district level. Statement 13 on the survey addresses this shift in autonomy by requiring participants to rate change regarding who creates their classroom assessments. More than half (53%) of both groups indicated no change in this area; however, the survey does not contain any items that indicate who has responsibility for the assessment development.

Instructional Communication

Statements 14 and 15 of the survey instrument, related to classroom communication, are somewhat vague when dealing with the method and importance of classroom communication. Nevertheless, for both statements, both groups reported an overall positive change. For Statement 14, 66% of the lesser experienced group and 65% of the veteran group indicated a minimal to significant positive change in the importance of their communication. Additionally, for Statement 15 the trend was similar, with both groups indicating no change or positive change. Further research is needed to determine

whether participants recognized positive change in their overall communication with students because of their own maturation process as teachers or because of professional development related to TAKS implementation.

For Statement 16 of the survey instrument, classroom communication of learning objectives is specifically linked to instructional strategies. For this statement, both groups indicated a positive change in the communication of their learning objectives. The recently hired group represented a larger percentage reporting a positive change; however, more than twenty percent from the combined surveyed groups indicated a significant positive change. One reason for this perception may be that post-TAKS implementation professional development has assisted both groups of teachers in the creation of clear and understandable learning objectives. With appropriate training, teachers can become self-reflective and aware of the quality of their learning objectives. This type of professional growth may have affected the way participants rated these two statements.

Time

The amount of time for instruction is often a concern for teachers. Statements 17 and 18 specifically address participant perception about how time affects communication and student exploration. Although the largest overall percentage for statement 17 suggested no change in this element of instruction, there was somewhat of a minimal to moderate (-1 to -3) negative trend that emerged with both groups. Comparatively, statement 18 offered a variety of responses, but similarly, as with the previous statement, participants' responses indicated a slight negative trend. Since instructional time has been a consistent concern for educators, the data may not clearly depict how TAKS has

actually affected this change. As with other statements in the survey that include a time element, the most notable trend emerging from the study is that little has changed in instruction or any change may be more likely perceived as negative rather than positive.

Classroom Environment

Statements 19-24 consider perception of change in the classroom environment. No clear negative or positive trend emerged in this category of the survey instrument from either group of participants. There are varieties of elements that become part of the classroom environment – elements that are integrated with several other categories found in the survey. From various forms of communication to different methods of assessment, all are potential components of the everyday environment encountered by students.

Developing a classroom environment based on personal communication is the focus of Statements 20 and 21 found in this category. Although both statements elicited a wide range of responses, a larger percentage for each statement from both groups suggested no change. The personality of the teacher may affect personal communication and the ability to develop it as a classroom component. Both statements may be subjective regarding how participants interpreted the personalization of communication and what that includes, and the comfort level for students to share ideas. Since several participants indicated no change, self-reflection about personality may have been the basis for rating both statements, and participants may have perceived these areas as unaffected by TAKS. Statement 19 considered the time teachers had to communicate important concepts. The data from this statement indicated either no change or a minimal to moderate negative trend (-1 to -3) from both surveyed groups. Again, time potentially becomes an influential change agent rather than the TAKS assessment.

Classroom environment also includes the potential change in different forms of assessments. As TAKS is formatted to assess specific curricular objectives, it could be assumed that several types of assessments, such as performance-based or metacognitive, may not be included during instruction. However, with ELA, since TAKS assesses writing ability, participants indicated an increase in use of performance-based assessments (Statement 23). When rating the increase of metacognitive assessments (Statement 24), a little more than one-third (38%) of all participants reported no change although the recently hired group provided a wide range of responses. If participants were not using metacognitive assessments prior to TAKS, they may see no need to include them in their present instruction, as TAKS is not a metacognitive assessment. For ELA, metacognition could be assessed through writing; therefore, since ELA teachers could use metacognitive writing prior to and after TAKS, the state test may have no impact on the use of this type of assessment.

For classroom environment, participants' perceptions varied. There was no consistent trend that emerged for all statements; however, for those statements regarding a comfortable classroom environment (Statement 22) and different methods of assessment if participants perceived any change with their instruction, the change was more likely a positive change. Comparatively, statements in the category that regarded time constraints with various forms of communication, typically resulted in participants perceiving either "no change" or mixed results.

Assessment

An additional area of the survey involved classroom assessments. Generally, the perception of the participants about change in their assessment strategies was positive.

This category of the survey included participants' reflections about their personal assessments, how assessment data were used, and the level of assessments used with their instruction. As TAKS is an assessment, it would be fair to assume assessments, as a component of instruction, are affected by the implementation of TAKS. Consequently, districts may have placed an emphasis on assessment, independently of other components of instruction, in order to increase student test scores.

Assessments are an important guide for instruction. Statements 25 and 26 from the survey specifically address the use of feedback from assessments. A modest percentage (42%) of participants suggested no change in their students using the feedback provided by their classroom assessments. However, a higher percentage (50%) from both groups rated this as a positive change rather than as a negative change. In order to determine the use of assessment feedback by students (Statement 25), teachers would need to provide formative or summative assessment opportunities for students actually to use the feedback. For ELA, this opportunity may present itself regularly, particularly with grammar, sentence structure, stylistic writing, and reading comprehension. Student use of feedback might also assume that students understand the feedback, which, if they do not, would require instructional time to explain. As previously discussed, instructional time for this type of explanation may be limited. Statement 26 of the survey instrument regarded assessment feedback focusing specifically on the participants' use of TAKS data when considering their own classroom assessment needs. If an instructional change in this area was perceived, it was typically positive; however, approximately one-third (33%) reported no change. As many districts use TAKS data to determine assessment needs, the percentage indicating no change was a bit surprising.

Statement 27 in this category of the survey focuses on the promotion of higher-level thinking. Assessments are tools used for the measurement of thinking ability, and since the implementation of TAKS, there has been a heightened awareness of the use of assessments for that specific purpose. For higher-level thinking, both groups indicated a positive change in the ability of their assessments to promote higher-level thinking in their students. Along with performance-based and metacognitive assessments, ELA can include higher-level assessments in the form of writing that are consistent with their curricular concerns revealed by TAKS data.

One assumption of the study was that participants who have been with one district since the implementation of TAKS may observe less change in their specific instructional elements. Additionally, if participants from the recently hired group only began teaching after the implementation of TAKS, their perception of assessment may be very different from participants who taught prior to TAKS, regardless of experience within a specific school district. Since 2003, districts have spent time considering the quality and construction of their assessments, and as TAKS has evolved in the curricular area of ELA, it could be assumed that emphasis about assessments has been specifically placed on ELA. More than two-thirds (74%) of the participants indicated TAKS has positively affected the quality of their classroom assessments (Statement 28).

Teacher Knowledge

This area of the survey regarded content knowledge, pedagogical knowledge, and professional development (Statements 29-31). TAKS is a content-specific test covering specific objectives. As ELA is a curricular area that has endured testing prior to 2003, the implementation of TAKS was intended to provide a more rigorous assessment than

those of previous years. The test became more rigorous in order to increase the rigor of accountability. One might assume an increase in expectations of teacher ability in content and instruction may accompany these heightened expectations with student achievement and higher test scores.

For Statement 29, an increased requirement in teacher content knowledge, more than half (58%) from a combination of both groups perceived a positive change. Several indicated a significant positive change. Participants responded similarly in terms of pedagogical knowledge. Specifically for Statement 30, the veteran group (69%) reported a higher percentage than did the recently hired group (56%) in terms of a positive change in pedagogical knowledge. Combining Statements 29 and 30, an average of 30% of both groups of participants perceived no change in either area. Considering a positive change in both instructor content and pedagogy, if one of the objectives of TAKS was to push for better instructors, the reported perceptions found in the data of most participants would support this goal. The notable difference between the groups regarding no change in pedagogical knowledge may be attributed to the fact that many participants in the recently hired group received pedagogical training following the implementation of TAKS. High-stakes testing may have influenced teacher preparatory programs to address different pedagogical needs as compared to teacher-training programs in place prior to the more rigorous accountability system. This difference in training may have influenced the perception of the recently hired group.

In order to meet the challenges facing school districts, many districts require or encourage professional development for their teachers. As accountability increases, districts may increase their use of professional development to assist teachers in

addressing and adapting to the changing expectations. Data from the survey support this assumption. A large percentage (81%) of participants perceived a positive change with the encouraged use of professional development (Statement 31). However, the survey does not address the nature of professional development. Professional development potentially includes many areas of instruction, professionalism, technology, or curriculum expansion. Therefore, the participants had to determine through self-reflection what criterion they chose to rate the change as positive.

Summary

Data from this study reveal that secondary ELA teachers, regardless of experience in a specific district, perceived that implementation of the TAKS has impacted their instructional practices in a generally positive manner as related to the commonly recognized components of effective instruction. Depending on the specific area of instruction addressed by the survey instrument, participants from both groups suggested minor to significant negative or positive changes. Although for each statement, several ELA teachers did not perceive any instructional changes, some observable trends from the data include a broad perception of how TAKS has affected student-centered instruction, student interests, instructional communication, assessment, classroom environment, instructional time, and teacher knowledge. Given specific statements within these categories, participants in the study provided a mixture of perceptions with no clear trend emerging positively or negatively. However, the most commonly selected measure of perception used by both participating groups was “no change” in their pre and post-TAKS instructional practices.

Frankly, several of the positive and “no change” results of the data were not anticipated by the researcher. Based on his colleagues’ attitude toward TAKS, the researcher assumed participants would manifest more negative perceptions of TAKS-imposed instructional changes. However, as previously discussed, most of the negative perceptions relate to lack of time rather than TAKS as an intrusion. The two areas of the survey where participants indicated the most positive change were assessment and instructor knowledge. Logically, because TAKS is an assessment, its direct influence would most likely be in the area of assessment. Participants typically perceived the statements that dealt with alignment of assessment and instruction as positive changes. As the researcher has encountered in his own instruction, TAKS has required more consideration of constructing appropriate assessments. As districts work to improve test scores, different programs and trainings are used to help teachers become better teachers. If many of the surveyed participants had a positive experience with professional development, they would likely indicate this as a positive change.

If the categories in the survey relate to quality classroom instruction, the general perception of participants is that TAKS had a modest positive effect on their instructional practice. Although much research suggests high-stakes tests present a marginalizing effect for specific students in the classroom, the results from this study suggest TAKS affects instructional change in the classroom at a minimal level, if at all.

Limitations and Future Research Directions

The findings of this study are limited by the low return rate of the surveys. The return rates for three of the four participating districts were relatively low, and unexpectedly, the number of recently hired participants outnumbered the veterans. For

statistical purposes, a more equal distribution of participants is desirable; however, this specific survey only provides quantifiable data, categorized data with limited insight to change in teacher perception. The missing component not revealed by the data from the study, and arguably the next direction of research would be to determine *why* participants perceived the directional change that they indicated on their survey. Although qualitative in nature, this research would provide a deeper understanding of the differences between the two groups, differences that may be miniscule but important. A deeper qualitative approach may reveal aspects of teacher perception skirted by the survey. Additionally, teacher voices from districts more affected by a need for higher test scores may provide an entirely different set of survey data, as might teachers from different subjects. Since TAKS now includes social studies and science, teachers in those curricular areas may perceive instructional changes differently than teachers from curricular areas that have endured testing for a longer period. As with most educational research, the data from this study provide information that leads to a new series of questions. As much research reports negative effects of high-stakes testing, the research studying teacher perceptions of instructional changes or increased use of proven instructional strategies typically results in what most educators would consider as positive. Studies show a drop in SAT scores at schools that emphasize their high-stakes state assessment. Research also suggests that higher dropout rates accompany the increased use of high-stakes testing. However, are higher accountability and testing the culprits leading to these trends? Generational changes have forced education to adapt to new learning methods, different parenting styles, newly discovered learning deficiencies, and other challenges. High-stakes testing resulting from the need for accountability may be a byproduct of the fast

pace in educational transition. If the desire of the accountability system is to promote a specific content mastered by a specific population of students taught by teachers who adapt their instruction accordingly, the findings from this study suggest minimal, if any instructional adaptation.

Implications

This study provides information about teacher perception that could be used to shape future policies or programs regarding accountability and quality instruction. As the accountability system is typically scrutinized for its rigidity and lack of fairness, more information about the ramifications of such a system can help policy makers, school administrators, and parents learn more about its benefits and shortcomings. The data from this study indicate that teachers can supply an important voice for systemic change or system validation. Teachers did not recognize TAKS has having an overwhelmingly significant positive effect on their classroom instruction. Effective instruction may remain a fluid part of the classroom regardless of external societal pressures or political trends. The environment may change and the system may evolve, but teachers are able to recognize the elements of effective instruction as a constant in the ever-changing process. Policies and programs designed to assist education may be better focused on preparing teachers to be effective instructors who can push students to achieve no matter what educational trend may capture the fancy of politicians. However, this study is limited by its scope, collecting only data about teacher perceptions without the clarification of why teachers rated the statements as they did. This study did not consider the breadth and dept of each instructional area. Teachers may feel differently if asked to consider the quality of the instructional time they have with their students. Nonetheless, the most

important implication from this study is that teacher voice should be an essential part of the creation of educational programs and policies designed to improve the quality of the current system.

Policy implications from this study most likely would focus on the body of essential knowledge, refining instruction to produce specific change in student achievement. Present Texas educational policy supports a system of essential knowledge (TEKS) that should be achieved by its students as measured by the TAKS. Such a policy confines the knowledge worth knowing to the knowledge tested and constrains the instructional creativity of classroom teachers to TAKS-like exercises. The findings from this study do not discourage the use of the current accountability system. However, one consideration that should be included when developing, adapting, or amending educational policy would be to include the expertise of educators. Whether federal, state, or local, policies often lack teacher input. The data from this study suggest that teachers' perceptions can be a very important element when considering policies that affect classroom instruction. Educational policy, designed to affect instruction that does not include the teachers voice in its creation, is doomed to failure.

APPENDIX A
SURVEY INSTRUMENT

Survey Instrument

Please respond to each of the following statements by choosing one of the provided responses.

Classroom Communication:

Since the implementation of the Texas Assessment of Knowledge and Skills test,

1. Classroom communication has become more important.

+ 5	4	3	2	1	0	1-	2-	3-	4-	5 -	
Strong positive change					No Change		Strong negative change				

2. My method of classroom communication has changed.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

3. The way I communicate my learning objectives to my students has changed.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

4. My learning objectives are clearer and easier to understand.

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

5. I am able to spend more time considering individual student needs.

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

6. I feel I have more time to communicate important concepts.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -

Strong positive change No Change Strong negative change

7. My students and I spend more time developing a classroom dialog.

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

8. My communication has become more personal.

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

9. My classroom is an environment where students feel comfortable sharing ideas.

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

10. There is less time to communicate effectively with the students.

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

Student-Centeredness

Since the implementation of the Texas Assessment of Knowledge and Skills test,

11. Students spend more time independently exploring concepts found in the content.

+ 5	4	3	2	1	0	1-	2-	3-	4-	5 -	
Strong positive change					No Change		Strong negative change				

12. A considerable number of lessons are designed for students to explore the content.

+ 5	4	3	2	1	0	1-	2-	3-	4-	5 -	
Strong positive change					No Change		Strong negative change				

13. Students have more control over the material being covered.

+ 5	4	3	2	1	0	1-	2-	3-	4-	5 -	
Strong positive change					No Change		Strong negative change				

14. When considering the content, students are able to work at their pace.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

15. There is more opportunity for student reflection.

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

16. The classroom curriculum considers the level of interest of the student.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -

Strong positive change No Change Strong negative change

17. Many classroom decisions are made based on the needs of the students.

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

18. Students seem to enjoy the curriculum.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

19. Students have a deeper understanding of the content.

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

20. Frequently, students have a positive attitude about the material.

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

Knowledge of the Instructor

Since the implementation of the Texas Assessment of Knowledge and Skills test,

21. Teachers are required to know more about their content.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

22. Teachers are required to know more about pedagogy.

+ 5	4	3	2	1	0	1-	2-	3-	4-	5 -
Strong positive change					No Change			Strong negative change		

23. Continued professional development has been encouraged.

+ 5	4	3	2	1	0	1-	2-	3-	4-	5 -
Strong positive change					No Change			Strong negative change		

Classroom Assessment

Since the implementation of the Texas Assessment of Knowledge and Skills test,

24. The quality of classroom assessments has improved.

+ 5	4	3	2	1	0	1-	2-	3-	4-	5 -
Strong positive change					No Change			Strong negative change		

25. More consideration is given to the construction of a classroom assessment.

+ 5	4	3	2	1	0	1-	2-	3-	4-	5 -
Strong positive change					No Change			Strong negative change		

26. Many classroom assessments are created by my department or school district rather than me individually.

+ 5	4	3	2	1	0	1-	2-	3-	4-	5 -
Strong positive change					No Change			Strong negative change		

27. Students use the feedback provided by most classroom assessments.

+ 5	4	3	2	1	0	1-	2-	3-	4-	5 -
Strong positive change					No Change			Strong negative change		

28. TAKS has helped to make me aware of my classroom assessment needs.

+ 5	4	3	2	1	0	1-	2-	3-	4-	5 -
Strong positive change					No Change			Strong negative change		

29. The use of performance-based assessments has increased.

+ 5	4	3	2	1	0	1-	2-	3-	4-	5 -
Strong positive change					No Change			Strong negative change		

30. The use of portfolio assessments has increased.

+ 5	4	3	2	1	0	1-	2-	3-	4-	5 -
Strong positive change					No Change			Strong negative change		

31. Assessments are designed to produce higher-level thinking.

+ 5	4	3	2	1	0	1-	2-	3-	4-	5 -
Strong positive change					No Change			Strong negative change		

APPENDIX B

INCREASED INSTRUCTIONAL PRACTICE OR TOOL

<i>Instructional Practice or Tool</i>	<i>Mean</i>	<i>SE</i>	<i>% Increase</i>	<i>% Large Increase</i>	<i>Total % Increase</i>	<i>% Same</i>
Open-response questions	4.05	0.04	57.4	24.2	81.6	18.0
Creative/critical thinking questions	3.79	0.03	55.9	12.1	68.0	31.3
Problem-solving activities	3.74	0.04	51.8	11.9	63.7	35.2
Use of rubrics or scoring guides	3.71	0.04	49.8	11.5	61.3	37.0
Writing assignments	3.69	0.04	49.8	10.0	59.8	39.4
Inquiry/investigations	3.64	0.04	45.1	10.2	55.3	43.5
Computers/internet and/or online research service	3.59	0.05	41.8	10.8	52.6	44.4
Calculators	3.56	0.06	27.6	16.0	43.6	53.6
Cooperative learning/group work	3.55	0.05	42.6	09.0	51.6	43.4
Use of charts, webs and/or outlines	3.54	0.05	37.5	09.7	47.2	51.2
Computers/educational software	3.52	0.05	40.4	08.3	48.7	47.5
Project-based assignments	3.41	0.04	36.4	04.5	40.9	55.1
Use of portfolios	3.41	0.05	29.7	07.6	37.3	59.5
Use of manipulatives	3.37	0.04	28.9	05.0	33.9	64.2
Visual aids	3.36	0.04	29.8	04.9	34.7	62.0
Modeling	3.33	0.04	31.2	03.6	34.8	60.0
Use of response journals	3.30	0.05	26.4	04.5	30.9	64.6
Interdisciplinary instruction	3.28	0.04	28.7	02.0	30.7	65.3
Discussion groups	3.28	0.04	27.5	03.2	30.7	63.7
Manipulatives	3.28	0.04	23.2	03.8	27.0	71.1
Group projects	3.27	0.04	32.0	02.4	34.4	57.2
Supplementary books	3.27	0.04	26.6	02.0	28.6	68.3
Facilitating/coaching	3.26	0.05	23.1	07.4	30.5	67.1
Newspaper/magazines	3.26	0.04	27.2	01.8	29.0	66.5
Audiovisual materials	3.26	0.03	26.0	01.6	27.6	69.9
Collaborative/team teaching	3.26	0.06	20.5	06.8	27.3	67.6
Peer or cross-age tutoring	3.26	0.05	21.0	05.0	26.0	70.2
Lab equipment	3.24	0.05	24.8	02.4	27.2	67.9
Use of exhibitions	3.20	0.04	18.3	04.1	22.4	72.6
Primary source materials	3.18	0.03	18.2	01.7	19.9	77.3
Reference books	3.17	0.03	16.7	01.6	18.3	79.3
Lessons based on current events	3.15	0.04	21.2	01.8	22.0	68.5

APPENDIX C

CORRESPONDENCE WITH PRINCIPALS OF PARTICIPATING SCHOOLS

Date

Dear (Administrator),

I am a doctoral student in Curriculum and Instruction at the University of North Texas. In researching my dissertation, I am particularly interested in the relationship, if at all, between high-stakes testing and classroom instruction. There is a considerable amount of research that discusses the affects of high-stakes testing; however, there is only minimal research regarding the relationship between high-stakes testing and classroom instruction. This study is my initial effort to determine how teachers perceive the influence high-stakes testing has on their instructional decisions made by. I have chosen to study the perception of 9th, 10th, and 11th grade English Language Arts teachers about their instructional changes since the implementation of the Texas Assessment of Knowledge and Skills test.

This study has been approved by the _____ Research Authorization Committee and with your permission; I would like to offer my research survey to your ELA teachers. If you have questions or concerns about the study, you can contact the committee's chairperson, _____. If you agree to the research, I would, by reviewing your school website, determine who among the faculty are English teachers and then individually email them information about the research and a link to the survey. Other than time, there will be no cost to the participant. At any time during the research a participant wishes to withdraw or discontinue their participation, they may do so without consequence. Additionally, if you wish to withdraw your approval for the continuation of the research, the research will immediately discontinue.

It is my opinion that the information discovered from this research could offer significant contributions to the overall body of knowledge regarding teacher perceptions of instructional change. At the conclusion of the research, I would gladly share my findings with your faculty at your discretion. For more information about the details of this research, please feel free to contact me at _____ or my university advisor, Dr. Gloria Contreras, at _____. I thank you for your careful consideration of this matter.

Respectfully,
Brian Horn

APPENDIX D

INFORMED CONSENT TO PARTICIPANTS

Dear (Teacher),

My name is Brian Horn, and I am a doctoral student in Curriculum and Instruction at the University of North Texas. As my dissertation topic, I have chosen to research the perception of 9th, 10th, and 11th grade English Language Arts teachers about their instructional changes following the implementation of the Texas Assessment of Knowledge Skills test. I realize this is a very busy time for teachers, particularly as the school year begins. Would you be willing to participate in taking the online survey at the link provided below? Your participation is voluntary, and at any time, you may discontinue your participation. All survey information should be completed by October 15th and will be reported anonymously. I have enclosed the link to the online survey with this email. If you have any questions regarding the instrument, the research, or how the data will be used, please feel free to email me or call at _____. I greatly appreciate your consideration of this email.

Respectfully,

Brian Horn

(survey link would go here)

APPENDIX E

RECONFIGURED SURVEY INSTRUMENT

Survey Instrument

Please respond to each of the following statements by choosing one of the provided responses.

Student-Centered Instruction (Factor 1):

Since the implementation of the Texas Assessment of Knowledge and Skills test,

1. My learning objectives are clearer and easier to understand.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

2. I am able to spend more time considering individual student needs.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

3. A considerable number of lessons are designed for students to explore the content.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

4. Students have more control over the material being covered.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

5. When considering the content, students are able to work at their pace.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

6. There is more opportunity for student reflection.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

Student Interest (Factor 2):

Since the implementation of the Texas Assessment of Knowledge and Skills test,

7. The classroom curriculum considers the level of interest of the student.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

8. Many classroom decisions are made based on the needs of the students.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

9. Students seem to enjoy the curriculum.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

10. Students have a deeper understanding of the content.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

11. Frequently, students have a positive attitude about the material.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

12. The quality of classroom assessments has improved.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

13. Many classroom assessments are created by my department or school district rather than me individually.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

Instructional Communication (Factor 3):

Since the implementation of the Texas Assessment of Knowledge and Skills test,

14. Classroom communication has become more important.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

15. My method of classroom communication has changed.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

16. The way I communicate my learning objectives to my students has changed.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

Time (Factor 4):

Since the implementation of the Texas Assessment of Knowledge and Skills test,

17. There is less time to communicate effectively with the students.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

18. Students spend more time independently exploring concepts found in the content.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

Classroom Environment (Factor 5):

Since the implementation of the Texas Assessment of Knowledge and Skills test,

19. I feel I have more time to communicate important concepts.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

20. My students and I spend more time developing a classroom dialog.

+ 5 4 3 2 1 0 1- 2- 3- 4- 5 -
Strong positive change No Change Strong negative change

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

+ 5	4	3	2	1	0	1-	2-	3-	4-	5 -	
Strong positive change					No Change		Strong negative change				

+ 5	4	3	2	1	0	1-	2-	3-	4-	5 -	
Strong positive change					No Change		Strong negative change				

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

+5	4	3	2	1	0	1-	2-	3-	4-	5-	
Strong positive change					No Change	Strong negative change					

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

+5 4 3 2 1 0 1- 2- 3- 4- 5-

Strong positive change No Change Strong negative change

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