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Nancy Ellen Linden
May 2013

# COMPARING INCORRECT ANSWER PERCENTAGE DISPERSIONS IN STATEWIDE READING COMPREHENSION SCORES AND THEIR <br> IMPLICATIONS FOR SCHOOL LEADERS 

A Doctoral Thesis Presented to the Faculty of the College of Education<br>University of Houston<br>In Partial Fulfillment<br>of the Requirements for the Degree

Doctor of Education<br>in Professional Leadership

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May 2013.

## Dedication

Dedication, thanks and praise to the Creator God as defined in the book of Romans, Chapter I. Without whom I would not be able to observe the world around me. This Doctoral Thesis is also dedicated to my father who has been my biggest fan, Dr. Richard Allen Linden. Thank you for believing in me Daddy. I would also like to dedicate this my best friend Laura Yough and her family, Chuck, Josh and Lynden for being my extended family while moving to Houston. Thank you all for your support. Thanks also to Tami Tafolla for recommending me to the University of Houston. I would also like to dedicate this my Chair, Dr. Allen Warner, thank you for your guidance and support while I was in the process of writing and thinking about this Study. I would also like to dedicate this to my committee: Dr. Steven Busch, Dr. Angus Mac Neil and Dr. Laveria Hutchison for their support in helping to refine ideas, modeling professional leadership, and providing support for on-going critical thought in finishing this task.

## Acknowledgements

My expression of appreciation to all who have generously assisted in the completion of this paper, thank you. A special "thank you" to my committee Dr. Allen R. Warner, Dr. Steven D. Busch, Dr. Angus J. MacNeil and Dr. Larveria F. Hutchison for their support in my research endeavor. And thanks to Dr. Julie Fernandez for support in the understanding of structure of this document. Thanks to Ms. Jessica Zorola, in the Graduate School Office for her continued help with class registrations. My sincere gratitude and thanks for Dan Houston, and Dr. John R. Slate with their help in editing. A special thanks to Theresa Campos and Josephine Rice for the constant support and help with group presentations. A special thanks to the entire Executive Ed. D. Cohort as well as the Northwest Cohort: Todd Davis, Chanel Fields, Kenneth Gay, Jeanette Gerault, Delic Loyde, Kelly Marchiando, Valerie Martinez, Kwabena Mensah, Michael Nasra, Laura Perry, Demetra Phipps, Serena Pierson, Karen Kulhanek-Rochin, and Jeff Stichler. A special thanks also to Ms. Jenny Eaton from The Texas Education Agency for providing all the resource data to conduct this study. Finally to all my family and friends who encouraged me along the way in this challenging endeavor.

# COMPARING INCORRECT ANSWER PERCENTAGE DISPERSIONS IN STATEWIDE READING COMPREHENSION SCORES AND THEIR <br> IMPLICATIONS FOR SCHOOL LEADERS 

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Linden, Nancy E. "Comparing Incorrect Answer Percentage Dispersions In Statewide Reading Comprehension Scores And Their Implications For School Leaders." Unpublished Doctoral Thesis, University of Houston, May 2013.


#### Abstract

This Differential Distractor Functioning (DDF) study involved 855,023 regular education students in Grades 3, 6, and 11 in Texas. Percentage dispersion anomalies were identified in the 2009 Texas Assessment of Knowledge and Skills Item Analysis Reports provided by the Texas Education Agency. Questions addressed in this investigation were: How many students answered incorrectly on certain test items? What items had the highest frequency of a single wrong answer? Which test objectives had balanced/even dispersions? Were these dispersions similar in other grade levels? Data analyses yielded an increase in incorrect answer anomalies by $8 \%$ from Grade 3 to Grade 11. Furthermore, a $100 \%$ incorrect answer anomaly was revealed for Objective 2 Applying Literary Elements for Grade 6 students. From these results, educational leaders need to examine more closely specific objectives and test items so that they can determine underlying reasons for students not answering these objectives and test items correctly.


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## Chapter 1 Introduction

One of the early pioneers in the field of distributed computing, Edsger Dijkstra, went on record at the 1969 North Atlantic Treaty Organization (NATO) Conference in Rome, Italy, stating: "Testing shows the presence, not the absence of bugs" (Dijkstra, 1970, p. 16). This particular remark was offered in relation to computer programming, as well as the need for continual testing to help programmers make the best possible experience for productive use of distributed computing. With this thought in mind, borrowing the idea from computer programming and applying it to academic tests, the same notion relates to the standardized assessment movement in America. More specifically, this comparison is analogous with regard to the results that tests yield bugs!

If educational leaders are to evaluate and reevaluate constantly the needs and concerns for addressing the pernicious "bugs" that pervade schools, school districts, and states, and make decisions that will have a positive impact upon the data collected, then a close examination of the assessment construct is imperative. The history of testing concepts, arguments of ideology, and format protocol exposes a need for continual research with regard to test structure. Furthermore, it is essential that researchers begin to explore current trends in standardized assessment construct validity and reliability for emerging issues about what and how to teach.

Concerns revolving around the growing importance of standardized assessments, and what they truly measure (i.e., the stated objectives and correct answer choices), generate debate among many educational leaders. Due to the fact most school campus summaries do not normally provide this detail - unless requested, the purpose of gaining
additional information from the incorrect choices on assessments is something commonly overlooked by most educators. However, this needed information provides educators a three-fold analytical benefit to consider in strategies for instruction.

First, by examining the incorrect answer choices selected from the data on an item analysis report, insights may be gained into the types of distracters that are effective with individual students who may need help with reading comprehension or technical reading. Secondly, instructional leaders can review a local population or multiple populations within a district to see if the same types of distracters were present. Furthermore, they may be able to determine whether professional staff development needs are present for targeted campuses within the school district. Third, instructional leaders can make informed inferences about the strand of thinking in which students engaged to select certain types of incorrect answers. Just as a typical field question may be reinvented for the future, educators can collaborate and readjust instruction for the incorrect thinking that caused students to answer incorrectly.

The significance of test item analysis is critical for decision-making in the progressive and changing environment of modernity. As educators, are we testing "real world" skills that can translate into the 21st century appropriately? Will these skills benefit our students in the present as well as the future? Or, are we simply hanging on to old protocols of a bygone past epoch?

Utilizing the sample data provided from the State of Texas, an investigation of critical incorrect answer choices was conducted in this investigation. As such, a purpose of this study was to reveal any relationships that might be present between incorrect answer selections and specific reading comprehension objectives. If novel discoveries
were made, this study provided meaningful insights in learning and instruction for all practitioners. More specifically, such discovery could serve as useful information that will allow practitioners the ability to eliminate and/or reframe some of the "bugs" present with the current system of assessment.

## Brief Review

Educational leaders analyze the data that educational testing associations provide and, subsequently, develop blueprints for improvement in weak areas. Educational leaders depend on the most accurate data from testing to help them pinpoint the "bugs" and remove them. Yet, when studying the data, administrators typically examine test results with some degree of generalization. This "generalization" being defined by only reported correct answers and the percentiles that correlate with those correct answers. This type of study is known as Differential Item Functioning analysis (also called "DIF"). According to the National Center for Research on Evaluation, Standards, and Student Testing (CESST), an abundance of studies exist regarding DIF as of 2008. Much information can still be gleaned from examining the DIF results as they are formatted on the final summary reports for the administrator; yet, most decision makers do not go beyond what is already set-up and provided by testing association as final. Most data are not in composing details of incorrect answers - or the Differential Distractor Functioning (DDF). For example, the average campus summary report does not include the selection of either the correct or incorrect answer selections (i.e., DIF), much less an additional summary report of the DDF.

Most often, the actual test booklets per grade level are not provided with the performance summaries through which to analyze the items one by one in order to
determine detailed instructional needs and possible strategies that could be planned for the following school year. The problem with performance data reports - in the State of Texas, at least - is that they provide sufficient amounts of quality data; yet, they also leave a lot of good data out of the report, which results in leaving school districts with the task of attempting to make assumptions or "best guess" solutions. Moreover, the solution (at least for the next 20 years) is ridding the system of all standardized assessments even though some educators would argue otherwise. In a controversial article in The American School Board Journal entitled, Teaching to the Test, Kevin Busweller quoted David Shane, the president of Community Leaders Allied for Superior Schools (CLASS), who works with communities in Indianapolis, stated the following:

With the nation heading toward a more knowledge-based, technology savvy economy, it will be difficult for schools to justify developing a unique curriculum while ignoring what is necessary to remain accountable. These days, the main ingredient for remaining accountable is good performance on standardized tests. You can't opt out of measuring results. If you do that you're in never-never land. (Busweller, 1997, p. 5)

Whether educators want to or not, standardized tests do provide overt, concrete data that aids in educators' attempts to make the best decisions for the directions of instructional strategy. Thus, standardized assessments are here to stay in America - at least for the next 20 years, and most likely beyond.

## Purpose of the Study

The purpose of this study was to examine answer options for analysis (DDF) in the State of Texas, as a representative sample for the nation. It is important to note that

Texas had approximately over 250,000 students in each grade level for this study. Additionally, the purpose of this study was to determine the extent to which relationships might be present between academic objectives and anomalies with incorrect answer (DDF) dispersions existed and correlated.

In this research investigation, only reading comprehension answer selections that were incorrectly answered were explored. From these incorrect choices, different percentages dispersions occurred. From this range of dispersion, research was conducted in a quantitative comparison of answer selections and their relationship to the respective test objectives was examined to determine whether the extent to which types of repeating patterns might be present.

The Texas Education Agency (TEA) had set up its reading comprehension score data via the following four basic categories: (1) Basic Understanding, (2) Applying Knowledge of Literary Elements, (3) Using Strategies to Analyze, and (4) Applying Critical-Thinking Skills. Using the general objective categories set-up by TEA and the percentage data that were provided by the summary test performance reports and the item analysis reports for the released test version, discoveries were made with respect to the frequency of questions answered incorrectly and whether any such questions were concentrated with high percentages into objective skill clusters both in a single grade level such as Grade 3, a horizontal study, or in all three grade levels (i.e., Grade 3, Grade 6, Grade 11/Exit Level) such as in a vertical study.

The high percentage anomalies yielded some interesting insights to this DDF study. The TEA provided most of the public data information separately; nevertheless, the aim of this study was to correlate these ideas, as well as to examine some of the
relationship aspects in more depth. Additionally examined in this investigation were whether the percentage anomalies were also present for students in Grade 6 and in Grade 11/Exit level. Specifically addressed was this study: Will the same types of anomalies occur for longitudinal analyses? Ideally, a more refined analysis of whether the same "bugs" were repeated as students age and develop was conducted. Thus, another salient question was examined: Will students reading comprehension errors stay the same, increase, or diminish with age and maturation? These questions provided solid rationales to conduct a study such as this one.

## Research Questions

Examined in this research investigation were incorrect responses to TAKS Reading Comprehension items that had the highest discrepancy of percentage dispersion. As such, this study was constructed from a quantitative field of research. All participants' identities were completely anonymous. The Public Information Act protected these participants and also provided the data needed for State educational leaders to make decisions about curriculum and instruction for State, district and campus levels.

The questions for this study (using third grade as the foundation) were as follows:

1. How many questions in third grade reading comprehension were missed in a grand total?
2. Which questions were most frequently missed?
3. How many questions had students missing less than $90 \%$ correct?
4. Out of the $10 \%$ or more percentage dispersions of wrong answers, was the dispersion percentage equally distributed or unequally distributed?
5. If the percentage dispersion was unequally distributed, was there a higher percentage for one single wrong answer choice? (For example, if A, B, C, and D were the choices for the test item, and A was the correct answer, then possibly B had a larger percentage then C and D as the three possible incorrect answers choices.)
6. How many high percentage anomalies occur in the third grade reading comprehension assessment out of 36 questions?
7. What knowledge or skill objectives do the percentage anomalies fall under?
8. Was there a reoccurring pattern of the same objective repeatedly for third grade?
9. Does that same repeating high percentage dispersal occur within the same type of knowledge or skill objective in a higher-grade level? (Sixth grade and the Exit level will be examined the same way, as third grade and objective categories were compared, and after these findings recommendations were made in Chapter V.)

If no relationship or connection was present with in the vertical comparison of knowledge and skill objectives, then individual or horizontal grade level anomalies were examined for recommendations in Chapter V. The following questions were addressed in this investigation: How many students answered incorrectly on certain test items? What items had the most frequency of a single incorrect answer option? Which test objectives had balanced dispersions and which did not? And what do educational leaders need to provide for instructional strategies in improving reading comprehension for the future?

## Definition of Terms

One specific term that was repeatedly used in this study was the Texas Education Agency (TEA). Due to the fact that the TEA provided all the data for this study, TEA will be frequently referred to throughout this document. Also, Texas school districts are usually known as ISDs or Independent School Districts, the name of the school district comes first such as the Pine Tree ISD or Spring ISD, and the abbreviation ISD comes after the name. Texas has a unique system of public school districts that are independent in that much of the decision making for district land and district lines, and thus bear the abbreviation ISD in the name of the district. Some other terms that occur in Chapter V for clarification with the standout examples are the Question-Answer-Relationships or (QAR) developed by Raphael and was then made part of the Pearson -Johnson Study of 1978 for coding reading comprehension questions in the Question - Answer Relationship (QAR). Each incorrect standout answer was coded from the Grade 3 assessment as a textually explicit (TE), textually implicit (TI), or scriptally implicit (SI) within each of the four TEA objective categories for discovering the difficulty of each higher percentage DDF (Raphael, 1986).

This procedure yielded an academically-accepted method of coding questions that has the following three additional subcategories:

1. TE, which stands for "textual explicit", that are answers to the test stem that are cued in the passage and are verbatim in the answer form;
2. TI, which means "textual implicit", wherein the question requires that reader to make some sense out of the textual language; and
3. SI, which represents those questions that demand that the reader would intergrade what is already stored in the mind and weave those ideas in with what is presented from the text. (Raphael, 1986)

Some other common academic acronyms that are commonly used are Reading Comprehension (RC) and multiple-choice (MC). Both of these terms and abbreviations are used throughout the context of this study.

Because the TEA does such a thorough job of making such they are on target with test validity and reliability, and because they have several doctoral level employee staff members dedicated to the psychometrics that report to the student assessment department, assumed herein is that this type of state test provides both reliable and valid scores due to the scale scores published biannually and continually for each version of the test at every grade level. Texas has been using standardized assessments for over 30 years, and the TEA provides very technical data reports to demonstrate score reliability and score validity to the public.

The term, Item Analysis Summary Report, will be used for analysis purposes because all of the data examined in this study comes from these reports for Grade 3, Grade 6, and Grade 11/Exit Level students. Exit Level may also occur as jargon for the state of Texas. The Exit Level exam for 2009 was simply the exam that is the last exam students will take in high school. This Exit Level exam determined if the students would graduate with a high school diploma. At the time of this study, the Exit Level exam was usually taken in Grade 11. Thus, for purposes of this investigation, Grade 11/Exit Level and eleventh grade are synonymous.

Also, the terms percentage score and raw score or raw data were used frequently as part of this study. Raw data/score are data collected that constitute the original data with no altering or converting into a scale score or other uses of formulas to reflect a population. Percentage data or percentage scores are scores in which raw data were used and converted into percentage data. For example if that raw data showed that 75 students answered correctly and 25 students answered incorrectly, in terms of percentage data it would be $75 \%$ of students who answered correctly and $25 \%$ of the students who answered incorrectly. Thus, percentage data reflect the raw data in a percentage form. For this study raw data were converted into percent-score, and percentage-score data were converted back into raw data. According to the ETS website (Educational Testing Service):

A percent-score represents that percentage of questions a test taker answers correctly on a test. For example, if a test taker answered 20 out of 50 questions on a test correctly, then his or her percent-score would be $40 \%$. The raw score in this example is 20 . The percent-score can be considered an adjusted raw score to account for differences... The percent-score is easy to calculate and understand, and is often used in classroom tests for score reporting. (ets.org, research page) And, finally, the Differential Item Functioning (DIF) is a study of the incorrect and correct answers on standardized assessments, and the Differential Distractor Functioning (DDF) is a study of the incorrect answers only on standardized assessments. This particular glossary of terms is necessary because the language that one uses that may be considered educational jargon; hence, application of these terms will aid in overall study understanding for individuals not working within the education profession.

## Limitations

This investigation has several limitations that should be emphasized. First, this particular study was limited to the State of Texas. According to the TEA (2009), 1,040 school districts were present across the state at the time of the assessment. Out of these school districts, data on only third grade, sixth grade, and Exit Level (or eleventh grade) students were represented in this study. Out of the different types of tests given in 2009, only the TAKS Reading Comprehension test items were analyzed. Another limitation is that only publicly available data were examined in this study as the TEA releases past or retired assessments to the public. The TEA also offered all the data that comes with each assessment. The complete data set was open to the public and was a limitation in that other assessments in the same year were not part of the study. Two administrations of the same type of test occurred in 2009, but only one assessment version was released and one other version was not released. Accordingly, only the first administration of reading comprehension in March 2009 for Grade 3 and April 2009 for Grades 6 and Grade 11/Exit Level was examined.

This study was also limited to the percent-score data that are converted into back into raw data from the Item Analysis Summary Reports. This report provides the percent-score data for the percentages of correct and incorrect answer options on each test question. The TEA posts this report on-line along with a sample released test and an answer key. Other data about the test such as scale scores were also posted online, however, for the purposes of this study, a narrow scope of incorrect/correct answers on one form of test given in a single year was investigated.

Moreover, in March/April of 2009, the State of Texas administered standardized Reading tests for more 750,000 third grade, sixth grade, and Exit Level regular students. This study was limited to only those students in third grade, sixth and Exit Level who were considered "Not in Special Education". In other words, data on only students who were considered "regular" learners were analyzed herein. For example, from the TAKS Summary Report on Group Performance, of March/April 2009, this category limited the study to 299,689 students in third grade, 148, 134 male students, and 151,492 female students (with 63 students not providing information about gender). With respect to students in Grade 3, Grade 6, and Grade 11, data from students with the following school designations were analyzed: economically disadvantaged, Title I participants and nonparticipants, Migrant, Limited English Proficiency (LEP), Bilingual, English as a Second Language (ESL), Gifted and Talented, and at-risk (TEA, 2009).

The TAKS Reading Comprehension exam for Grade 3 students was 36 questions long. For these 36 questions, they were categorized into four different groups of objective categories (i.e., Basic Understanding, Applying Knowledge of Literary Elements, Using Strategies to Analyze, and Applying Critical -Thinking Skills). The TAKS Reading Comprehension Grade 6 assessment was comprised of 42 questions with the same objective categories; and, the Exit Level exam had 48 questions in the multiplechoice under the same categories. It should be noted that only those answers that were considered "incorrect" were examined in this investigation. Moreover, out of those limited incorrect answers, only the answer items with the highest percentage of dispersion were analyzed, $10 \%$ or higher for the test question. The study was also restricted to a quantitative comparison of DDF selections anomalies. No matter how well
it is organized or conducted, every study has limitations. These limitations reflect why it is not reasonable to employ words such as "prove" or "disprove" with respect to research findings. It is always possible that future research will cast doubt on the validity of any hypothesis or the conclusions from a study.

## Chapter 2 <br> Literature Review

Assessments are meaningful in all respects due to the fact that they provide a continual stream of data to help educational leaders make decisions for identified needs and improvements within student achievement. According to Schmoker (2008), author of the article, "Measuring What Matters" in Educational Leadership, he stated, "Datadriven decision making is here to stay" (p. 70). Furthermore, two decades prior to this statement in 1982 Tom Peters and Robert H. Waterman Jr., wrote the book, The Search for Excellence, which is about excellence in business and which business rise to the top. The theme of the book actually became a famous quote, "What gets measured gets done" (Peters \& Waterman, 2004, p. 268). With reference to data-driven decision making in the workplace and big business, these same themes and quotations can be applied to education. Schmoker (2008) also stated in the same article, "We must realize that our current data-driven decision making is to a great degree standardized-test-data-driven decision making" (p. 71).

Data-driven decision making is a "relatively recent idea that has emerged in the last 10-15 years" according to the Institute of Educational Leadership in Washington, DC (Pascopella, 2005, p. 75). Data-driven decision making stems from a response to the perceived lack of informed decisions made by principals, administrators, and teachers regarding problems and failures on the part of students in general (Pascopella, 2005). Currently, the "bugs" are moving out of education with the help of data collection and analysis. Principal-initiated data-driven policies, for instance, will "no doubt uncover some startling facts that had either not been known or kept secret" (Pascopella, 2005, p. 77). In our current period, data-driven decision-making is an unavoidable force for
change due to the No Child Left Behind (NCLB) legislation's demand for demonstrable results (NCLB, 2004). Today's principals also have a unique opportunity to provide solutions for problems that they would not have known existed 20 years ago. And, today's administrators can use scientific, informed, and well-researched remedies for problems or "bugs" in a direct route to best solve concerning issues (Burley, 2002).

Balancing innovation and accountability, educational leaders strive to derive some of the best possible knowledge about the data generated from one or more annual assessments. Educational leaders analyze the data that test scores provide and develop blueprints for improvement in weak areas. Educational leaders depend on the most accurate data from testing to help them pinpoint the "bugs" and, subsequently, remove them.

In this chapter, an extensive review will be provided of the continuum of research for standardized assessments. In order to narrow the topic and analyze an area that is vital, critical and specific, reading comprehension will be used to illustrate the ideas expressed in this chapter. This review will encompass the following topics: (1) What is tested?; (2) How do we test?; (3) What strengths are apparent in the testing process?; (4) What weaknesses are present?; (5) What is a significant "standout" in reading assessments today?; (6) How do incorrect answers play a role in accurately assessing reading comprehension?; And, (7) How does information about standardized assessments help educational leaders make good decisions for the future?

What is tested? Today basic skills are being tested along with more advanced skills and knowledge. In reviewing reading comprehension for this general study of students in the regular population the following skills and knowledge were tested in 2009
on the TAKS assessment: Cause and Effect, Compare and Contrast, Context Clues, Details, Fact and Opinion, Using Graphic Aids, Mood, Plot, Setting, Prefixes and Suffixes, Sequential Order, State Main Ideas, Technical Terms, Word Meaning, Literary Devices, Analysis, Author's Point of View, Author's Purpose, Drawing Conclusions, Generalizations, Implied Main Ideas, Implied Sequential Order, Making Inferences, Making Judgments, Predicting Outcomes, and Summarization. All of these skills and knowledge are then "clustered" into four groups for Grade 3 through Grade 9: (1) Basic Understanding, (2) Applying Knowledge of Literary Elements, (3) Using Strategies to Analyze, and (4) Applying Critical-Thinking Skills. For students in Grade 10 and higher, three clusters are present: (1) Basic Understanding, (2) Literary Elements and Techniques, and (3) Analysis and Evaluation (TEA 2009).

According to Eisner, a professor of Education at Stanford University, educational leaders need to be focusing on judgment:

The best way to prepare students for the future is to focus on the present in a way that enables students to deal with problems that have more than one correct answer. The problems that matter most cannot be resolved by formula, algorithm, or rule. They require the exercise of that most exquisite human capacity that we call judgment. Judgment is not mere preference, but rather the ability to give reasons for the choices that we make. Good judgment requires good reasons. The disposition and critical acumen that make good judgment possible are among the most important abilities that schools can cultivate in students. (Eisner, 2004, p. 6)

Also, school curriculum should be focused on critical thinking:
A second ability that schools need to develop in students is the ability to critique ideas and to enjoy exploring what one can do with them. To develop this ability, students must be presented with ideas that are worth exploring. Several decades ago, Jerome Bruner identified three questions to guide the development of his curriculum Man-A Course of Study: What is human about man? How did he get that way? What can make him more so? Each of these three ideas can be explored and discussed in class at a level appropriate to the students' age. (Eisner, 2004, p. 7)

And educational leaders should chose and discern meaningful literacy:
A third aim for schools is to cultivate multiple forms of literacy. Literacy is normally conceived of as the ability to read and write. Sometimes computational skill, or numeracy, is added to the concept. I mean something considerably broader, however. Literacy involves the ability to encode or decode meaning in any of the symbolic forms used in the culture. For example, one can be literate in one's ability to experience and derive meaning from music, from the visual arts, or from dance. (Eisner, 2004, p. 7)

Most educators would agree on these three points of teaching meaningful literacy, critical thinking and judgment to be part of a campus, district and state curriculum. Yet how these ideas are tested can look very different on different standardized assessments from state to state.
(2) How do we test? Today testing in the United States is mostly conducted with multiple-choice testing format due to it being inexpensive and efficient as electronic grades do most if not all of the work. The theory that drove the technology into existence
for the nation to adopt use the electronic graders such as the Scantron and the forms for tests is the idea of immediate feedback. "The Immediate Feedback Assessment Technique provided immediate response feedback in an answer-unit-correct style of responding" (Epstein, Epstein, \& Brosvic, 2001, p. 889). This idea of immediate feedback was known to be a better form of feedback than the opposite, a delayed form of feedback. Erickson and Lipsitt in the 1960's documented that delayed feedback resulted in more errors and more trials to reach solutions for both normal and intellectually challenged students during problem solving (Epstein et al., 2001). An interesting note on Erick and Lipsitt in regard to their research is that this immediate feedback theory worked when students received feedback within six seconds for the students to understand the error (Epstein et al., 2001). This fact seems most ironic in that even though many if not all the states in the nation use an immediate feedback electronic form of testing, the feedback is usually greatly delayed pass this time of six seconds. Some tests are now formatted with open-ended questions that require professional graders to make decisions based on a rubric to determine if a question is answered adequately. This change is becoming more of a trend with standardized assessments as educators see a need to test more than just a standardized multiple-choice format (Gardner, 2002).
(3) What strengths are apparent in the testing process? After the publication of the A Nation at Risk (National Commission on Excellence in Education, 1983), the climate toward standardized testing altered and more standardization of assessment occurred within education. Expansion of testing occurred to grade levels of elementary and in the early childhood years (Perrone, 1991). Standardized testing has become a way of accountability for the school to show that it is serving the community well.

Standardized testing has a strength in that it pinpoints what educational leaders feel is necessary and important for students to know and understand in the 21 st century to be productive in the workplace (Haladyna, 2002). Standardized testing can be a valuable tool in the hands of educational leaders who are positive about the feedback and who want to promote learning within and outside of the assessment guidelines. Standardized testing is almost like a foundation of where to begin learning, and hopefully excellent instructional leaders will surpass the test and promote these same ideas with pencil and paper to become real world life skills (Holloway, 2001).
(4) What weaknesses are present? Much debate has and continues to occur about standardized testing among professional leaders in education. In the book, Contradictions in School Reform, Educational Costs of Standardized Testing, the author Linda M. McNeil illustrated her case against standardized testing with her magnet school studies. In her studies, she determined that these types of schools teach students without any constraints or legislation, accountability, or centralized controls. She contended that magnet schools carried a special importance due to the fact that authentic learning was produced. She also commented that the prescriptive rules and compliance with the topdown mandates from the state bring an unwelcome standardization with phony curriculum. She contended that this was exactly what schools need to be reformed away from (McNeil, 2000). Undoubtedly, many educators most likely would agree with her. According to Ralph Phelps, in the book, Testing Student Learning. Evaluating Teaching Effectiveness, about $30 \%$ of the professional educational community are against standardized testing, whereas $70 \%$ are in favor of it (Evers \& Herbert, 2004, p. 27).
(5) What is a significant "stand out" in reading assessments today? The most significant concept today in reading assessments is high order thinking skills or critical thinking skills for reading comprehension. Skills such as drawing conclusions, making inferences, making judgments, author's point of view, author's purpose, persuasive devices, summaries and generalizations and other higher level test items that are not literally stated as words, phrases or clauses expressed the reading passage. The standout test items are those items that are created in such a way that the reader must use, "authentic" reading to answer the complicated questions. For example, if a reader is going to identify a summary statement from the text with paraphrased ideas to choose from, a beginning, middle and ending statements must be present that frame the events or action in the reading selection. This reading is a much more complicated skill than simply pointing out a detail that is obvious and located verbatim within the passage. Moreover, making sure that prior knowledge is not a part of the test questioning process and all answers come from the evidence presented and reading comprehension skills should be present (Johnson, 1984).
(6) How do incorrect answers play a role in accurately assessing reading comprehension? According to the Handbook of Reading Research, "the role that incorrect answer plays in the need to understand reading comprehension for students is the notion of "schemata." An understanding is required of knowledge and skills from the past and applying those skills and knowledge to the written text in the present. With schemata, the information should be already stored in a student's memory to produce the correct answers on a standardized assessment. What incorrect answers simply tell the educator is that not enough schemata are present within the memory of an individual
student to draw it forward for the application process (Pearson, Barr, \& Mosenthal, 2002).
(7) How does information from standardized assessments help educational leaders make good decisions for the future? With all types of varying feedback, standardized assessments help educational leaders make quality data-driven decisions. Much of the finished data provided by the state or educational testing companies provide adequate and detailed feedback to find out the strengths and weaknesses for certain areas of objective skills and knowledge. Educational leaders depend upon this type of data to help them take their state, district, or campus to the next level in learning (Gerstner, 2001).

## Significance to Educational Leadership

Due to the fact that they provide a continual stream of data to help educational leaders make decisions for identified needs and improvements within student achievement, assessments are significant in all respects. Remember that Schmoker contended that "Data-driven decision making is here to stay" (2008, p. 70). And Peters stated that "What gets measured gets done" (Peters \& Waterman, 2004, p. 268). Furthermore, with reference to educational leadership in the 21 st Century, Schmoker also stated, "We must realize that our current data-driven decision making is to a great degree standardized-test-data-driven decision making" (2008, p. 71).

Due to the fact that data-driven decision-making is recently emerging in the last decade or more, educated and informed decisions made by principals, administrators and other educational leaders have been more accurate in targeting the great needs of a campus, district, or a state. It seems with data-driven decision-making that the "bugs" are slowly being eliminated with the help of accurate specific rich data. Principal initiated
data-driven policies will "no doubt uncover some startling facts that had either not been known or kept secret" (Hoover, 2002, p. 17). In today's educational system with the No Child Left Behind Act as a driving force for accountability, data-driven decision-making is an unavoidable and public legislation demands demonstrable results (Fox, 2001, p. 30). Today's principals have a unique opportunity to provide solutions for problems that they would not have known existed 20 years ago. Moreover, today's programmers (or administrators) can use scientific, informed, and well researched remedies for problems or "bugs" in a direct route to best solve concerning issues (Dijkstra, 1970).

Through their balance of innovation and accountability, educational leaders strive to derive the best possible knowledge about the data generated from one or more annual assessments. Educational leaders analyze the data that test scores provide and, consequently, develop blueprints for improvement in weak areas. Educational leaders also depend greatly on the most accurate data from testing to help them pinpoint the "bugs" and remove them.

The co-director of the Michigan Educational Assessment Program (MEAP), Olga Moir, analyzed test scores from 93 schools to facilitate these schools moving off of the unaccredited state list. In her observation of the low performing schools, as referenced in Bushweller's article "Teaching to the Test", Moir stated: "Very few [of the schools we worked with] were using data to make educational decisions. We go to schools and look at the state testing results, how the schools are teaching, and where the missing pieces are" (Bushweller, 1997, p. 7).

Maryland School Performance Assessment Program (MSPAP) has helped guide schools across the state that serves working, middle class families. One school that is a
stand out is Fullerton Elementary School in Baltimore County. In his praise of this particular school, a retired principal of the school, John Hutchinson, said: The school was once so enamored of creative teaching methods that classes were slighting core academic skills such as reading, writing and math. Now, pinned up somewhere in every classroom are two daily reminders. One emphasizes what the students should know after the day's lesson, and the other says what they should be able to do with that knowledge. That double-edged 'know and do' emphasizes teaching lessons that apply to real life-and that are almost always linked in some way to the skills tested by the state. (Bushweller, 1997, p. 5)

As referenced again in "Teaching to the Test" Kevin Bushweller (1997), the vice president of the teaching and learning division of and chief research scientist of the College Board, Howard Everson, stated:

A good test, has a mixture of multiple-choice and essay questions. A good test, must also tell teachers how to improve their teaching. If test results don't accomplish that, either the test is poorly constructed or there is a major misalignment between a district's curriculum and the test.
(Bushweller, 1997, p. 8)
Additionally, as paraphrased in The American School Board Journal, the following represent the many different types of data that help educational leaders make decisions: All of these data are combined to formulate decisions related to the direction of instruction for academic performance. In other words, therefore, the entire data set is directed toward one, ultimate goal - namely, increased test scores. High stakes test scores
are the gateway for better college admissions and possible rewards for school campuses themselves. Increased test scores usher in many benefits for individuals and campuses; consequently, educational leaders desire and plug in all data to help them succeed with external test scores (Bushweller, 1997).

According to a NCLB brief in 2002:
Almost every exemplary district uses its schools data to inform and create school improvement plans. Such plans are required by the state and sometimes by the district, but in all cases they help educators focus their attention on student learning. (p. 6)

Therefore, what types of decisions are made specifically from test data as the primary source of data? The following list gleaned, generalized, and paraphrased from "Standardized Assessment: A Primer" (American Association of School Administrators, 2000) denotes a short list of 20 data decision-making results educational leaders make continually from standardized assessments as they are trying to manage the "bugs" and get rid of them as administrators are responsible for the health of the schools and how they run:

1. Individual student (needs) decisions
2. Instructional materials decisions
3. Targeted teaching decisions
4. Proficiency (of basic skills) decisions
5. Measurement (of growth over time) decisions
6. Evaluate (effectiveness of educational programs) decisions
7. Monitor (schools for accountability) decisions
8. Instructional placement decisions
9. Diagnostic decisions
10. Policy decisions
11. Funding decisions
12. Staff placement decisions
13. Professional staff development decisions
14. Progress decisions
15. Formative Evaluation decisions
16. Budget decisions
17. Admission decisions
18. Graduation decisions
19. Summative evaluation decisions
20. Reward decisions. (AAP, 1999)

Data-driven decision-making is now becoming much easier with the help of technology. Smart-desktop technology, for example, now offers new and quick means for gathering data. Even within a smart-phone used as a computer, educational leaders literally have the data at their fingertips. In today's technological era, essential data can be used more in "real-time" to help fix problems efficiently and effectively. Thus, the use of data is not going away; it is here to stay in abundance. However, one might ask whether the same trend applies to standardized assessments? As the "crown" on the "king of data," by being the primary source of data, these internal and external assessments are, and will, be a classic in our educational repertoire for now and years to come.

Lastly, the NCLB Act (2002) noted, "International standardized tests have shown that American students are not competing with their foreign counterparts" (p. 8). Many of the voting public in America wants results for rapid increased accountability in public schools. In conclusion, therefore, standardized assessment as a relatively new foundation for data-driven decision-making now has a permanent place in the world of education.

This dominant factor of test results makes such an impact on administrator decision-making that there is now, as cited by Schmoker in the article, Measuring What Matters, "an unpleasant discovery: Schools and even whole states could make steady gains on standardized tests without offering students intellectually challenging tasks" (Schmoker, 2008, p. 72). Indeed, much debate continues to occur regarding whether standardized testing is now outdated, as well as whether reform needs to occur regarding employs alternative methods of assessing student performance.

## Arguments Against Testing

According to a Washington Post article written by Cathy N. Davidson (2011), the current Internet age is a new way of educating our youth as we are no longer in an industrial age. Rather, Davidson noted that we are significantly lagging " 15 years into the information age" behind with our use and over use of standardized testing "with an educational system that was designed for the industrial age, modeled on mass production and designed for efficiency, not for high standards" (2011). Davidson (2011) also contended that "Multiple-choice exams do not equip kids for either the information avalanche or the fine print that they encounter online every day."

Furthermore, Davidson commented that:
In a decade of researching digital education, $I$ have never heard and educator, parent or students say that they test work well as teaching tools. Beyond the flaws of these rigid exams - which do not measure complex, connected, interactive skills - there is little room in the current curriculum or even in the current division of disciplines (reading, writing, math, natural sciences and social studies) for lessons about key questions that affect students' daily lives. (2011)

In his book titled The Case Against Standardized Testing, Raising the Scores, Alfie Kohn (2000) fully expressed his criticism of the standardized assessment system in the United States on the jacket of this book. Moreover, Kohn asked the following questions:

Do high scores often signify superficial thinking? Are these tests really intended to measure teaching and learning? Do schools that improve test results have to lower their standards in doing so? Are standardized test scores "closing the gap" or damaging low-income or minority students? Is it true that as much as $90 \%$ of the variation in test scores among schools and states have nothing to do with the quality of instruction? And finally, Are their more meaningful measures of student learning available?
(2000, Cover)
Debate will most likely always be ongoing about the use of test standardized test scores, what they assess, and why certain tests are administered. What seemed to be remaining today and will remain in the future is accountability
of some type, basic standards, and some kind of assessment to show those standards are met. The more educational leaders examine and pinpoint issues within testing, the better equipped they will be to argue for or against the process of standardized testing, what is tested and at what grade level, and what is the best construct of an assessment given for age appropriateness.

## National and State Assessments

In his November, 2011, Test Critic article entitled The Case Against Standardized Tests for Test Critic, Chris Carter criticized required nationally-mandated tests for higher education, such as the SAT and the GMAT, by stating, "Standardized testing is big business" (2011, p. 2). And, the "gatekeepers" that play a major role in American higher education is the Educational Testing Service (ETS). This particular organization is a non-profit organization, which reported revenues of $\$ 432$ million in 1997, and $\$ 905$ million in 2009, pays no taxes, has no shareholders, and was "founded in 1947 by a grant from the Carnegie Foundation" (Carter, 2011, p. 7). In addition, it should be noted that the President and Vice President of the ETS both have salaries significantly above six figures. Carter (2011) stated, "Forbes magazine called ETS 'one of the hottest little growth companies in U.S. business in 1976." Moreover, the ETS has been accused of exorbitant officer compensation, unethical practice of selling test preparation materials, unacceptable political manipulation, exploiting test-takers for research and exorbitantly expensive score reports according to Americans for Educational Testing Reform (Carter, 2011, p. 8).

James Crouse and Dale Trusheim, staunch critics of the ETS, published a book titled The Case Against the SAT. Drawing on three national surveys and hundreds of
studies conducted by colleges, the authors refuted the justifications the College Board and the ETS gave for requiring high school students to take the SAT. Specifically, Crouse and Trusheim (1988) demonstrated that the test neither helps colleges and universities improve their admissions decisions, nor do they help applicants choose schools at which they will be successful. The authors also outlined the adverse effect the SAT has on students from non-White and low-income backgrounds. Furthermore, they questioned the ability of the College Board and the ETS to monitor themselves adequately (Crouse \& Trusheim, 1988).

Interestingly, however, Crouse and Trusheim did not recommend abolishing either college admissions testing or the College Board and the ETS. Rather, they proposed dropping the SAT and relying on such already available measures as students' high school coursework and grades. Moreover, they raised the possibility that new achievement tests that measure the mastery of high school courses could be developed to replace the SAT. The Case Against the SAT provides important new information for policymakers, college and university administrators, and researchers in testing and measurement. For instance, it requires a rethinking not only of what admissions testing accomplishes now, but also of what it might and should accomplish in the future. Many other critics are present of standardized testing who have a myriad of different reasons why standardized testing should be dismissed as an antiquated method of measuring student achievement (Crouse \& Trusheim, 1988, p. 54).

## Assessment Origins

Each of the sources in this literature review confirms that testing had its origins in China. Specifically, it is estimated that the Chinese began to record the use to testing as a
means of selection for entry into Civil Service around 2200 BC (Phelps, 2004). Subsequently, after China's application of such methods, other countries began using both oral exams for various entrance and exit purposes. It appears that, during the early 1800s, written exams became widespread and were a common practice in England. Later, in the mid-1800s, the United States government used written exams in schools in Boston (Phelps, 2004). Then, in 1851, Harvard started using the first written exams for admittance; subsequently, during the 1900s, the first College Entrance Examination was established (Phelps, 2004). Ironically, as the West was gearing up with more standardized assessments, in the east, China abolished service entrance exams as part of their educational reform in 1905. Nonetheless, China's move did not seem to influence global decisions toward the implementation of standardized assessments in other countries. In 1915, the multiple-choice format was invented, and multiple-choice tests were administered for IQ assessments to the US Army during WWI. This practice marked the beginning of widespread standardized testing in the United States. Then, in 1916, Terman and Stanford expanded the Binet's IQ test to create the Stanford-Binet IQ Test. Eventually, in 1920, Scholastic designed the Scholastic Aptitude Test. These tests were used across America to test the proficiency of both intelligence and ability of students (Phelps, 2004).

Other major events also shaped the testing climate in the United States. In 1957, for instance, the Sputnik launch initiated a monumental wave of educational reform in America. During the 1960s, Banesh Hoffman's critical text, entitled The Tyranny of Testing, was published in 1964 and then later republished in 2003 due to the relevance of the topic. The book caused persons to think and to rethink the methodology of multiple-
choice tests. Regardless of such criticisms, standardized assessments became a fixture in the 1970s, particularly with the advancement of the accountability movement, and the National Assessment of Educational Progress creation of the "Criterion-Reference Test". Testing also gained momentum in the 1980s with the emphasis for authentic, alternative performance-based testing (Hoffman, 2003).

## Trends in Testing

Three different types of standardized assessments are administered throughout the United States: (a) achievement tests, (b) aptitude tests, and (c) specific aptitude tests. First, achievement tests assess how much students have learned from what they have specifically been taught. These tests are usually used for measuring a broad range of knowledge as opposed to specific knowledge. Achievement tests are also useful when comparing the performance of two groups of students (Hoover, 2002). Moreover, achievement tests allow educators to follow students' progress over a given period of time. Secondly, aptitude tests assess students' general capability to learn and to predict their general academic success over a shorter period of time. Aptitude tests are often called intelligence tests (Burley, 2002). Aptitude tests are not constructed to indicate student potential over a long period of time, and such tests are typically administered through a one-on-one approach with a student. In addition, verbal skills are often a significant component of this type of testing. Popham (2002), in his article "Right Tool, Wrong Task," noted that aptitude testing does assess how much a student had learned from their everyday lives and experiences.

Specific aptitude tests are formulated for the purposes of understanding how well students will perform in a specific content domain (Popham, 2002). An example of a
specific aptitude test is the Stanford Diagnostic Reading Test. Many schools in the United States use both aptitude and achievement tests to assess their students' ability and achievement during the school year. Different tests use different methods of scoring based on different needs, which is often confusing to many educators and parents, not to mention the students. Attaining a sufficient understanding of these terms will help in answering the core question of this particular study.

These specific terms are raw scores, criterion-reference scores, norm-referenced scores, and standard scores. Raw scores are counted by a percentage, or correct responses from the number of points earned. Raw scores are not difficult to interpret unless they relate to specific criterion or a norm group (Hoover, 2002). Criterionreferenced scores compare performance, comparing either one to another, or comparing to a standard of success for determining whether specific instructional objectives have been achieved. Criterion-reference scores are useful in determining whether a basic skill requires prerequisites for other skills that need to be learned, or to assess for mastery of a complex skill or to identify if a skill may be too difficult to identify (Lin, 2002).

Norm-reference assessments are used for equating a student's performance to the average performance of students at a particular age or grade level (Lin, 2002). Normreference tests are useful when explaining performance to people unfamiliar with standardized scores. These scores, however, may be inapplicable when achieving on a secondary level or when higher assessments are needed. Standard scores are the most complicated scores to interpret.

When examining a normal distribution of scores, a line is drawn from the highest point on the curve to the $x$-axis. This particular point is the mean score. A standard
deviation's worth is counted on each side of the mean, and those points are marked. Another standard deviation is counted out and two more points are marked. When the normal distribution is divided up this way, the same percentage of students scoring in each portion occurs. Approximately $68 \%$ will score within one standard deviation of the mean (i.e., $34 \%$ in each direction). As movement away from the mean occurs, fewer and fewer students obtain these scores. Therefore, a standard score simply provides information regarding where a student scores in relation to this normal distribution in standard deviation units (Holloway, 2001, p. 78).

Why has America embraced standardized testing? In short: Practicality. One of the advantages of standardized assessments is that such assessments take less time and are easy to administer. In addition, they are easy and quick to grade and computers track progress (Holloway, 2001). Standardized testing provides objectivity without making the testing process personal. It is possible for a teacher to assess students without biases affecting their test scores. Another reason why the United States is using many standardized assessments is that the tests are instigators of change (Gardner, 2002). Furthermore, as far as their overall convenience goes, educators can use tests to determine whether a particular problem exists. Upon identifying a given problem, educators can then take active steps in correcting said problem(s). Standardized assessments can also provide valuable information to improve classroom and student learning (Gardner, 2002). In addition, high student expectations are present when accountability is present. Accountability for the same standards of other schools and other students, thus, leads to gains (Nathan, 2002). People tend to take the
comprehensive notion of testing more seriously when they are held accountable, both student and teacher alike.

Some disadvantages of testing in America are the "high stakes" abuse that occurs when standardized assessments are misused. This abuse unfortunately can occur when jobs or scores are on the line for a particular outcome. High-stakes testing can affect the curriculum being taught. Additionally, it can affect how meaningful the classroom content is throughout the course of a school year. High-stakes testing can also have a negative emotional impact on students; specifically, causing them either to feel overly competitive or possibly giving up if tests seem insurmountable.

## Measuring What Matters

Many educators feel that high-stakes testing neglects the creative part of the instruction process. Many times, what is objectively taught in the classroom is not a part of the actual assessment, or what is not taught in the classroom ends up being objectives on the assessment (Ormord, 2003). This particular phenomenon is referred to as testingteaching mismatches (Popham, 2002). Due to the fact that school districts want their curriculum to be aligned with the state assessments, many districts will teach objectives that are most like going to be measured on the standardized assessment. In other words, if you put specific objectives in, the same objectives must come out. Many parents and teachers are not happy with the objectives and subjects that are not being taught in schools due to the need to score well on these state assessments. Moreover, both educators and parents should consider the practice of teachers "teaching to the test" rather that simply teaching objectives in the classroom setting. With this in mind Burley (2002) stated in the American School Board Journal,

This isn't so bad, but becomes a problem when teachers are forced to discard other topics they had planned on covering in order to spend more time on the concepts they know will be on the test... They drill students on what they will be tested on and they go beyond the curriculum only to teach test-taking skills, or what is called 'testwiseness'. (p. 25)

Another common criticism is the multiple-choice format. Many educators and critics say that the use of this testing formal limits teaching and learning knowledge (Haladya, 2002). If students are taught to think in a "A, B, C or D-None of the above" manner, students will never go beyond operational thinking (Haladya, 2002). In other words, the United States is not developing high-level critical thinkers with this format of standardized assessments.

## Construct and Validity

Critics also say that standardized testing is outdated, particularly given the Constructivist view, which promotes more of a social leaning theory with use of the multiple intelligences (Lin, 2002). Many researchers and psychologist disagree about this; yet, such sentiment is a growing trend in education currently. The argument today is that learning is more of a complex relationship between the student and their environment. Lin (2002) noted that meaningful learning is "reflective, constructive and self-regulated." Critics purport that standardized test "scores rule out the possibility of discussing student learning in terms of cognitive and intellectual development, growth, social awareness and social conscience, as well as social development" (Lin, 2002, p. 47).

Other negative outcomes include cheating where dishonesty has occurred on the part of the teachers or principals to not include special needs students in their pool of
students. Emotional effects for low-achievement, such as disillusionment or less motivation, is often an aspect of a negative outcome of low scores. Test anxiety is not uncommon and students may not perform up to their abilities. Some students can even panic (or "freeze") and cannot perform. This problem may become worse when students feel as though they are going to be punished somehow if they get a low score. Schools themselves often feel "punished" after receiving poor overall test results. Subsequently, some schools are rearranged or redesigned based on these consistent lower scores. By the end of the decade, approximately half of all current teachers will retire as a result of the stress associated with high-stakes testing (Haladyna, 2002).

Another issue related to standardized testing, which can be interpreted and perceived negatively, is the practice of determining the scores. For instance, due to the statistics behind the score, many times the scores are so complicated that the average person may have difficulty understanding what the scores are and what they mean. With so many different ways to perceive a score, it can be a negative experience for both students and parents in determining whether the score is, in fact, adequate or not.

A growing concern with regard to standardized testing is language differences. In many cases, students who are not native English speakers have to take a standardized assessment in a second language. If a high-stakes test is present where a student will not graduate without passing this assessment, this process could exacerbate test anxiety or even result in cheating. Other critically related factors are present, such as socioeconomic status, cultural bias and gender, which can all play a significant role in affecting test scores.

Finally, one very controversial problem with high-stakes testing is the notion of score spread (Popham, 2002). Items that are answered correctly from students are not included in the overall score. Lin (2002) stated, "Most standardized tests are designed so that only half of the students taking the test will respond correctly to most of the items" (p. 48). This process entails a built-in bias against all students. Creators of the test purposefully select items for that test, which will create score spread, instead of items that would or should be taught (Popham, 2002).

Considering the information related to standardized assessments, both the advantages and disadvantages, what impacts the thinking of school administrators and classroom teachers? The following questions may assist in addressing such questions:
1.What steps to educational leaders need to take to ensure authentic assessments?
2. How can educational leaders disclose standardized test scores for real understanding to parents, teacher and students?
3. How many standardized assessments should educational leaders provide on their campus or for their district as feedback?
4. Do test scores truly give a representation of real leadership in education?
5. How do Reading Comprehension scores reflect educational leadership?
6. What alternative assessments can be used to achieve similar results besides the multiple-choice format?
7. Should there be more testing or less testing in public schools today?
8. Should the educational leader be informed of score spread before it happens?
9. How much information does a educational leader need to know about standardized tests?
10. What essential thought processes go into standardized assessments?
11. What is the real emphasis in critical thinking for a standardized assessment?
12. If not standardized assessments for accountability, then what? (Mintrop, 2003)

Reading comprehension tests are the most common type of test taken by students. Such assessments are typically used to place children on grade level, as well as to mark progress of understanding a text. Basic assessments are also use where a passage is presented to the student that is leveled appropriately for the child. The child is asked some explicit questions about the passage. However, some assessments may ask the child for inferential questions about the text as well. In some cases, a child's comprehension might be tested by his or her ability to retell the story in his or her own words, or through summarization of the main idea or the moral of the story. Another common reading comprehension assessment is called a "cloze" task - hence, words are omitted from the passage, and the child is asked to fill in the blanks with appropriate words (Taylor \& Anderson, 1998).

Reading comprehension should not be confused with reading accuracy. Reading accuracy assessments ask a child to read the passage aloud clearly, without making mistakes. The Southwest Educational Development Lab (SEDL) stated: "The mistakes the child does make are analyzed to find clues about the child's decoding (sound) strategies" (2011, p. 12). Additionally, SEDL reported, "It should be noted that oral reading accuracy does not give insights into decoding (comprehension) skills" (2011, p. 13).

Language comprehension can also be measured in a similar way that reading comprehension can be measured. In language comprehension, questions are presented
verbally to the child, and he or she is not expected to read from any text. As cited in the article "Predicting Growth in Reading Ability for Children's Exposure to Print" Stanovich (1992) commented: "For most young children learning to read, their ability to read and understand text is limited by their decoding skills, not by their comprehension skills" (p. 76).

Decoding is another strategy that all readers use continually, whether they are consciously aware of it or not. This strategy is used primarily when working with words one has never seen before. Thus, readers often attempt to guess such words based on the context or clues provided within the given text. This practice constitutes a life skill that is useful for critical reading comprehension. In children as emerging readers, words that are guessed to be inaccurate may provide insight into the lack of exposure to words, or lack of the child's spoken vocabulary. Allen (2008) noted, "Typically, decoding skill is measured through the child's ability to read words out of context. Isolated words are presented to the child one at a time, and the child is asked to say the word aloud." In addition, Anderson (1990) commented, "A child can be tested on their accuracy (Is each word pronounced correctly) and fluency (How much doe the child struggle with the word meaning?), on their 'level.

Another approach is the child's ability to "recognize" sight words. Recognizing a word, however, is not the same as decoding. The idea is that "decoding is a strategy that reading can help us with all words, even words they've never seen before" (Allen, 2008). Sight-word reading has to do with memorizing the image of a word or a specific feature of a word, and with this strategy, only a select few words are learned. Teachers who use this method sometimes use the Dolch word list or indexes to focus the child's attention
on the most useful words. However, memorizing sight words does not help a child to learn how to decode words, and testing the child's knowledge of specific, well-practiced sight words does not provide a measure of decoding skill (Page, 2010).

Other assessments are present of back ground knowledge embedded into reading content that measure the child's knowledge of general facts about the world. Usually, an estimation is made of what children could reasonably be expected to know in first grade (e.g., birds build nests in trees, or bicycles have two wheels) - hence, the child is asked to answer these simple "fact" questions. However, these assessments measure a child's relevant background knowledge, and by "relevant" one means "related to the task at hand". For example, if a child is expected to listen to (and understand) Charlotte's Web, the child should have some background knowledge about farm animals and spiders. Children can possess a great deal of knowledge, even at very early ages. For example, children raised within an urban city environment may know much about public transit, taxis, traffic jams, shopping malls, and skyscrapers. By comparison, children raised in other settings may know about various other things. A particular child may not know much about a particular topic, and it is worthwhile to assess a child's relevant background knowledge before expecting a child to be able to accomplish a task (Anderson, 1990).

Linguistic knowledge is the synthesis of three or more basic cognitive elements phonology, semantics, and syntax. It can be assessed orally with questioning various types of language, reading, listening, speaking, and writing. Linguistic knowledge is more than the sum of its parts. If a child does not have a grasp on basic cognitive
elements and is still having trouble expressing his/her self or understanding others, it is likely that the child not yet managed to synthesize these three elements (Carroll, 1968).

The most common assessment is phonology. It involves a child telling the difference between two different words that sound similar. In this assessment, the child is asked to listen to the teacher stating pairs of words. The words can be different words that sound the same or the same word repeated twice. When the pairs of words are presented, they should be different by one single phoneme.

For example, $/ \mathrm{d} /$ and $/ \mathrm{g} /$ or $/ \mathrm{sh} /$ and $/ \mathrm{s} /$ should be presented to the child being tested. When pairs of words are presented, the location of the target sound should be varied. More specifically, for instance, /rhyme/ and /lime/ use the beginning of the word to detect the correct phoneme, or $/ \mathrm{mud} /$ and $/ \mathrm{made} /$ to detect the middle phoneme, and, finally, /rib/ and /rip/ to detect the end phoneme. Phonemes should be tested with both vowels and consonants (Heaton, 1975).

In a phonology test, the pairs of words do have to be real words with which the child is familiar. An instructor may use made-up words to assess if the child hears the differing sounds. Some merit is present to this approach because the child's attention is focused on the words themselves, and not the meanings of the words (Carroll, 1968).

Semantics is a general term that refers to the "meaning" of words. According to Ravitch (1984), "Semantics can also be applied to the meaning of word parts, whole words, sentences, and discourse." Several ways are present to assess semantics, however, a question arises if the assessment is in a written form. If the assessment is written, then it is argued that the assessment is testing more than just simple semantics; rather, it is also
testing decoding skills form the written word. Often pictures are used to try and assess semantics for this issue.

A child might be asked to provide a name for pictures as a test of expressive vocabulary, or to match spoken words with pictures as a test of receptive vocabulary. A test of semantics at the larger-than-word level may involve asking a child to arrange a series of pictures to reflect a logical sequence of events (Fox, 2001).

Another common assessment involves asking a child to provide a word that is a best match for a definition presented verbally. This way a teacher can test if the child understands receptive vocabulary. For example, a child could be asked which word does not belong to a given group set (e.g., thread, string, knot, rope). In this kind of assessment the child must know the meaning of most of the words (if not all of the words) to be successful on the test. Additionally, a child might be asked to provide a synonym or an antonym or words presented in the test. This type of testing shows whether the child knows the word presented.

Morphology assessments often involve asking the child to describe how a word's meaning changes as the parts of the word are changed. For example, a child might be asked to break down a compound word into components parts, such as base-ball, or daybreak or head-ache. A child could also be asked to describe what happens when affixes are added to various words, such as "skip" verses "skipped". Moreover, a child could be asked to explain what affixes, such as "unwrap" and "unite", have in common. Finally, morphology assessments might ask the child how to describe how words with similar parts are related (e.g. earache, earring, and eardrum). Fox (2011) stated, "Semantics
assessments at the larger-than-word level usually depend on identifying words, sentences that do not make sense in context" (p. 34).

Syntax mostly uses printed text, but also comes into question of mixing up with a decoding skill. Taylor (1998) commented, "It is possible to make some estimations about the child's productive syntactic knowledge by listening to the sentences that she child forms when he or she is talking." One common syntax test involves presenting the child with sentences (via spoken word) that are syntactically incorrect and, subsequently, asks the child to correct the sentence. Another common assessment involves providing a student with a sentence with blanks, and asking him or her to fill in the blanks. Another assessment provides the child with several sentences, and then asks him or her to combine the sentences correctly. Ward (1990) contended that, "A child's syntax can be assessed through a test of their ability to change tense and modifiers of sentences. A child could be asked to restructure, 'I went to the store' in future tense."

Cipher knowledge is a skill that tests a child's ability to sound out unfamiliar words that are usually in isolation. By assessing these words out of context, the test helps to ensure that the child is not relying on decoding skills or context clue skills, or simply recognizing the word. Cipher knowledge uses real, regular words that are so rare that it is unlikely that the words are familiar to the child (Lin, 2002). Some assessments use nonsense words where the objective of the assessment is to ensure that the child identifies the first letter of the spoken word or a vowel sound in the word. With this idea in mind, common letter-sound knowledge assessments ask the child to identify a letter that could represent a speech sound (Fox, 2011).

Lexical knowledge is an assessment of irregular word sounds. Heaton (1975) commented that "...a person's ability to correctly read irregular words is directly related to their exposure to those words. A test of regular words in reading is strengthened by words that a child is not familiar with." The child can either be asked to read aloud a list of irregular words, or can be asked to use a set of words and distinguish which word does not belong. Sometimes children are asked in a test to match irregular words that have the same sound patterns.

Phoneme awareness is a general term that covers an "umbrella" of reading decoding skills. However, phoneme awareness is also specific and can refer to test that reflects a child's specific knowledge that words are made up of phonemes. To test phoneme awareness, a teacher could ask rhyme words, or to pick out words that rhyme from a set or words (Carroll, 1968). Furthermore, Fuchs (1996) stated that, "Alliteration is also another way to test phoneme awareness. The child's ability to produce words that start with the same sound or to match words based on alliteration also will reflect the student's understanding that words are made up of sounds."

Knowledge of alphabetic principle is present in a child's understanding of the alphabetic principle at an early age. Before the child can read or write even simple words, an assessment for this knowledge can be gleaned by asking the child a question. For example, if the teacher says "dog" the child could write a "d" or draw a dog, or bark, making the sound of a dog. Therefore, Ormrod (2003) noted that, "This reflects their view that a word only exists as a representation of an object.... Children who have an understanding of the alphabetic principle will attempt to encode all the sounds they hear in the word" (p. 29). Another way to test knowledge is to present two written words on a
page, such as "Hat" and "Hippopotamus." By using long and short words in visual patterns, the child could be asked which words best represents what is being said or read to them. "Even if the child cannot read yet, an understanding of the alphabetic principle will allow him/her to pick the right word" (Fuchs, 1996).

Letter knowledge is a presentation of the alphabet and asking the child to name each letter. This assessment typically occurs with both upper case and lower case letters so that the child is familiar with all the letters in all their forms.

Finally, Taylor (1998) stated the following:
Young children who do not know the letter names yet can be given a pile of ...letters (cards) and numbers and symbols and (be) asked to separate the letters from the numbers and the symbols. Similarly, children can be asked to "tell what they know" about each letter....Children that know all the letter names can be further tested by their ability to separate the letters into upper and lower case groups, or to separate them into vowels and consonants. (p. 19)

## Summary

In an extensive review of the literature in relation to standardized testing and decision-making, and in reading comprehension assessments, specifically, a "hole" appears to be present in a DDF study on a large scale. With respect to the presence of DIF studies, an abundance of said studies appears to be present on every level, in every state, and in every content area tested. However, with respect to DDF studies, such studies have been limited to smaller groups, such as students with learning disabilities or other students enrolled in special education. As such, this study should provide insights
in offering more data on DDF for the regular student. Moreover, given that well over 750,000 total students are participating - with Grade 3, Grade 6, and Grade 11/Exit Level - this study should produce findings related two outcomes/questions: (a) Is a DDF necessary to study for regular students? And if so, (b) should be make this a standard practice in data profiles for public schools?

## Chapter 3 <br> Methodology

The purpose of this study was to analyze the relationship of frequency of "wrong to wrong" answers (or the DDF) on the Texas level standardized assessment (i.e., TAKS). Explored in this research investigation were high percentage anomalies regarding the numbers of Grade 3, Grade 6, and Grade 11/Exit Level students in the state of Texas who answered test items incorrectly. Specifically examined were the category skill objectives of items with these higher percentage anomalies with the intent to being to determine the presence of connections with similar skill objectives in different grade levels as reading comprehension progresses in development with age.

To conduct this investigation, primary data from the state of Texas through the TEA were analyzed. Test data, obtained for the spring 2009 administration, were analyzed for third grade, sixth grade, and Exit level or eleventh grade students to ascertain the extent to which relationships might be present in the same skill objectives. Relied upon in this investigation were the TAKS Item Analysis Summary Reports for all students and the TAKS Summary Reports for Test Performance. The Item Analysis Summary Reports were in a form of percent-score data (i.e., a raw score adjusted to a percentage). One example of such raw data is the number of questions answered correctly on a test, or the number of students answering correctly or incorrectly for a particular response option on a test question. For this study, a conversion back to the raw data from the percent-score occurred.

The TEA releases two types of data for released tests. One type of data is the scale score data that are reflected in a frequency distribution graph. This frequency distribution graph data that represent scale scores is for test rigor compared from one year
to the next, or multiple administrations in the same year with a different form of the same type of grade level and subject content of the test. Not addressed in this investigation was test rigor from year to year or from one test form to another. Instead, one single form for one specific year was analyzed. As such, a determination could be made regarding whether relationships of incorrect answers were present from a "vertical standpoint" in the same year. In other words, test item responses for the third, sixth and eleventh grades were investigated only for the 2009 school year, as a vertical study, and in a single administration in the spring 2009. As results are delineated in Chapter IV and recommendations made in Chapter V, data from the TAKS Released Test Booklets administered in March of 2009 were also examined to "fine tune" specific discoveries or insights with five standout examples taken from the Grade 3 exam. According to the TEA, no such study of test item comparisons across grade levels had been conducted to date. Furthermore, the TEA reported that it had no comparative studies of this type - that is, identifying the incorrect answers and comparing them to other incorrect answer types in the same grade level and in other grade levels, or a DIF analysis. Confirmed in an extensive review of the literature was a clear need for this type of analysis because such studies were not available for the "regular" population of students.

## Research Questions

This study was constructed from a quantitative field of research. Participants' identities were completely anonymous. The Public Information Act protects these participants and also provides the data needed for State educational leaders to make decisions about curriculum and instruction for State, district, and campus levels.

The questions for this study (using third grade as the foundation) were as follows:

1. How many questions in third grade reading comprehension were missed in a grand total?
2. Which questions were most frequently missed?
3. How many questions had students missing less than $90 \%$ correct?
4. Out of the $10 \%$ or more percentage dispersions of wrong answers, is the dispersion percentage equally distributed or unequally distributed?
5. If the percentage dispersion is unequally distributed, is there a higher percentage for one single wrong answer choice? (For example, if A, B, C and D are the choices for the test item, and A is the correct answer, then possibly B has a larger percentage then C and D as the three possible incorrect answers choices.)
6. How many high percentage anomalies occur in the third grade reading comprehension assessment out of 36 questions?
7. What knowledge or skill objectives do the percentage anomalies fall under?
8. Is there a reoccurring pattern of the same objective repeatedly for third grade?
9. If so, does that same repeating high percentage dispersal occur within the same type of knowledge or skill objective in a higher-grade level? (Sixth grade and the Exit level will be examined the same way, as third grade and objective categories will be compared, and after these findings recommendations will be made in Chapter V.)
10. If no relationship or connection is present within the vertical comparison of knowledge and skill objectives, then individual or horizontal grade level anomalies will be examined for recommendations in Chapter V.

## Setting

The setting for this study was the Texas state public school system. Texas had approximately 1,040 public school districts in 2009 that were/are independent and separate from any form of municipal government, which means that school districts in this region have the right to tax their residents and assert eminent domain over privately owned property (TEA, 2012). Texas public school districts range from extremely large urban districts, such as the Houston Independent School District, which has approximately 200,000 students, to very small rural districts, such as Divide Independent School District, which has about 25 students. At the time of this study, Texas had approximately 8,300 schools in the state, and approximately 4,000 campuses that are elementary schools, 1,500 campuses that are middle/junior high schools, and 1,400 campuses that are high schools.

Although school districts in Texas are independent, The Texas Education Agency oversees these independent school districts as the governmental entity. Texas also has 254 counties, and 286,601 square area miles (Office of the Governor, Rick Perry). Texas is the second biggest state in the USA, with Alaska being the biggest. And, due to the fact that the state of Texas is so large, the TEA is divided into 20 regions that serve the needs of the local school districts. The State has also provided the TEA with the authority to oversee many different district operations, as well as allocate supplemental funding based on standardized test scores.

Using the TEA data for the year of 2009 , test score data on all the students enrolled who took the reading assessment in the months of March and April of that year were analyzed in this study. The TEA does disaggregate the sub-populations with percentages of each group who passed TAKS tests; however, the TEA does not disaggregate individual test item performance for these sub-populations. As a result, test item performance will be analyzed for all of the students who took the test with all subpopulations included.

## Instruments

Since the No Child Left Behind Act of 2001, the state of Texas established the requirements and the standards for assessment systems to be accountable to the federal government, and comply with the law in assessing Reading, Writing, Math, Science and Social Studies. The TEA developed an instrument called the Texas Assessment of Knowledge and Skills (TAKS) as a standardized assessment used for both primary and secondary schools. This standardized test required under the TEA was developed and scored by Pearson Educational Measurement with supervision by the TEA in 2009.

The TAKS test component that was examined in this investigation was the Reading Comprehension assessment for the spring of 2009. The Reading Comprehension Assessment had 36 multiple-choice questions for Grade 3 in the objective skill areas, which are titled: (1) Basic Understanding, (2) Applying Knowledge and Literary Elements, (3) Using Strategies to Analyze, and (4) Applying Critical Thinking Skills. The Grade 6 Reading Comprehension Assessment had these same categories for objective skills tested, but a difference with the number of test questions was increased to 42 . Finally, the Grade 11/Exit Level Reading Comprehension
assessment had 48 questions and similar categories of objectives. In the Grade 11/Exit Level assessment, the categories are: (1) Basic Understanding, (2) Literary Elements and Techniques, and (3) Analysis and Evaluation. The Exit Level assessment also has some short answer portions that were not analyzed in this investigation of multiple-choice incorrect answers.

From the data provided by the TEA in a final analysis format, the stated objective categories and the Item Analysis form of the incorrect answer options from the multiple choice format were relied upon. The released test booklets for these grade levels were used in Chapter V to provide further insights with some recommendations.

## Participants

According to the US Census Bureau and the Texas Department of State Health Services, Texas had an estimated population of $24,782,302$ as of 2009 . From that general population, approximately $27 \%$ are people under that age of 18 . Approximately $4,300,000$ students are enrolled in the public schools in Texas annually. In 2009, about $49 \%$ of the children enrolled in public education from Kindergarten through the 12th grade were Hispanic. From 1999 to 2009 Hispanics have comprised about $91 \%$ of the new growth in the public school systems of Texas (US Census Bureau, 2009).

Texas had approximately $2,200,000$ male students and 2,100,000 female students from Kindergarten through the 12th grade. Approximately 127,000 Asian-Pacific Islander students, 13,000 American Indian-Alaskan students, 617,000 Black students, 1,894,000 Hispanic students, and 1,677,000 White students are enrolled in Texas public schools (TEA, 2009).

Participants whose TAKS test item performance was analyzed in this investigation included all student populations mentioned as well as students with other demographic characteristics. That is, students determined to be economically disadvantaged constitute approximately 200,000 students in each grade level sampled; Migrant students vary from 2,200 to 2,700 from the third grade to the eleventh grade. English as a Second Language or ESL students comprise approximately 11,900 to 52,439 students. Students deemed to be at-risk as well as Title I students range from 12,000 to 10,000 students in these grade levels. Scores from students who were enrolled in special education were not included for this testing population; therefore, data were analyzed for only regular education students in the State in the respective grade levels of third, sixth, and eleventh.

## Procedures

Once data were obtained, the first step of sorting and classifying occurred. The data were first selected in two categories: Low Percentage Distribution (for questions having less than 9\% incorrect answers) and High Percentage Distribution (for questions having $10 \%$ or more incorrect answers). From the one category: High Percentage Distribution, the second step was examined for the larger percentage of incorrect answer choices. In this category a subcategory or another two groups was present: Answer items with high percentage "anomalies" (anomalies meaning a higher percentage in one answer option choice that exceeds $10 \%$ ), and answer options that had percentages with "even distribution" (even distribution meaning the percentages range between $1 \%$ to $9 \%$ for the three remaining answer option choices).

The third step of the process was to examine only the category of the anomalies or the incorrect answer option choices with greater or irregular distribution of percentage. From this narrowed group of high percentage anomalies, an examination of the test item and the knowledge/skill objective was conducted. Step four was to determine if the anomalies in the incorrect answers fell into similar (repeating) test objectives clusters or varied and different test objectives clusters. Four objectives clusters were present for Grade 3: (1) Basic Understanding, (2) Applying Knowledge of Literary Elements, (3) Using Strategies to Analyze, and (4) Applying Critical-Thinking Skills.

The third grade served as a foundation for this method of examination. After the third grade incorrect answer anomalies were discovered and correctly identified with a matching test objective cluster. Step five did the same (i.e., steps one through four) with the Grade 6 TAKS test in Reading Comprehension, and step six was the same method with the Exit level exam, but only with the multiple-choice portions of the test: (a) Literary Elements and Techniques, and (b) Analysis and Evaluation.

The seventh step of this process was to represent graphically each grade levels’ incorrect answer option anomalies for a visual perspective to the reader and to illustrate where these anomalies occur according to the knowledge/skill objectives on the test. The graphic charts showed if a reoccurring pattern of anomalies was present in the percentage dispersions within one type of test objective cluster or scattered evenly throughout all the test objectives. These graphic charts showed the eighth step that was a side-by-side grade level comparison to illustrate further a discovery for a relationship of common objectives answered incorrectly, vertically through the upper grade levels, or null hypothesis of no common objective relationships vertically through the upper grade levels.

The ninth step entailed gathering various insights about these anomalies by investigating in using the TAKS Test Booklets and Answer Keys for each grade level. For example, findings and recommendations were made with this information on Grade 3 with some items that stood out with the highest anomalies, without any relationship or connection with other objectives in different grade levels. The tenth and final step in the method was to report the findings in Chapter IV.

In summary, the steps used in analyzing individual test item performance in this method of study were the following:

1. From the 2009 Comprehensive Annual Report on Texas Public Schools, $90 \%$ of 3rd graders passed the TAKS test in Reading Comprehension. Therefore, 10\% was a general guideline as a place to start in examining incorrect answers.
2. From the TAKS Item Analysis Report for Third Grade, sort question items into two groups: High Percentages ( $10 \%$ or higher) of wrong answers and Low Percentages (9\% or lower) of wrong answers.
3. From the High Percentages group: sort incorrect answer "anomalies" for higher percent dispersions of $10 \%$ or higher on one single incorrect answer choice from "even distribution" of percentage dispersions of $9 \%$ or less for each individual incorrect answer option.
4. From the "anomalies" dispersion group: select one of the individual incorrect answer option choices that have the highest percentage of irregularity above the others.
5. From the single irregular high percentage option: Match test question with knowledge/skill test objective.
6. Conduct the same narrowing method (Steps 1-4) with Sixth Grade TAKS Reading.
7. Conduct the same narrowing method (Steps 1-4) with the Exit Level TAKS English Language Arts (multiple-choice section).
8. Create a graph to represent each grade level studied of the irregularities within test knowledge/skill test objectives.
9. Represent the three different graphical data charts to illustrate any or all possible relationships between grade levels with common knowledge/skill objectives, frequently answered incorrectly for a vertical exhibit.
10. Determine whether a vertical relationship was present among the incorrect answer options, if yes then A, if no then B in Step 10.
11. A. Examine the TAKS Test Booklets/Answer Key for all three grade levels collectively and make recommendations vertically or B. Examine the TAKS Test Booklets/Answer Key individually for all three grade levels and make grade-level only or horizontal recommendations.

## Limitations

This study was limited to the State of Texas. According to the Texas Education Agency (2009), 1040 school districts are in Texas. Out of these school districts, a sample limited to Grade 3, Grade 6, and Grade 11/Exit Level students were represented in this investigation. Of the different types of tests given in 2009, only the TAKS Reading Comprehension test items were analyzed in this study. In March/April of 2009, the State of Texas administered standardized reading tests to more than 750,000 third grade students, sixth grade students, and Exit Level regular students. This study was limited to
only those students in third grade, sixth grade, and Exit Level who were considered "Not in Special Education." In other words, test item data were analyzed for only students who were considered to be "regular" learners.

For example, from the TAKS Summary Report on Group Performance, of March 2009, this category limited the study to 299,689 students in third grade. This number encompasses 148,134 male students and 151,492 female students (with 63 students not providing information about gender). This study included the following participants in Grades 3, 6, Grade11/Exit Level: Economically Disadvantaged, Title I participants and non-participants, Migrant, Limited English Proficiency (LEP), Bilingual, English as a Second Language (ESL), Gifted and Talented, and At-Risk (TEA, 2009).

The Third Grade Reading TAKS Test was 36 questions long. In addition, the following four different groups of objective categories were listed for this Reading test: Basic Understanding, Applying Knowledge of Literary Elements, Using Strategies to Analyze, and Applying Critical -Thinking Skills. The Sixth Grade Reading assessment had 42 questions with the same objective categories, and the Exit Level had 48 questions in the multiple-choice format under the same categories. Only those answers that were considered "incorrect" were examined in this investigation. And, from those incorrect answers, only the answer items with the highest percentage of dispersion were analyzed. The study was also limited to a quantitative comparison of DDF selections anomalies.

The TAKS Item Analysis Summary Reports were the primary source of data used for this study. All data used for this study were either in percentage form taken from raw data or in a raw from and were original data, without any sort of adjustment, conversion or transformation, being real numbers of students. Additional data that TEA posted on-
line and provided to the public are available but not all of these data were required in this investigation. The major types of data posted from TEA were the frequency distribution graph data that represents scale scores that test rigor compared from one year to the next, or multiple administrations in the same year with a different form of the same type of grade level and subject content of the test. Not examined in this investigation was test rigor from one year to the next or rigor within the same year with multiple administrations of the same grade levels. Instead, a single year test administration was examined to ascertain the extent to which relationships of incorrect answers percentages might be present from both a "horizontal viewpoint" in third grade reading comprehension and a "vertical standpoint" in the same year of March/April 2009. In other words, the vertical view would be that the third, sixth and eleventh grades would be investigated only for the single year 2009 and on a single administration in the spring. Although the TEA does administer another TAKS test in April 2009 for some other grade levels, the TEA does not provide data for this second test given in the forms of an Item Analysis, test booklets or answer keys. Thus, a limitation in this study was a focus on only the data that were in the public domain, only data that were regarded as being raw data, and only for one single year.

Field questions are also a consideration within this study. The field questions were an unknown regarding which specific test questions actually counted in a standard score and which specific test questions did not count. The TEA considers all questions on test a "field question" until the scores are finalized. The TEA discarded 10 test questions that did not count in the overall scale scores. The issue of field questions would be problematic if scale scores were analyzed herein, however, because percent-
scores were derived from raw data, much information was gained simply by examining the incorrect answer choices, whether, "field" or not, the idea of investigating incorrect answers was the goal of this study. The end result of the converted scores was not taken into consideration for this study. Therefore, the idea of examining the numbers of students who missed a correct answer merits relevance and value for this study.

Every study, no matter how well it is conducted, has limitations. Therefore, for this fact, it is not reasonable that the words "prove" and "disprove" are used with respect to research findings. It is always possible that future research will cast doubt on the validity of any hypothesis or the conclusions from a study.

## Chapter 4 Results

The interest for this study of examining incorrect answer options came from examining ways to help educational leaders make more informed decisions about instructional strategies for increasing standardized test scores. Because standardized assessment are currently here to stay and most likely will be in the next 10 to 20 years, this researcher took a unique approach in directly focusing on and analyzing test item analysis reports for the state of Texas.

The findings for this study were interesting because the sample size was quite large. Essentially this study consisted of examining the percent-score data that was publicly available data and provided by the Texas Education Agency (TEA). In this study, the percent-score data was converted back to raw data with the numbers of students who took the test and answered some items incorrectly. Incorrect answers were then examined with higher percentages using $10 \%$ as a starting point, and then increasing from there to another additional $10 \%$ for answers options that were incorrect. This procedure allowed a fast filter to show the highest percentages and reveal these percentages as "percentage anomalies." From those anomalies (i.e., the highest percentages of incorrect answer options) some conclusions can be made in Chapter 5.

This Differential Distractor Functioning (DDF) study was conducted to ascertain the extent to which percentage anomalies might be present. If present, then an analysis was conducted to determine whether any anomalies reoccurred in vertical grade levels such as sixth and eleventh grades with corresponding objective categories. An example of a percentage anomaly would be if one incorrect answer option was $10 \%$ or higher for students selection. The test did have these anomalies and in a few cases $20 \%$ or more
students selected the same incorrect answer. A few of these choices were "stand out" options that will be reviewed further in Chapter 5.

From these high percentages of incorrect answer options, a correlating objective cluster of skills was then examined. To illustrate the percentage rate and the objective cluster for each set of data, charts throughout this chapter will aid in communication of the findings. Third grade was the foundation of this study because third grade serves as an "entrance gate" to testing being the first official standardized assessment taken in the state of Texas. Third grade was the "horizontal" part of this study, and sixth grade along with Grade 11/Exit Level was the "vertical" part of this study. For the findings in this study the following research questions were the focus that follows:

1. How many questions in third grade reading comprehension were missed in a grand total?
2. Which questions were most frequently missed?
3. How many questions had students selected incorrectly $10 \%$ of the time or more?
4. Out of the $10 \%$ or more percentage dispersions of wrong answers, is the dispersion percentage equally distributed or unequally distributed?
5. If the percentage dispersion is unequally distributed, is there a higher percentage for one single wrong answer choice? (For example, if A, B, C and D are the choices for the test item, and A is the correct answer, than possibly B has a larger percentage then C and D as the three possible incorrect answers choices.)
6. How many high percentage anomalies occur in the third grade reading comprehension assessment out of 36 questions?
7. What knowledge or skill objectives do the percentage anomalies fall under?
8. Is there a reoccurring pattern of the same objective repeatedly for third grade?
9. If so, does that same repeating high percentage dispersal occur within the same type of knowledge or skill objective in a higher-grade level? (Sixth grade and the Exit level will be examined the same way, as third grade and objective categories will be compared, and after these findings recommendations will be made in Chapter Five.)
10. If no relationship or connection is present with in the vertical comparison of knowledge and skill objectives, then individual or horizontal grade level anomalies will be examined for recommendations in Chapter Five.

The results of this study rely on the primary public data from the state of Texas. To provide a frame of how the Reading Comprehension/Language Arts assessments compared with all the other content area assessments in the batch of tests for the 2008 and the 2009 school years the following charts for Mathematics, Writing, Science, Social Studies and all grades tested was furnished in the 2009 Comprehensive Annual Report on Texas Public Schools: A Report to the 81st Legislature from the Texas Education Agency, on page $v$ in the "Executive Summary."

The passing rate for all grades in Reading/ELA (English Language Arts) was 91\%. Figure 4-1 depicts these percentages for the 2008 and 2009 school years.


Figure 4-1. TAKS Passing Rates, All Grades Tested, Reading/ELA for the 2008 and 2009 school years.

On page 9 in the "Academic Excellence Indicators" section of the same report, third grade Reading/ELA scores for the entire State as a passing rate were $91 \%$. Shown in Figure 4-2 below are the percent passing rates on the TAKS Mathematics exam of $80 \%$ in the 2008 school year and $82 \%$ in the 2009 school year.


Figure 4-2. TAKS Passing Rates, All Grades Tested, Mathematics for the 2008 and 2009 school years.

Depicted in Figure 4-3 below are the TAKS passing rates on the Writing exam for the 2008 and 2009 school years. As revealed in this figure, $93 \%$ of students passed the TAKS Writing exam for the 2008 and 2009 school years.


Figure 4-3. TAKS Passing Rates, All Grades Tested, Writing for the 2008 and 2009 school years.

Shown in Figure 4-4 below are the TAKS passing rates on the Science exam for the 2008 and 2009 school years. As revealed in this figure, $74 \%$ of students passed the TAKS Science exam for the 2008 school year. A higher percentage, $78 \%$, of students passed the TAKS Science exam in the 2009 school year.


Figure 4-4. TAKS Passing Rates, All Grades Tested, Science for the 2008 and 2009 school years.

Present in Figure 4-5 below are the TAKS passing rates on the Social Studies exam for the 2008 and 2009 school years. As depicted in this figure, $91 \%$ of students passed the TAKS Social Studies exam for the 2008 school year. A slightly higher percentage, $93 \%$, of students passed the TAKS Social Studies exam in the 2009 school year.


Figure 4-5. TAKS Passing Rates, All Grades Tested, Social Studies for the 2008 and 2009 school years.

Delineated in Figure 4-6 below are the TAKS passing rates on all of the TAKS tests for the 2008 and 2009 school years. As shown in this figure, $72 \%$ of students passed the TAKS exams for the 2008 school year. A slightly higher percentage, $74 \%$, of students passed the TAKS exams in the 2009 school year.


Figure 4-6. TAKS Passing Rates, All Grades Tested, All Tests Taken for the 2008 and 2009 school years.

Because the focus of this study is only on regular students who passed and not all students, having a limitation to the study, the following chart is for this group. This subgroup of regular students resulted in the score decreasing to $90 \%$ with the first administration of the assessment. Two administrations for this assessment occurred in the spring of 2009. The first assessment was in March 2009 and these data were released for this assessment. A second administration for this assessment was given to different subgroups and for students who needed to take the assessment for a second time. The

TEA did not release these data. Even though this study does not have every single person who took the TAKS test in the spring of 2009, included herein is a majority of the students who took the test on the first administration. Table 4-1 below simplifies the data for the use of this study:

Table 4-1
Texas Education Agency Performance Report for the 2008-2009 School Year TAKS
English Passing Rates

| TAKS English First Administration Only | Reading | Mathematics | All State |
| :--- | :---: | :---: | :---: |
| Grade 3 Students | $90 \%$ | $86 \%$ | $82 \%$ |

The chart above represents only the regular students who completed the test in English and who were tested with the first administration. As such, this chart reflects one of the limitations of this study. Because $10 \%$ of Texas students did not pass the TAKS Reading exam, in the 2008-2009 school year, the top $10 \%$ of incorrect answers will be examined. That is, if an exam question had $90 \%$ of the students answering this question correctly, then $10 \%$ of that $90 \%$ would fall into this study of incorrect answer options. If an exam question had $91 \%$ of the students answering a question correctly, then the other $9 \%$ of incorrect answer would not be a part of this study.

## Results of Each Set Statistics

Third grade constitutes the base for the study. Similar percentages of passing and failing were also noted for Grade 6 students in that $93 \%$ passed and the Exit Level, $93 \%$ passed (located in Appendix K and L). Taking into consideration that $91 \%$ was the average passing rate for Texas students and that $90 \%$ was the average passing rate for

Grade 3 students on the TAKS English exam, the $10 \%$ figure served to use as a rounded mean to begin this study. With the research questions driving this investigation, each exam question was analyzed one at a time. Accordingly, results for each research question are presented below.

With respect to the first question of, "How many questions in third grade reading comprehension were missed in a grand total?", readers are directed to Table 4-2.

Table 4-2

Percent Correct Responses to Grade 3 TAKS Reading Exam on the March 2009 Test Administration

| TAKS Reading Exam Question | Percent Correct |
| :---: | :---: |
| 1 | $97 \%$ |
| 2 | $88 \%$ |
| 3 | $89 \%$ |
| 4 | $81 \%$ |
| 5 | $91 \%$ |
| 6 | $92 \%$ |
| 7 | $85 \%$ |
| 8 | $91 \%$ |
| 9 | $85 \%$ |
| 10 | $89 \%$ |
| 11 | $92 \%$ |
| 12 | $93 \%$ |
| 13 | $93 \%$ |
| 14 | $68 \%$ |
| 15 | $67 \%$ |
| 16 | $85 \%$ |
| 17 | $94 \%$ |
| 18 | $83 \%$ |
| 19 | $88 \%$ |
| 20 | $85 \%$ |
| 21 | $76 \%$ |
| 22 | $81 \%$ |
| 23 | $74 \%$ |
| 24 | $90 \%$ |
| 25 | $94 \%$ |
| 26 | $95 \%$ |
| 27 | $56 \%$ |
| 28 | $84 \%$ |


| 29 | $80 \%$ |
| :--- | :--- |
| 30 | $77 \%$ |
| 31 | $81 \%$ |
| 32 | $82 \%$ |
| 34 | $87 \%$ |
| 35 | $76 \%$ |
| 36 | $77 \%$ |

In examining the Item Analysis Report Summary for Grade 3 Texas students’ reading comprehension and using a process of converting percent-scores back to the raw data of the simple numbers provided by the State, the answer to this question is 25 divided by 36 , which equals $69.44 \%$ of items correctly answered. In reviewing the total missed questions on this test, a substantial number of items to analyze were present. According, these items provided justification for conducting this study. Even though most questions were correctly answered, as would be expected, some questions had high percentages of incorrect selection. These items constitute the "bugs" referred to in Chapter 1 that need examination and analysis by educational leaders. In particular, educational leaders need to examine these missed items to determine reasons students would be likely to answer these items incorrectly. As such, efforts could be made, possibly, in curricula and in instructional strategies.

The second question of the focused research questions: Which questions were most frequently missed? Readers are directed to Table 4-3 for the items on this exam. The three items on the TAKS Reading exam that were answered by less than $70 \%$ of students were items 27,15 , and 14 .

Table 4-3
Grade 3 TAKS Reading Exam Items Arranged in Order of Most to Least Missed on the March 2009 Test Administration

| TAKS Reading Exam Question | Percent Correct |
| :---: | :---: |
| 27 | $56 \%$ |
| 15 | $67 \%$ |
| 14 | $68 \%$ |
| 23 | $74 \%$ |
| 21 | $76 \%$ |
| 34 | $76 \%$ |
| 30 | $77 \%$ |
| 35 | $77 \%$ |
| 36 | $79 \%$ |
| 29 | $80 \%$ |
| 4 | $81 \%$ |
| 31 | $81 \%$ |
| 22 | $81 \%$ |
| 32 | $82 \%$ |
| 18 | $83 \%$ |
| 28 | $84 \%$ |
| 20 | $85 \%$ |
| 9 | $85 \%$ |
| 7 | $85 \%$ |
| 16 | $85 \%$ |
| 33 | $87 \%$ |
| 2 | $88 \%$ |
| 19 | $88 \%$ |
| 3 | $89 \%$ |
| 10 | $89 \%$ |

The results for Grade 3 were 25 questions out of a total of 36 questions fell below the $10 \%$ mark on getting the answer correct. That is, $70 \%$ of the test was answered with less than $90 \%$ of the questions being answered correctly.

In Figure 4-7 below, the five most difficult TAKS Reading items are presented, with respect to the percent of students who answered the item correctly.


Figure 4-7. Five most difficult TAKS Reading items for Grade 3 students on the March 2009 test administration.

In the third research question: "What knowledge or skill objective do these percentage anomalies fall under?", the exam questions were plotted on a chart to determine specific skills and knowledge areas assessed by these questions. The test was divided into four main areas for skills and knowledge: (1) Basic Understanding - 15 questions, (2) Applying Knowledge of Literary Elements - 7 questions, (3) Using Strategies to Analyze - 6 questions and (4) Applying Critical-Thinking Skills - 8 questions.

Table 4-4 provides a representation of the number of test items that were answered incorrectly $10 \%$ or more than $10 \%$ of the time for third grade.

Table 4-4
Grade 3 TAKS Reading Exam Items Arranged by Test Objectives on the March 2009 Test Administration

| TAKS Reading | $n$ of <br> questions <br> in <br> category | $n$ of <br> Incorrect <br> Choices 10\% <br> or above in <br> Category | $n$ of Correct <br> Choices above <br> $90 \%$ or higher in <br> Category | \% of Category <br> met |
| :--- | :--- | :--- | :--- | :---: |
| Objective 1 Basic <br> Understanding | 15 | 11 | 4 | $73 \%$ |
| Objective 2 Applying | 7 | 6 | 1 | $85 \%$ |
| Knowledge of Literary <br> Elements <br> Objective 3 Using <br> Strategies to Analyze | 6 | 4 | 2 | $67 \%$ |
| Objective 4 | 8 | 5 | 3 | $62 \%$ |
| Applying Critical- <br> Thinking Skills | 8 |  |  |  |

As delineated in Table 4-4 is that students demonstrated the lowest performance on Objective 4: Applying Critical-Thinking Skills ( $62 \%$ met this category) and the highest performance on Objective 2: Applying Knowledge of Literary Elements (85\% met this category).

These percentages are visually depicted in Figure 4-8 below.


Figure 4-8. Percent of TAKS Reading test objectives met by category on the March 2009 test administration.

The fourth question: How many students missed questions with 10\% or higher incorrect answers on the assessment? These percentages will now be described in real numbers of how many students are answering incorrectly with a $10 \%$ or higher on a test item. The total number of students who took the Grade 3 TAKS test in the first administration and were regular students was 299,689 or $90 \%$ of Grade 3 students who took this test. If the category of (1) Basic Understanding is examined, with 73\% answering $10 \%$ or higher incorrectly, this value would translate to 218,773 number of students. For the category of (2) Applying Knowledge of Literary Elements, with 85\% answering $10 \%$ or higher incorrectly, this value would reflect 254,736 students who answered incorrectly. With respect to category (3) Using Strategies to Analyze, 67\% answered $10 \%$ or higher incorrectly and, as such, this value would constitute 200,792
students. Finally for the category of (4) Applying Critical-Thinking, $62 \%$ answered $10 \%$ or higher incorrectly, and, as such, would comprise 185,807 students. In Table 4-5 below are presented the number of students who took the TAKS test in the 2008-2009 school year. In addition to the number of students who were assessed, their performance is also indicated.

Table 4-5
Numbers and Performance of Grade 3 Students Who Took the TAKS Test in the 20082009 School Year

| Participation in State | $n$ of All | $n$ Tested | \% Met | $n$ Not Tested | \% Not |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Assessment by | Students | Regular | Standard | Regular | Tested |
| Grade 3 for 2008- | (Total) | Students | Regular | Students |  |
| 2009 for the First |  |  | Students |  |  |
| Administration |  |  |  |  |  |
| Grade 3 | 363,100 | 299,689 | $90 \%$ | 3,110 | $0.9 \%$ |

Examining the 25 incorrect answer choices and the categories, the next question that needs addressing regards what is occurring vertically. Thus, the next research question is: Is there a reoccurring pattern of the same objectives for Sixth Grade and the Exit Level? With the Sixth Grade assessment the same exact objective categories were present to compare the high percentage anomalies. The only substantive difference was that the Sixth Grade assessment has 42 questions instead of 36 questions. The categories can nevertheless be compared, based upon how many questions were answered incorrectly. The Sixth Grade test was also divided into four main areas for skills and knowledge: (1) Basic Understanding - 13 questions, (2) Applying Knowledge of Literary Elements -8 questions, (3) Using Strategies to Analyze - 8 questions and (4) Applying Critical-Thinking Skills - 13 questions.

By comparing these $10 \%$ or higher anomalies with a different grade level test, a determination can be made regarding the presence or absence of a reoccurring pattern of missed questions at a higher percentage. Delineated in Table 4-6 below are the percent of students' correct responses on the Grade 6 TAKS Reading exam for the March 2009 administration.

Table 4-6
Percent Correct Responses to Grade 6 TAKS Reading Exam on the March 2009 Test Administration

| TAKS Reading Exam Question | Percent Correct |
| :---: | :---: |
| 2 | $76 \%$ |
| 3 | $63 \%$ |
| 4 | $88 \%$ |
| 6 | $86 \%$ |
| 7 | $89 \%$ |
| 8 | $65 \%$ |
| 12 | $83 \%$ |
| 13 | $81 \%$ |
| 15 | $76 \%$ |
| 17 | $65 \%$ |
| 18 | $88 \%$ |
| 19 | $88 \%$ |
| 22 | $81 \%$ |
| 23 | $70 \%$ |
| 24 | $88 \%$ |
| 25 | $76 \%$ |
| 27 | $86 \%$ |
| 28 | $86 \%$ |
| 30 | $79 \%$ |
| 30 | $77 \%$ |
| 33 | $89 \%$ |
| 34 | $88 \%$ |
| 35 | $77 \%$ |
| 36 | $77 \%$ |
| 37 | $63 \%$ |
| 38 | $79 \%$ |
| 39 | $82 \%$ |
| 41 | $65 \%$ |
| 42 | $87 \%$ |
|  |  |

For Grade 6 TAKS Reading assessment, 29 of the 42 questions were answered incorrectly with a $10 \%$ or higher rate. Accordingly, almost $69 \%$ of the TAKS Reading exam items had incorrect answer options to which students responded on this test. This result was congruent to the Grade 3 assessment except the percentages in each category had a different range.

Table 4-7
Grade 6 TAKS Reading Exam Items Arranged in Order of Most to Least Missed on the March 2009 Test Administration

| TAKS Reading Exam Question | Percent Correct |
| :--- | :---: |
| 37 | $63 \%$ |
| 3 | $63 \%$ |
| 41 | $65 \%$ |
| 8 | $65 \%$ |
| 17 | $65 \%$ |
| 23 | $70 \%$ |
| 25 | $76 \%$ |
| 2 | $76 \%$ |
| 15 | $76 \%$ |
| 35 | $77 \%$ |
| 36 | $77 \%$ |
| 30 | $77 \%$ |
| 38 | $79 \%$ |
| 30 | $79 \%$ |
| 22 | $81 \%$ |
| 13 | $81 \%$ |
| 39 | $81 \%$ |
| 12 | $82 \%$ |
| 6 | $83 \%$ |
| 27 | $86 \%$ |
| 28 | $86 \%$ |
| 42 | $86 \%$ |
| 18 | $87 \%$ |
| 19 | $88 \%$ |
| 34 | $88 \%$ |
| 24 | $88 \%$ |
| 4 | $88 \%$ |
| 7 | $88 \%$ |
| 33 | $89 \%$ |
|  | $89 \%$ |

In Figure 4-9 below, the five most difficult TAKS Reading items for Grade 6 students are presented, with respect to the percent of students who answered the item correctly.


Figure 4-9. Five most difficult TAKS Reading items for Grade 6 students on the March 2009 test administration.

Delineated in Table 4-8 below are the answers arranged by objective category. In the (1) Basic Understanding category, 8 out of 13 questions were answered incorrectly. Accordingly, students answered $62 \%$ of questions in this category incorrectly. With respect to the category of (2) Applying Knowledge of Literary Elements, 8 out of 8 questions had incorrect answers over $10 \%$. As such, $100 \%$ of the questions in this category had incorrect answers. Regarding the category of (3) Using Strategies to Analyze, 5 out of 8 answers had $10 \%$ or higher incorrect answer options. Student responses to objective category (3) Using Strategies to Analyze, in Grade 6 with 63\%, were similar to their answers to the first objective category (1) Basic Understanding for

Grade 6 with $62 \%$. Finally, for the category of (4) Applying Critical-Thinking Skills, 7 out of 13 questions had answers with a percentage higher than $10 \%$. This last category constituted the most difficult objective for students, as $54 \%$ of the questions had the higher anomaly. These objectives were listed for both Grade 3 and Grade 6 students.

Table 4-8
Grade 3 and Grade 6 TAKS Reading Exam Items Arranged by Test Objectives on the March 2009 Test Administration

| 2009 Reading | Basic | Applying | Using | Applying |
| :--- | :--- | :--- | :--- | :--- |
| Comprehension | Understanding | Knowledge of | Strategies to | Critical- |
|  |  | Literary Elements | Analyze | Thinking |
|  |  |  |  | Skills |
| Grade 3 |  |  | $67 \%$ | $62 \%$ |
| Grade 6 | $73 \%$ | $85 \%$ | $63 \%$ | $54 \%$ |
|  | $62 \%$ | $100 \%$ |  |  |

In Figure 4-10 below, the percentages of Grade 3 and of Grade 6 students who mastered items for this objective of Basic Understanding are provided. As evidenced in this figure, a higher percentage of Grade 3 students met this objective than did Grade 6 students.


Figure 4-10. Grade 3 and Grade 6 students who mastered the Basic Understanding objective in the 2008-2009 school year.

Depicted in Figure 4-11 below, the percentages of Grade 3 and of Grade 6 students who mastered items for this objective of Applying Knowledge of Literary Elements are provided. As evidenced in this figure, a higher percentage of Grade 6 students met this objective than did Grade 3 students.


Figure 4-11. Grade 3 and Grade 6 students who mastered the Applying Knowledge of Literary Elements objective in the 2008-2009 school year.

Shown in Figure 4-12 are the percentages of Grade 3 and of Grade 6 students who mastered items for the objective of Using Strategies to Analyze. As revealed in this figure, similar percentages of Grade 3 and Grade 6 students met this objective.


Figure 4-12. Grade 3 and Grade 6 students who mastered the Using Strategies to Analyze objective in the 2008-2009 school year.

Revealed in Figure 4-13 are the percentages of Grade 3 and of Grade 6 students who mastered items for the objective of Applying Critical-Thinking Skills. As revealed in this figure, a higher percentage of Grade 3 students met this objective than did Grade 6 students.


Figure 4-13. Grade 3 and Grade 6 students who mastered the Applying CriticalThinking Skills objective in the 2008-2009 school year.

With respect to the numbers of Grade 6 students who took this TAKS test in $2009,304,495$ students or $93 \%$ of the Grade 6 student population were assessed. Regarding the category of (1) Basic Understanding, with $62 \%$ answering $10 \%$ or higher items incorrectly, this value reflects a total of 188,787 students. With respect to the category of (2) Applying Knowledge of Literary Elements, 100\% or 304,495 students answered incorrectly $10 \%$ or more. For the category of (3) Using Strategies to Analyze, $63 \%$ of students answered incorrectly $10 \%$ or higher, which would reflect 191,832
students. Finally, for the category of (4) Applying Critical-Thinking, with 54\% answering $10 \%$ or higher incorrectly, this value would reflect 164,427 students.

As a result of this comparison between Grade 3 and Grade 6 students on these TAKS Reading objectives, a determination that pattern matching was not presented in the objectives. From this analysis, it appeared that there were many answers that when counted as incorrect, a substantive number of students selected the incorrect choices. For both grade levels, approximately $70 \%$ of the items had $10 \%$ or higher for incorrect answer selection. With respect to the individual objective skill categories, however, no patterns appeared to be present.

In continuing the research questions, out of the $10 \%$ or more percentage dispersions of wrong answers, is the dispersion percentage equally distributed or unequally distributed? To ascertain the extent to which the results based on Grade 3 and Grade 6 students were generalizable to other grade levels, an analysis of the Grade 11/Exit Level TAKS was performed. The Grade 11/Exit Level has different categories for objective skills and also has both multiple-choice and short answer items present. The short answer questions, however, are designated on the Item Analysis Summary Report and the Reading portion can be measured with similar categories. The categories for the Exit Level assessment are (1) Basic Understanding - 8 questions, (2) Literary Elements and Techniques - 8 questions, and (3) Analysis and Evaluation - 12 questions. Although these categories differ from Grade 3 and Grade 6, a general assessment can be conducted to ascertain whether approximately $70 \%$ of the test is similar to Grade 3 and Grade 6 students, with respect to the $10 \%$ or higher incorrect answers. An analysis of
individual objective categories, however, cannot be conducted. Data for this analysis were provided by the Texas Education Agency.

The Grade 11/Exit Level TAKS English Language Arts exam had a total of 28 multiple-choice questions and several short answer questions. For purposes of this research investigation, only the multiple-choice questions will be analyzed. In Table 4 9 are these multiple-choice items listed by percentage with $10 \%$ or higher incorrect answer chosen. A total of $67 \%$ of these multiple-choice questions were missed with $10 \%$ or higher incorrect answer options chosen.

Table 4-9
Percent Correct Responses to Exit Level Grade 11/TAKS Reading/ELA Exam on the March 2009 Test Administration

| TAKS Reading/ELA Exam Question | Percent Correct |
| :--- | :---: |
| 2 | $88 \%$ |
| 5 | $87 \%$ |
| 6 | $87 \%$ |
| 7 | $85 \%$ |
| 8 | $78 \%$ |
| 10 | $86 \%$ |
| 11 | $85 \%$ |
| 14 | $76 \%$ |
| 16 | $86 \%$ |
| 17 | $85 \%$ |
| 18 | $82 \%$ |
| 20 | $79 \%$ |
| 22 | $80 \%$ |
| 23 | $82 \%$ |
| 24 | $80 \%$ |
| 26 | $88 \%$ |
| 27 | $86 \%$ |
| 28 | $79 \%$ |

Delineated in Table 4-10 are the same items listed in Table 4-8, however, in Table 4-10, the items are arranged in order from most to least difficult.

Table 4-10
Exit Level Grade 11 TAKS Reading/ELA Exam Items Arranged from Most to Least Difficult on the March 2009 Test Administration

| TAKS Reading/ELA Exam Question | Percent Correct |
| :--- | :---: |
| 14 | $76 \%$ |
| 8 | $78 \%$ |
| 28 | $79 \%$ |
| 20 | $79 \%$ |
| 22 | $80 \%$ |
| 24 | $80 \%$ |
| 23 | $82 \%$ |
| 18 | $82 \%$ |
| 7 | $85 \%$ |
| 11 | $85 \%$ |
| 17 | $85 \%$ |
| 10 | $86 \%$ |
| 16 | $86 \%$ |
| 27 | $86 \%$ |
| 5 | $87 \%$ |
| 6 | $87 \%$ |
| 26 | $88 \%$ |
| 2 | $88 \%$ |

In Figure 4-14 below are depicted the five most difficult TAKS items on the Grade 11/Exit Level exam, with respect to the percent of students who answered the item correctly.


Figure 4-14. Five most difficult TAKS Exit Level reading items for Grade 11 students on the March 2009 test administration.

In terms of the number of students who took the Grade 11/Exit Level exam in $2009,250,839$ or $94 \%$ of the student population were assessed. If the category of (1) Basic Understanding was analyzed, with $62 \%$ answering $10 \%$ or higher incorrectly this statistic would translate to 155,520 students. Regarding the category of (2) Literary Elements and Techniques, $88 \%$ answered $10 \%$ or higher incorrectly, resulting in 220,738 students. Concerning the category of (3) Analysis and Evaluation, 59\% of the students answered $10 \%$ or higher incorrectly, for a total of 147,995 students.

To permit the reader to view student performance at each of the three grade levels in this study, Table 4-11 provides the percentages of students who answered each Reading Comprehension category correctly.

Table 4-11
Grade 3, Grade 6, and Exit Level TAKS Reading/ELA Exam Items by Objective Category on the March 2009 Test Administration

| 2009 Reading <br> Comprehension | Basic <br> Understanding | Applying <br> Knowledge of <br> Literary Elements | Using <br> Strategies to <br> Analyze | Applying |
| :--- | :--- | :--- | :--- | :--- |
| Critical- |  |  |  |  |
| Grade 3 | $73 \%$ | $85 \%$ | $67 \%$ | Thinking |
| Grade 6 | $62 \%$ | $100 \%$ | $63 \%$ | $54 \%$ |
| Grade 11/Exit <br> Level | $62 \%$ | $88 \%$ |  | Skills |

As depicted in Figure 4-15, a higher percentage of Grade 3 students mastered the Basic Understanding category than did Grade 6 and Grade 11 students. Students in Grade 6 and in Grade 11/Exit Level had the same percentages of students who mastered the Basic Understanding reading items.


Figure 4-15. Grade 3, Grade 6, and Grade 11/Exit Level students who mastered the Basic Understanding objective in the 2008-2009 school year.

As revealed in Figure 4-16, 100\% of Grade 6 students mastered the Applying Knowledge of Literary Elements. Students in Grade 3 and in Grade 11/Exit Level had high percentages of students who mastered the Applying Knowledge of Literary Elements reading items.


Figure 4-16. Grade 3, Grade 6, and Grade 11/Exit Level students who mastered the Applying Knowledge of Literary Elements objective in the 2008-2009 school year.

As presented in Figure 4-17, the lowest level of performance was for Grade
11/Exit Level students, who only mastered $59 \%$ of the Using Strategies to Analyze items.
Students in Grade 3 and in Grade 6 had similar percentages of students who mastered the items in this reading comprehension category.


Figure 4-17. Grade 3, Grade 6, and Grade 11/Exit Level students who mastered the Using Strategies to Analyze objective in the 2008-2009 school year.

As depicted in Figure 4-18, the lowest level of performance was for Grade 6 students, who only mastered $54 \%$ of the Applying Critical-Thinking Skills. Students in Grade 3 and in Grade 11/Exit Level also performed poorly in this reading comprehension category.


Figure 4-18. Grade 3, Grade 6, and Grade 11/Exit Level students who mastered the Applying Critical-Thinking Skills objective in the 2008-2009 school year.

After reviewing these findings and examining the incorrect answers that were in the $10 \%$ category for Grade 3 Reading, a fifth additional research question was addressed. Out of the $10 \%$ incorrect answers group, if the percentage dispersion was unequally distributed, is a higher percentage present for one single answer choice? (For example, if $\mathrm{A}, \mathrm{B}, \mathrm{C}$, and D are the choices for this test item, and A is the correct answer, then are the incorrect answers spread equally across $\mathrm{B}, \mathrm{C}$, and D ? Or, is the percentage of incorrect responses higher for one of these incorrect answer options?) If such percentage anomalies are present, what are knowledge or skill objectives in which these
percentage anomalies are present? To answer this research question, an analysis of Grade 3 test questions was conducted. For this grade level, 25 questions fell into the $10 \%$ missed group. The incorrect answers for these items were examined to determine dispersion between the three incorrect answers for each item. For each of the 25 identified questions, three incorrect answer choices were present.

The test questions that had dispersions under $10 \%$ were more evenly distributed. The incorrect options that had over $10 \%$ were less evenly distributed. Test question responses that $10 \%$ or more selected as incorrect of the three incorrect choices were examined next. These choices narrowed the number of questions from 25 to 11 questions and are presented in Table 4-12. As can be viewed in this table, the incorrect options most often selected by Grade 3 students were answer B for question 14, with $19 \%$ of the students selecting this incorrect response option, and answer A for question 27, with $18 \%$ of the students selecting this incorrect response. Also revealed in Table 4-12 is that several of the incorrect response options were rarely selected. For example, answer C for question 4 was selected by only $1 \%$ of these Grade 3 students. Similar low percentages of students selected answer D for question 18, answer C for question 27, and answer A for question 31.

Table 4-12
Dispersion of Grade 3 Students' Responses to Reading Comprehension Items on the March 2009 Test Administration

| Reading | A | B | C | D | Highest $\%$ with |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Comprehension |  |  |  |  | Incorrect |
| Question |  |  |  |  | Answer |
| 4 | Correct $81 \%$ | $3 \%$ | $1 \%$ | $15 \%$ | $15 \%$ |
| 14 | $9 \%$ | $19 \%$ | $4 \%$ | Correct $68 \%$ | $19 \%$ |
| 15 | Correct $67 \%$ | $10 \%$ | $15 \%$ | $8 \%$ | $15 \%$ |
| 18 | Correct $83 \%$ | $4 \%$ | $11 \%$ | $2 \%$ | $11 \%$ |
| 21 | Correct 76\% | $6 \%$ | $7 \%$ | $11 \%$ | $11 \%$ |
| 23 | $8 \%$ | Correct 74\% | $12 \%$ | $6 \%$ | $12 \%$ |
| 27 | $18 \%$ | $10 \%$ | $2 \%$ | Correct $56 \%$ | $18 \%$ |
| 30 | $11 \%$ | Correct 77\% | $4 \%$ | $8 \%$ | $11 \%$ |
| 31 | $2 \%$ | Correct $81 \%$ | $3 \%$ | $14 \%$ | $14 \%$ |
| 34 | $3 \%$ | $9 \%$ | Correct 76\% | $12 \%$ | $12 \%$ |
| 35 | Correct 77\% | $7 \%$ | $6 \%$ | $10 \%$ | $10 \%$ |

These missed items were next grouped by reading comprehension objective. As delineated in Table 4-13, 6 of the items fell into the Basic Understanding category and 4 items were in the Applying Knowledge of Literary Elements category. None of these missed items were in the Using Strategies to Analyze category.

Table 4-13
Grade 3 Students' Reading Comprehension Missed Items by Objective on the March 2009 Test Administration

| $10 \%$ or Higher for <br> one incorrect <br> answer option | Objective 1 <br> Basic <br> Understanding | Objective 2 <br> Applying <br> Knowledge of <br> Literary Elements | Objective 3 <br> Using <br> Strategies to <br> Analyze | Objective 4 <br> Applying <br> Critical- <br> Thinking <br> Skills |
| :--- | :---: | :---: | :---: | :---: |
| Test Question | 4 | 21 |  | 34 |
| Numbers | 14 | 23 |  |  |
|  | 15 | 31 |  |  |
|  | 18 | 35 |  |  |
|  | 27 |  |  | 1 item |

Following this analysis of the missed items for Grade 3 students, an item analysis was performed for Grade 6 students. The 29 questions that fell into the $10 \%$ missed group with incorrect answers for Grade 6 students were reviewed, with a specific focus on the dispersion between the three incorrect answers. Similar to the Grade 3 questions, three incorrect answer choices were present for each item. From these three incorrect answer choices, an examination was made whether any specific incorrect answer option was selected more often than the other incorrect answer options.

The answers that had dispersions under $10 \%$ were more evenly distributed. The incorrect options that had over $10 \%$ were less evenly distributed. These incorrect
answers were analyzed for answers that were $10 \%$ or higher selected as incorrect of the three incorrect choices. As a result, the number of test questions decreased from the total of 29 to 15 items. As revealed in Table 4-14, the incorrect options most often selected by Grade 6 students were answer C for question 41, with $29 \%$ of the students selecting this incorrect response option, and answer C for question 37, with $22 \%$ of the students selecting this incorrect response. Also revealed in Table 4-14 is that several of the incorrect response options were rarely selected. For example, answer B for question 13 was selected by only $1 \%$ of these Grade 6 students. Similar low percentages of students selected answer B and D for question 26, answer B for question 39, and answer B for question 41.

Table 4-14
Dispersion of Grade 6 Students' Responses to Reading Comprehension Items on the March 2009 Test Administration

| Reading | A | B | C | D | Highest \% with |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Comprehension |  |  |  |  | Incorrect |
| Question |  |  |  |  | Answer |
| 2 | 16\% | 3\% | Correct 76\% | 5\% | 16\% |
| 3 | 15\% | Correct 63\% | 13\% | 9\% | 15\% |
| 8 | 13\% | Correct 65\% | 8\% | 13\% | 13\% |
| 13 | 14\% | 1\% | 3\% | Correct 81\% | 14\% |
| 17 | 16\% | Correct 65\% | 4\% | 16\% | 16\% |
| 23 | Correct 70\% | 16\% | 7\% | 7\% | 16\% |
| 25 | 3\% | Correct 76\% | 12\% | 9\% | 12\% |
| 26 | Correct 85\% | 2\% | 10\% | 2\% | 10\% |
| 30 | 6\% | 5\% | Correct 79\% | 10\% | 10\% |
| 35 | Correct 77\% | 5\% | 5\% | 14\% | 14\% |
| 36 | Correct 77\% | 5\% | 11\% | 7\% | 11\% |
| 37 | 7\% | 7\% | 22\% | Correct 63\% | 22\% |
| 38 | 3\% | Correct 79\% | 6\% | 12\% | 12\% |
| 39 | 6\% | 2\% | 10\% | Correct 82\% | 10\% |
| 41 | Correct 65\% | 2\% | 29\% | 4\% | 29\% |

These missed items were next grouped by reading comprehension objective. As delineated in Table 4-15, 6 of the items fell into the Applying Knowledge of Literary Elements category.

Table 4-15
Grade 6 Students' Reading Comprehension Missed Items by Objective on the March 2009 Test Administration

| 10\% or Higher for <br> one incorrect <br> answer option | Objective 1 <br> Basic <br> Understanding | Objective 2 <br> Applying <br> Knowledge of <br> Literary Elements | Objective 3 <br> Using <br> Strategies to <br> Analyze | Objective 4 <br> Applying <br> Critical- <br> Thinking <br> Skills |
| :--- | :---: | :---: | :---: | :---: |
| Test Question |  |  |  |  |
| Numbers |  |  |  |  |
|  | 2 | 23 | 3 | 8 |
|  | 13 | 25 | 35 | 17 |
|  | 26 | 30 |  | 37 |
| Total Items | 38 | 36 |  |  |

In Table 4-16, the previously discussed items are grouped by objective for students in Grade 3 and Grade 6. The objectives of Basic Understanding and Applying Knowledge of Literary Elements each had 10 of these items. In contrast, the objective of Using Strategies to Analyze only had 2 of these items.

Table 4-16
Grade 3 and Grade 6 Students' Reading Comprehension Missed Items by Objective on the March 2009 Test Administration

| 10\% or Higher | Objective 1 <br> Basic <br> Understanding | Objective 2 <br> Applying <br> Knowledge of incorrect <br> Literary Elements | Objective 3 <br> Using <br> Strategies to <br> Analyze | Objective 4 <br> Applying <br> Critical- <br> Thinking <br> Skills |
| :--- | :---: | :---: | :---: | :---: |
| Grade 3 |  | 4 | 0 | 1 |
| Grade 6 | 6 | 6 | 2 | 3 |

Finally, an analysis was conducted of the Grade 11/Exit Level English Language Arts test questions. For these students, 18 questions fell into the $10 \%$ missed group with incorrect answers selected. The dispersion of student responses across the three incorrect answers was examined. Answers with dispersions under 10\% were more evenly distributed, whereas the incorrect options that had over $10 \%$ were less evenly distributed. Similar to the analyses reported for Grade 3 and Grade 6 students, answers that were again $10 \%$ or more selected as incorrect were analyzed. This analysis narrowed the number of test questions from 18 to 9 questions.

As delineated in Table 4-17, the incorrect options most often selected by Grade 11/Exit Level students were answer C for question 24, with $18 \%$ of the students selecting this incorrect response option, and answer B for question 14 , with $17 \%$ of the students
selecting this incorrect response. Also indicated in Table 4-17 is that several of the incorrect response options were rarely selected. For example, answers B and C for question 2 were selected by only $1 \%$ of these Grade 11 students. Similar low percentages of students selected answers A and D for question 7, answer B for question 10, answer B for question 17, answer B for question 22, and answers A and D for question 24.

Table 4-17
Dispersion of Grade 11/Exit Level Students' Responses to Reading Comprehension Items on the March 2009 Test Administration

| Reading | A | B | C | D | Highest \% with <br> Incorrect <br> Answer |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Comprehension |  |  |  |  |  |
| Question |  |  |  |  |  |
| 2 | Correct $88 \%$ | $1 \%$ | $1 \%$ | $10 \%$ | $10 \%$ |
| 7 | $1 \%$ | Correct $85 \%$ | $13 \%$ | $1 \%$ | $13 \%$ |
| 10 | Correct $86 \%$ | $1 \%$ | $12 \%$ | $2 \%$ | $12 \%$ |
| 14 | Correct 76\% | $17 \%$ | $3 \%$ | $3 \%$ | $17 \%$ |
| 17 | $13 \%$ | $1 \%$ | $2 \%$ | Correct $85 \%$ | $13 \%$ |
| 20 | $5 \%$ | $6 \%$ | Correct 79\% | $11 \%$ | $11 \%$ |
| 22 | $12 \%$ | $1 \%$ | $6 \%$ | Correct $80 \%$ | $12 \%$ |
| 24 | $1 \%$ | Correct $80 \%$ | $18 \%$ | $1 \%$ | $18 \%$ |
| 28 | $11 \%$ | Correct 79\% | $5 \%$ | $5 \%$ | $11 \%$ |

In Table 4-18, the items in Table 4-15 are grouped by objective for these Grade 11/Exit Level students. The objective of Using Strategies to Analyze/Applying Critical Thinking Skills had the most missed items, with 5 of the 9 items falling in this category.

Table 4-18
Grade 11/Exit Level Students' Reading Comprehension Missed Items by Objective on the March 2009 Test Administration

| 10\% or Higher for <br> one incorrect <br> answer option | Objective 1 <br> Basic <br> Understanding | Objective 2 <br> Applying <br> Knowledge of <br> Literary Elements | Objective 3 <br> Using <br> Strategies to <br> Analyze | Objective 4 <br> Applying <br> Critical- <br> Thinking <br> Skills |
| :--- | :---: | :---: | :---: | :---: |
| Test Question |  |  |  |  |
| Numbers |  |  |  |  |
|  | 2 | 7 | 20 | 10 |
|  | 14 | 17 | 22 |  |
| Total Items |  |  | 24 |  |

Presented in Table 4-19 are the reading comprehension missed items grouped by objective category and by grade level. Evident in this table is that fewer items with high percentages of incorrect response options selected were present for the Grade 11/Exit Level students than for Grade 3 and for Grade 6 students. This research was guided by the research questions: How many high percentage anomalies occurred the Grade 3 reading comprehension assessment out of 36 questions? Did other grade levels have the same type of percentage anomalies? If so, what skill or objectives do the percentage anomalies fall under?

Table 4-19
Grade 3, Grade 6, and Grade 11/Exit Level Students' Reading Comprehension Missed Items by Objective on the March 2009 Test Administration

| 10\% or Higher <br> for one incorrect <br> answer option | Objective 1 <br> Basic <br> Understanding | Objective 2 <br> Applying <br> Knowledge of <br> Literary Elements | Objective 3 <br> Using <br> Strategies to <br> Analyze | Objective 4 <br> Applying <br> Critical- <br> Thinking <br> Skills |
| :--- | :---: | :---: | :---: | :---: |
| Grade 3 | 6 | 4 | 0 | 1 |
| Grade 6 <br> Grade 11 Exit <br> Level | 4 | 6 | 2 | 3 |

In the figure below the percentage of TAKS Reading exam items passed for each of the test objectives is depicted. As can be seen below, the highest percentage of mastery was present for Applying Knowledge of Literary Elements. The lowest percentage of mastery was obtained for the Applying Critical-Thinking Skills. Figure 4 19. Percent mastery of TAKS Reading Exam Items by test objectives for Grade 3 students.

Depicted in the figure below are the percentages of mastery of the TAKS Reading exam items by test objectives for Grade 3 and Grade 6 students. Grade 6 students had a higher percent mastery of the Applying Knowledge of Literary Elements than Grade 3 students. Grade 3 students demonstrated a higher degree of mastery for the other three test objective areas.


Figure 4-19. Percent mastery of TAKS Reading Exam Items by test objectives for Grade 3 and Grade 6 students.

Delineated in the figure below are the percentages of mastery of the TAKS Reading exam items by test objectives for Grade 3, Grade 6, and Grade 11 students. Grade 6 students had a higher percent mastery of the Applying Knowledge of Literary Elements than Grade 3 and Grade 11/Exit Level students. Grade 11/Exit Level students had a higher degree of mastery of Applying Knowledge of Literary Elements than Grade 3 students. For the Basic Understanding, Using Strategies to Analyze, and Applying Critical-Thinking Skills, Grade 3 students demonstrated a higher degree of mastery than either Grade 6 or Grade 11/Exit Level students. The final research question: Does that same repeating high percentage dispersal occur within the same type of knowledge or skill objective in a higher-grade level? This question is addressed by the graphic below which indicates there are some similarities in these anomalies.


Figure 4-20. Percent mastery of TAKS Reading Exam Items by test objectives for Grade 3, Grade 6, and Grade 11/Exit Level students.

## Finding in Terms of Population

With respect to the population of Texas students who took the TAKS exam this school year, 299,689 students were enrolled in Grade 3; 304,495 students were in Grade 6; and 250,839 students were enrolled in Grade 11/Exit Level. Summing these grade level totals yielded a grand total of 855,023 students whose TAKS data were analyzed in this research investigation.

Two major limitations should be noted for this study. First, the investigation was limited to the regular student population for Grades 3, Grade 6, and Grade 11/Exit Level. Second, a limitation was that data were analyzed for only the first administration of the TAKS assessment. Regarding these limitations for the student population, of the 375,761 Grade 3 students who were tested in the 2008-2009 school year, only 299,689 of these students were a part of this study. Accordingly, data on 76,072 students who were in various subgroups not defined as regular students in Grade 3 were not analyzed. For Grade 6 , out of a total of 346,572 students, data on only 304,495 Grade 6 students were examined herein. Finally, only 250,839 Grade 11/Exit Level students out of the grade total of 288,196 students provided data for this research investigation.

More specifically, as stated in this investigation, the total number of students who took the Grade 3 TAKS test was 299,689 students, with a $90 \%$ passing rate for students who took this test in the first administration in March of 2009. The number of Grade 3 students who did not pass the TAKS exam on the first administration was 29,970 students. Students who did not pass had an additional time to test with a second administration of the assessment that is not part of this study.

An analysis was conducted of the incorrect answer options chosen on the Grade 3 assessment, with all skill clusters included and narrowing the scope to a $10 \%$ incorrect selection or more. Of the 25 questions selected, $69.44 \%$ of the items were incorrectly answered by 208,104 students leaving $30.56 \%$ answered above the $10 \%$ threshold. For Grade 3 students regarding the category of Basic Understanding, $73 \%$ answered $10 \%$ or higher incorrectly. As such, this value translates to 218,773 students who answered incorrectly. Regarding the $10 \%$ or higher anomaly, $27 \%$ of the students did not fall this grouping, for a total of 80,916 students. Regarding the category of Applying Knowledge of Literary Elements, $85 \%$ answered incorrectly. With the $10 \%$ or higher incorrect anomaly, $15 \%$ of students or 44,953 students answered of the $10 \%$ or higher anomaly. With respect to the category of Using Strategies to Analyze, $67 \%$ of the students answered incorrectly at the $10 \%$ or higher level. Accordingly, $33 \%$ of the students or 98,897 students, did not fall into this category. Finally for the category of Applying Critical-Thinking, $62 \%$ answered incorrectly at the $10 \%$ or higher level. This value translates to $38 \%$ or 113,882 students who did not fall into the $10 \%$ or higher anomaly.

With regard to the numbers of Grade 6 students who took this TAKS test in 2009, 304,495 students were tested with the first administration. Of this group, $93 \%$ of Grade 6 students or 283,180 students passed the assessment. The number of Grade 6 students who did not pass this assessment was 21,315. Again, narrowing the scope to a more concentrated incorrect selection of $10 \%$ or higher yielded 36 questions out of the 42 test items. For these Grade 6 students, 210,102 students answered test questions with $10 \%$ or higher incorrectly, and $31 \%$ or 94,393 .

Regarding the category of Basic Understanding, $62 \%$ of the Grade 6 students answered $10 \%$ or higher items incorrectly. Accordingly, this value reflected a total of 188,787 students who fell into the incorrect anomaly. With respect to the category of Applying Knowledge of Literary Elements, 100\% or 332,600 students answered incorrectly $10 \%$ or more. For the category of Using Strategies to Analyze, $63 \%$ of students answered incorrectly $10 \%$ or higher. As such, this statistic indicated that 191,832 students fell into this category. Finally, for the category of Applying CriticalThinking, $54 \%$ answered $10 \%$ or higher incorrectly, resulting in 164,427 students who fell into this category.

In terms of the number of students who took the Grade 11/Exit Level exam in 2009, 250,839 students were tested, with $94 \%$ or 235,789 students passing the exam. With regard to the category of Basic Understanding, $62 \%$ answered $10 \%$ or higher incorrectly. Accordingly, this statistic translates to 155,520 students who fell into this percentage anomaly. Regarding the category of Literary Elements and Techniques, $88 \%$ answered $10 \%$ or higher incorrectly, resulting in 220,738 students who fell into the category. Concerning the category of Analysis and Evaluation, 59\% of the students answered $10 \%$ or higher incorrectly, for a total of 147,995 students who fell into the anomaly range.

Examining missed test questions more specifically, the five most frequently missed questions for Grade 3 students were: Question 27 had a $56 \%$ incorrect responding rate; Question 15 had 67\% of students who responded incorrectly; Question 14 had a $68 \%$ incorrect rate; Question 23 had $74 \%$ of students who responded incorrectly; and Question 21 had 76\% of students who did not respond correctly.

Regarding the five highest percentage anomalies for Grade 6 students, Question 37 had a $63 \%$ incorrect answer rate; Question 3 had a $63 \%$ incorrect rate; Question 41 had $65 \%$ of students who responded incorrectly; Question 8 had a $65 \%$ incorrect rate; and Question 17 had $65 \%$ of students who responded incorrectly. With respect to Grade 11/Exit Level students, Question 14 had a $76 \%$ incorrect response rate; Question 8 had $78 \%$ of students who responded incorrectly; Question 28 had a $79 \%$ incorrect response rate; Question 20 had a $79 \%$ incorrect response rate; and finally Question 22 had $80 \%$ of students who did not answer correctly.

## Summary

Although no relationship appeared to be present between the vertical grade level of similar percentages in objective clusters, what did emerge from the item analyses were that overall percentages of incorrect answers occurred with the $10 \%$ higher percentage rate of incorrect answers selected. These percentages were $69.44 \%$ for Grade 3 students, 70\% for Grade 6 students, and 62\% for Grade 11/Exit Level students. Another finding was that for Grade 6 students, $100 \%$ of the $10 \%$ or higher incorrect answer anomalies occurred in the objective and skill cluster of Applying Knowledge of Literary Elements. Both of these findings are important and will be addressed with recommendations in Chapter V.

## Chapter 5 Conclusions

The significance from this study and the implications for educational leaders has an impact for decision-making in the near future and beyond. First, this study used a large sample of students totaling 855,023 in Grade 3, Grade 6 and Grade 11/Exit Level. Having a large sample allows a window into the entire state of Texas, and also a glimpse into the nation. With all the new Common Core State Standard Initiative (CCSSI) designed to make assessments uniform among states, a study like this could yield similar findings that need more investigation for future instructional strategies and professional staff development decisions nationwide.

Secondly, this study looked at a regular population. Since most Differential Distractor Functioning (DDF) studies have been conducted on special populations, and a very limited number, of this type of study now has been conducted for a regular population. This is one of the first studies done in the state of Texas. The Texas Education Agency (TEA) confirmed that they do not have this type of data within their collection to offer to the public. (Appendix C) With this new data configuration or type of information to analyze a regular population, there may be further interest for other researchers to discover and fine tune content areas or objective skills that need more attention to a regular population.

Thirdly, the findings of this study discovered $100 \%$ of the Grade 6 or 332,600 students all selecting incorrect answers of the questions in Objective 2 - Applying Knowledge of Literary Elements, $10 \%$ of the time or more. This is highly significant. There is a foundation now laid for more research on a regular population from this initial study.

Also, another significant finding with Objective 2 - Literary Elements and Techniques, was a high concentration with incorrect answer anomalies for Grade 11/Exit Level with $88 \%$ of the answers options selected incorrectly $10 \%$ of the time or 220,738 students making the same type of mistakes in this skill category. I would recommend a future study focused on Literary Elements and the application of these elements for all grade levels for the next examination study in the next step of data collection and analysis. Possibly a qualitative study could be conducted as that next step for better understanding of where the possible breakdown is for students applying literary elements correctly. The idea of "applying" is a higher-order thinking process, and this type of investigation would be good examination needed for making decisions in fostering stronger test scores in this type of skill category.

Fourth, an overall high anomaly rate was recorded in this study that shows that there is a need to look further into the future and conduct more studies like this one. In Figure 4-20 the anomaly percentages are extremely high, over $50 \%$ in all categories of objectives for all grade levels. It would be a good long-term goal of the state of Texas to examine these percentages and campaign for getting these incorrect answer anomalies to decrease below the $50 \%$ mark.

A study such as this one could change the thinking in the mind of the educational leader to strive for higher achievement in standardized testing goals. This type of study could also be broken down by sub populations and examine again for more specific needs in various socio and economic designations.

In this research investigation, the performance of Grade 3, Grade 6, and Grade 11/Exit Level students on the Texas Assessment of Knowledge and Skills (TAKS)
reading assessment items was addressed. Specifically analyzed were student responses, both correct and incorrect, to individual TAKS test items. For example, the Grade 3 TAKS assessment had 36 questions in total. As each question had 4 possible choices, with 3 being incorrect and 1 being correct, the total number of answer options equals 144 (i.e., 36 items times 4 choices). In analyzing the response options that are incorrect, the total number is 108 (i.e., 36 items times 3 incorrect choices). Accordingly, $75 \%$ of the answer options are incorrect on the TAKS assessment compared to $25 \%$ of the answer options being incorrect.

This high percentage of $75 \%$ or a 3 to 1 relationship is substantial enough for educational leaders to focus more specifically on relationships within these incorrect answer options. As such, insight may be gained into skill clusters or the groupings of the TAKS test items into concepts measured by the test. Moreover, insight may be obtained regarding test-taking strategies that might assist students to become successful as 21 st century learners. Yet, this type of detailed item analysis is not implemented often enough by educational leaders, as discussed previously in Chapter II. Accordingly, this research investigation should provide innovative ideas for educational leaders, so that they can provide information for teachers to help their students with respect to technical reading, personal reading, critical reading, higher-level thinking, problem solving, logic, and evidence.

To extend this study vertically to examine if these same types of errors were being made as students matured in their reading and thinking abilities, Grade 6 and Grade 11/Exit Level were also examined using the same methods as Grade 3. The TAKS test data provided clusters of skills and knowledge that were identical with Grade 3 and

Grade 6, and very similar for all three grade levels. In this investigation, attempts were made to gain insight both vertically and horizontally, though analyzing Grade 3 student performance, yet also comparing Grade 3 student performance to the performance of students in upper grades to determine the extent to which relationships were present regarding similar knowledge and skills frequently answered incorrectly in reading comprehension.

## Overview of the Study

In this chapter, the reader will be provided with a limited illustration of five standout examples of the highest percentage anomalies from the Grade 3 assessment to serve as a general explanation some for the common ideas that emerged from the format of the reading selections, the correct answer options, as well as the three incorrect answer options that were presented on the Grade 3 TAKS assessment. The standout examples illustrated in this study represent a pattern of incorrect answers selected with $10 \%$ or higher frequency. The standout examples are located in Appendix V. In thinking about the concept for this study, the inspiration come from 20 years of my professional experience of analyzing finalized state data, and a quote from Edsger Dijkstra, who was a computer programmer, considered the foremost pioneer in the field of distributed computing. His mantra was that "Testing shows the presence, not absence of bugs" (Dijkstra, 1970, p. 16).

Those "bugs" then became the incorrect answer options that we have experienced on all standardized tests. Every single time a state creates, administers and collects data from a standardized assessment, "bugs" are present. Just like the computer programmer evaluates and reevaluates the needs from obvious issues that will negatively impact a
program from running smoothly, so educational leaders also need to think "outside the box" when it comes to "finished" data.

All educational leaders have the exact same finished data set in their possession after testing, but many, if not all, of those leaders only work from the knowledge that the finalized data provide. This State data seems to be "surface" data. In doing so, leaders work on the intended obvious targets and make some "strides" in areas that "surface" data shows a deficit. However, a "stride" could and would easily become a "leap" of academic student achievement if the investigation of the finished data got a deeper inspection, from data that may be not intended, than just what was provided by the State. This research investigation was the beginning of that deeper analysis of finished data. Questions that served to probe for additional answers from these data came from the focused research questions for this study:

1. How many questions in third grade reading comprehension were missed in a grand total?
2. Which questions were most frequently missed?
3. How many questions had students selected incorrectly $10 \%$ of the time or more?
4. Out of the $10 \%$ or more percentage dispersions of wrong answers, is the dispersion percentage equally distributed or unequally distributed?
5. If the percentage dispersion is unequally distributed, is there a higher percentage for one single wrong answer choice? (For example, if A, B, C and D are the choices for the test item, and A is the correct answer, then possibly
$B$ has a larger percentage then $C$ and $D$ as the three possible incorrect answers choices.)
6. How many high percentage anomalies occur in the third grade reading comprehension assessment out of 36 questions?
7. What knowledge or skill objectives do the percentage anomalies fall under?
8. Is there a reoccurring pattern of the same objective repeatedly for third grade?
9. If so, does that same repeating high percentage dispersal occur within the same type of knowledge or skill objective in a higher-grade level? (Sixth grade and the Exit level will be examined the same way, as third grade and objective categories.)
10. If no relationship or connection is present with in the vertical comparison of knowledge and skill objectives, than individual or horizontal grade level anomalies will be examined for recommendations.

Even though no direct obvious patterns were identified between the vertical grade levels for similar percentages in objective clusters, what did emerge was a slight decrease of percentage concentration for all the skill clusters combined. In other words, the overall percentages of incorrect answers with the $10 \%$ or higher percentage rate for the overall test including all skill clusters was $69.44 \%$ for Grade 3, $70 \%$ for Grade 6, and $62 \%$ for Grade 11/Exit Level. Thus, a decrease was noted for correctly chosen answers as grade levels increased. Simply stated, more incorrect answer options were selected the higher the grade level, and more of these incorrect answer option anomalies occurred in Grade 11/Exit Level than the other two grade levels. Another unusual finding was in Grade 6 with $100 \%$ of the $10 \%$ or higher incorrect answer anomalies occurred in the
objective and skill cluster (2) Applying Knowledge of Literary Elements. Both of these findings are meaningful and unexpected.

## Discussion of Study Finding Results

The first implications from this study can be derived for individual students. These ideas invoke the common sense questions that usually accompany test-taking in general. Was the testing environment optimal for testing on the day of the administration? Or was the testing environment not optimal in some way, such as temperature, too hot or too cold? Was the lighting in the testing room adequate? Did students have a good night sleep the night before the test? Did they eat a balanced breakfast the morning of the test? Are some students prone to test anxiety? What about the background of the students tested? What percentage of the students tested were socially or economically disadvantaged? These possibilities could have been factors for many of the students that influenced their performance on the day of the test. However, implications of this study are provided for all students and are not just limited to individual students. So questions should be asked to address a large group. For the significant finding of a decrease of correct answers from Grade 3 to Grade 11/Exit Level some implications in the form of questions for educational leaders arise for the nation, the state, the district, the campus, and the classroom.

First, due to the fact that Texas is a large state and this study had a rather large pool of regular education students, it may be realistic to infer that these findings may reflect a plausible sample of the general population in the nation. Also, after conducting this type of DDF study, similar studies such as this one could become valuable on a national level with the CCSSI now being adopted by most of the states in the nation.

Some implications of the findings in the form of questions, on a national study such as this one could be: What common core standards need to be focused on in the nation? What common core standards are weak areas that need improvement? What federal to state relationships need to be cultivated, promoted and utilized in the process for sharing information across this nation? What government agencies should interact with states for shaping and reshaping of academic objectives and goals for a national assessment, based on these data?

On a state level, educational leaders should be examining these findings and asking questions of what rationale they can provide for such findings. What ideas do they believe directly affects these deficits in scores? What state information can be provided in the form of professional staff development to help district educational leaders bring up these scores? What regions of the state need more assistance than others? What questions were the actual field test questions and what questions counted for the passing or failing of this test administration? What underlying skills and knowledge is not being focused on in the state literacy curriculum that could cause such a decline in scores at the Exit level? How could findings such as the ones delineated herein help Texas to produce academic achievement for the upcoming higher standards of the State of Texas Assessment of Academic Readiness (STAAR) test? And in the future, how could findings such as the ones discussed herein help Texas to produce academic achievement for the national assessment that reflects CCSSI?

On a district level implications for educational leaders for a study such as this could be: What campuses identified need more work in these Language/Arts objectives? What instructional strategies do we need introduce or focus on in our district? What were
we not prepared for or lacked in reinforcement for our student body? What assumptions did we make that could have possibly lead to the direction of our students answering this high percentage incorrectly? What resources can we provide in the area of professional staff development or in Language/Arts products that will help our teachers? What other diagnosis and planning can we do with these findings? How can we track our district's progress for improvement?

For the campus leaders the implications could be: How should our campus directly address these academic needs? What professional staff development should our campus be focused on for the school year? What kind of intervention does our campus need? What campus support personnel should be helping out with the needs of this deficit and when should they help out, after school, or pull out? What instructional campus plan can we use to backload the instruction to meet the end results for these objectives? How should our campus alert parents to reinforce concepts in the home?

For the classroom instructor some implications could be: It appears that students may have not been prepared for this assessment, could they have been answering questions by guessing? Are they reading all their answer choices? Are they rushing through the test? What should I teach? How much reinforcement should I use on targeted knowledge and skills with class time? What are my areas of weakness in teaching? What are my strengths? How can I identify the specific academic needs for this type of assessment findings? How can I raise the bar in my classroom for academic achievement?

For the second type of finding of the sixth grade missing $100 \%$ with $10 \%$ or higher in Objective 2 -Applying Knowledge of Literary Elements the same implications
with the same type of questions would arise except some additional questions with more specific focus on Literary Elements would be asked because this finding was dealing with only one objective cluster and one grade level, Grade 6. Some other implications of this study are that this study was quantitative based on the aspects of examining differing grade levels and a high concentration of percentages in the same objectives. This study would not be a thorough examination if a closer focus into the possible reasons for these incorrect answer selections were not made. To make cogent recommendations from the implications of this study for educational leaders, or more specifically the instructional or turnaround administrator, a review of examples is needed to support the recommendations forthcoming in this chapter.

Not analyzed herein were ideas regarding the motivation for test-taker selections or choices of answers to test questions. Such analyses would make for interesting qualitative investigations. It would be interesting, however, for future researchers to find out more about the ideas from the test-taker, in their own words, for the rationale of why they picked certain answers. One example of such an investigation was a qualitative study conducted Allen (1998) titled, "Metacognition, Reading, and Test Taking of Third Graders." Twenty-four third graders were individually given three reading comprehension tests and questions about the passages. Allen (1998) documented their behavior and their responses with audio and discovered that in the interviews, six categories emerged: (a1) right answer/right reason; (b) right answer/wrong reason; (c) right answer/no reason; (d) wrong answer/ right reason; (e) wrong answer/wrong reason; and (f) wrong answer/no reason. These categories provided data regarding the thought processes utilized by these students. Allen also determined that "detailed-type questions
had a higher accuracy score while inference-type questions had a lower accuracy score." As well as other factors of reading inaccuracy, such as personal opinion, life experiences, question type, and inaccurate comprehension were all factors in this type of study (Allen, 1998). This type of research could be a next step in a study such as this one, in which percentage anomalies were examined. This idea would be a strong recommendation for future research for educational leaders in Texas. More discovery into the thought processes behind these answer options would provide more awareness of what, how, and why students think the way they do. This analysis could be an asset in the teaching and learning process in today's culture along side of these types of continual standardized assessments.

Also not included in this research investigation was the labeling from Pearson and Johnson's (1978) study as part of this formal scientific study. However, this labeling of the three categories for Question-Answer Relationships (QAR): TE (Textually Explicit) reading skills explicitly cued in the language of the text and knowledge of sentence structure; TI (Textually Implicit) implied meaning from the words on the page and vocabulary efficiency; and SI (Scriptally Implicit) an interaction of the text information and the readers' prior knowledge and to read critically and broaden a knowledge base, will be applied to the five standout examples in this chapter to provide a reference point for enhancing and determining the difficulty level of the question. Having this additional information may be useful in deciphering some of the possible thought processes behind these incorrect answer choices.

An illustration of the top five most frequently missed questions with $10 \%$ or higher incorrect options are coded with the QAR for a frame of reference or a tool to
determine if these missed questions were higher level thinking questions (implied or inferred) or lower level thinking questions (stated or expressed) within the passage. QAR is used in this chapter to simply provide some of the possible reasons why students may have in selecting the incorrect options. This illustration of standout examples were taken from excerpts from the released TAKS assessment administered in March 2009 for Grade 3 in Reading. This assessment in its entirety is located in the Appendix V. This short illustration is simply examining possibilities in the test design that may or may not be apparent to education leaders. The illustration examines what is present, and what is absent, in the stated answer options, correct or incorrect. A first recommendation after a study such as this one is to begin a discussion with other educational leaders about possible solutions to helping students become directed to the correct answers. Educational leaders can start an ongoing conversation to help determine some further ideas for a possibility of why the third grader test-taker may have answered incorrectly.

A conversation about this example could be that the textual answers draw the reader in for distraction. All the incorrect answers were "familiar" now to the reader as they are stated from the passage. An instructional strategy for the teaching of reading comprehension could be to focus awareness on the answers that are stated directly in the text. So, from this closer analysis of the possible motivations for why some of these incorrect answers could be chosen by students, some generalizations could emerge from these conversations. In the form of questions some additional implications could be: Do all true statements always make correct answers? If the answer statement is expressed in the passage does that mean it is a correct answer? When you read a test question, can you determine the difference of when that question is asking for a part of the passage or
the whole of the passage? When you answer a test question, do you use evidence to support your answer or just have a reaction to the question? These possibilities could be some of the ideas that arise from conversations from this type of DDF study. These types of implication could help that educational leader see more deeply into the greater needs of campus instruction other then simply teach more of the same obvious techniques or ideas represented by the finished data.

## Implications for Educational Leaders

Some educational leaders may question the significance of this study, saying themselves, "Why study incorrect answer options?" Their thinking may be that incorrect answers are just wrong and somewhat irrelevant seeming to be "dead and buried" away in the archives of the past. However, illustrated in this study are the relevance and significance in five key areas for educational leaders to become more aware of important aspects of thinking behind incorrect choices. Examining and pinpointing the threads of thought in the students' brains while selecting those wrong choices are essential.

First, analyzing incorrect answer choices is not conducted often in education settings by educational leaders. The most likely explanation is that educational leaders do not have the time to conduct this type of detailed, time-intensive investigation. Another explanation may be that the focus is on simply getting the answer correct and meeting that threshold of excellence. For most campuses a $90 \%$ or above is an excellent benchmark. If standards are met, such as the case in the State of Texas with a $90 \%$ passing rate of the regular students who took the Reading Comprehension assessment, a determination of why incorrect choices occur is not as urgent in most educational leaders'
frame of mind. If the benchmark is adequate, why examine what seems to be irrelevant, incorrect answers?

Educational leaders might take a more serious approach if a problem occurs wherein Annual Yearly Progress (AYP) benchmarks are not met. In this situation the issue of incorrect answer options may become relevant to meeting AYP benchmarks. Educational leaders who find themselves in this type of scenario may realize that understanding the reasoning of students in selecting incorrect answers is important. By the time educational leaders pay attention to these problematic areas, however, the possibility of bad testing habits or incorrect strands of thinking may have set in for some of the students. Needless to say, educational leaders will find themselves in either a "safe harbor" or a "storm" throughout their tenure of leading campuses and districts. Both situations call for a deep knowledge and understanding of standardized testing along with the critical thinking process.

It is important that educational leaders be aware of how incorrect answer choices are made, and how tests are constructed generally to help guide and direct the instruction throughout their sphere of influence. Because standardized test scores are currently and most likely will be in the future, the measures of accountability by which schools demonstrate their performance academically, educational leaders need to investigate all aspects of assessment to help all students in their schools.

Learning about incorrect answer options and how students select those options, or how students are distracted by those incorrect answer options, gives a perspective of clarity both to the educational leader and to the student. Most standardized assessments that are in a multiple-choice format examine a concept and express "what the concept is"
and "what the concept is not." Having that knowledge is not only good for the learning process, but it is also congruent with the entire standardized testing process. Most students in the United States will continue to take standardized tests as they are entering careers, college, and graduate school. Having a general working knowledge of how tests are constructed and what to search for in a wrong answer is wise for a test-taker.

Discovering thinking behind incorrect answers and teaching stands of thought compared or contrasted with correct answers should be a part of on-going practice for our State, our districts and our campuses.

Much can be gleaned from this untapped resource of analyzing incorrect answer options, both on a single grade level and on multiple grade levels. However, this type of examination or study is not practiced currently by many educational leaders. Instead public school systems give away ground to the boutique academic consultants who specialize in areas that are simply not addressed in the public schools. Whatever the public schools do not cover or make a part of the curriculum will quickly show up in the educational market place with savvy independent educators who find a niche to address those unmet needs. Unfortunately, those unmet vital needs usually come at a high cost both in low-test scores, and expensive outside independent consulting.

After an in depth analysis of the extant literature, as well as interviewing educational leaders regarding the nature of this investigation, no similar study was located. This gap in the educational literature was confirmed by The Student Assessment Department of the TEA. Provided in an appendix is a confirmation e-mail that this type of study had not been conducted in Texas. At the time of this research investigation, this
particular type of study in which the high percentages of incorrect answer choices were examined has not been conducted by the State of Texas.

The second reason for studying incorrect answer options is the connection of higher-order thinking skills. Due to the fact that a test-taker must use the compare/contrast model for answering the test questions correctly, this type of thinking, compare/contrast is also used for advanced critical thinking. Marzano, Pickering, and Pollock (2001) contended that this construct of comparing and contrasting was one of the types of higher orders in cognition.

Comparative thinking is one of our first and most natural forms of thought. When we are infants, one of the first differences we must identify is that between mother and other. Without the ability to make comparisons - to set one object or idea against another and take note of similarities and differences - much of what we call learning would quite literally be impossible. (Silver, 2010 p. 2)

When a student is taking a multiple-choice exam the ideas in each answer options are compared and contrasted to one another as well as the question stem. Thus, multiple levels of comparing and contrasting take place in the thought processes while a student is engaged in test taking. By compiling the available research on effective instruction, Marzano et al. (2001) determined that strategies that engage students in comparative thinking had the greatest effect on student achievement, leading to an average percentile gain of 45 points (Marzano, 2007). Also, according to the Association for Supervision and Curriculum Development, (ASCD) comparing and contrasting achieve five distinct instructional goals: (a) strengthen students' memory, (b) develop higher-order thinking skills, (c) increase student comprehension, (d) enhance students' writing in the content
areas, and (e) develop students' habits of mind. This research is supported by the defining characteristics of intelligent behavior and thought (Costa \& Kallick, 2008, 2009). Also, according to Silver Strong \& Associates working with ASDC, four principles or four phases of compare and contrast are closely aligned with critical/higherorder thinking: (a) Comparisons allow students to know the purpose of the content. By providing an orientation to the content, comparisons help students to begin to know what they are focusing on in a correct answer to a question. (b) Comparison thoughts need time to take shape. In other words, when a student is comparing or contrasting, and searching for a structure of similarity or difference, the most important points need to be expressed (or rise to the surface). This process takes some time to prioritize characteristics. (c) Comparisons allow students to draw conclusions. If the comparison is meaningful, comparisons drive a process of thinking that leads to an inference or a conclusion. And (d), comparisons help students to synthesis and put together what they have learned.

Due to the fact that most standardized assessments have a construct of the compare/contrast model, it is useful for examining the comparisons within one test question. Because most test questions offer three additional answer options and sometimes four additional answer options, the information of what the concept "is not" is equally valuable as what the concept "is" for the sake of understanding a concept in its entirety. Also, the idea of "combining information" is an important issue that educational leaders need to examine closely, and educational leaders need to analyze how mistakes are made, and possibly why mistakes are made, to help them choose the correct types of curriculum for guiding students to have a knowledge base for making combinations of
textual evidence and precisely recognizing when information has been combined. To understand how to make combinations of textual evidence and how to recognize this combination in a multiple choice exam is something that will occur well into the future with college entrance and graduate school exams. Making summarizations, generalizations and drawing conclusions all needed as input for several/many details to support the larger idea that expresses a broad-brush stroke from the text. These types of higher-order thinking are needed to help students in 21st century thinking and these kinds of skills manifest in standardized testing.

Third, educational leaders need to be wise:
Wisdom requires one to know what one knows and what one does not know, as well as what can be known and cannot be known... wise people look out not just for themselves, but for all to whom they have a responsibility... teachers should actively teach their students ways of thinking that will lead them to become wise. (Sternberg, 2000)

Being wise and making wise decisions means being aware of academic problems and knowing how to problem solve. Educational leaders need to guide instructors to identify issues with problem solving within their schools, and provide wise academic decisions based on these various needs. According Thomas and Thorne in an article called "How to Increase Higher Order Thinking" written for the Center for Development and Learning (CDL), students may have with problems with the following:

1. Problem identification - knowing a problem when you see one, and stating the whole problem
2. Process selection - choosing the best process for solving the problem
3. Representing the information clearly - stating the information in a clear way
4. Strategy formation - forming a good strategy for solving the problem
5. Allocation of resources - spending your resources of time and energy wisely
6. Solution monitoring - checking to see if the solution is coming out right
7. Evaluating solutions - evaluating which solution or solutions are best.

Similarly, these seven stated problems related with problem solving, also are mirrored in standardized testing. A wise educational leader will take a second examination of the provided data and dig deeper to seek out these other possible issues behind the data as the "back stage" story. Once the annual data are finalized, reported to a district, and in the hands of a capable reader, that is just the beginning point in the quest of a wise leader. A wise educational leader should try to determine why some incorrect answers have a higher percentage than other incorrect answers. From these analyses, qualitative research studies could be conducted within the district to try and pinpoint some of the various issues students may experience with these standardized assessments. Possibly forming a task team or committee to try to find answers for the "why" of these incorrect answers is a wise course of action. Examining both the skill sets of students and the structure of test items can provide a deeper analysis of possible answers regarding why students pick a specific incorrect answer over other incorrect choices. These data may provide valuable information for a campus or a district especially if these percentages are similar across a district or even the state. Excellent educational leaders are the ones who do not sit back and continue to do the usual; they strive to do the unusual, and think outside the box for answers. Not just data that are prepared for them, but data that can be read "between the lines" with more probing and questions behind the
questions. It takes effort, but wise leaders will make efforts to seek out answers that make a difference in their sphere of influence.

Fourth, many school districts need to think in terms of the future as these standardized assessments eventually increase in difficulty. Today in the 2013 school year, the exam that is now in place uses a more rigorous question and answer schemes. As stated on the TEA website, the new State of Texas Assessments of Academic Readiness or STAAR exam has a different blueprint for assessing subject/grade preparedness as opposed to simply testing the Texas Essential Knowledge and Skills, or TEKS. Even though data were analyzed herein to the 2009 school year, the ideas from this study are current and valid in that this type of study helps educational leaders have a different frame of thinking that will be needed for examining data differently, and in ways that reveal thought patterns, as well as the obvious review correct percentages. The STAAR test will have more tightly constructed incorrect answer scheme where options with ideas expressed may be incorrect yet these same choices might or could be true if the question stem was worded differently. Special attention will be needed for following directions according to the question stem, and answering incorrectly may simply be missing a slight wording in the question. The Texas Education Agency (TEA) has collaborated with the Texas Higher Education Coordinating Board (THECB) in developing this new assessment system in response to requirements set forth by the 80th and 81st Texas legislatures. This new system will focus on increasing postsecondary readiness of graduating high school students as well as ensuring that Texas students are competitive with other students both nationally and internationally. (TEA 2013)

Along with the rigor of the new test questions for the state of Texas the STAAR Test, the test will also has a complex way of determining how to measure growth. The TEA has stated that this criterion-reference test will be compared with norm-reference tests both nationally and internationally. An ongoing collection of data will occur from empirical studies to help the test develop along the way to increase in rigor so students do not "out grow" the assessment. Thus, adjustments for rigor will continue to increase within the testing. It seems that the STAAR Test will continue to change from year to year based on these comparisons and future studies. Educational leaders need to be aware of all these changes as soon as possible, and they should be able to extrapolate what those changes will look like as classroom instruction. Smith Middle School in the Cypress-Fairbanks Independent School District, used the words, "focus, clarity and depth" to describe the new assessment in Texas. Some of the verbs use to describe the objective in the new STAAR Test are: analyze, compare, describe, develop, infer, make, understand, and use. And measurement of progress will be phased in over several years due to the advanced rigor of the new assessment.

Once again, this change is a call for educational leaders to work smarter not harder for the greater depth and complexity of measured by the new assessment. Instructional leaders will need to review every aspect of the data continually so that they can inform their teachers on what to focus, what to be clear about, and how to go into depth to help their students have the knowledge and skills needed to preform well on this type of examination. With the standards and the rigor of the STAAR assessment, some people have criticized the ideas of classroom for standards based instruction. The following quote from The Wilson Quarterly, published in autumn 2011 by the Woodrow

Wilson International Center for Scholars that even though progression with standardized assessment move forward there will always be a counter

The development of standards-based tests is time consuming and expensive. And the process starts only after the content standards have been set. Today, the standards dog wags the test tail. Even so, some education insiders rue the effect on instruction. Complete alignment matches the content of the curricular standards, the test, and instruction as well, which means that every teacher in the state must teach the same content in a given grade level and subject area. That notion is anathema to many education professors and others who take the romantic view that each and every teacher is a skilled and creative craftsperson who designs unique instructional plans for unique classrooms. In this view, standardizing instruction "de-skills" teachers. Therefore, teaching to a test must always be wrong.

Fifth, technical reading needs to be addressed with students individually, as a subculture and even on a larger scale. Two different kinds of reading exist: personal pleasure reading and technical directional reading. Personal reading is defined as reading an individual would choose out of personal interest, such as topics that motivate a reader to want to select, read, and think by piquing an interest. Technical reading on the other hand, is reading that individuals have to do to get the job done, such as reading directions to assemble something, reading a contract to seal a deal or reading a recipe to bake a cake correctly. Technical reading is more of a pathway to support the end result. The end result whatever it may be, a cake, a business deal or a new kitchen appliance is more interesting to the individual then the portion of reading that must take place to manifest the end result. For most people, more reading occurs personally then technically.

However, taking a test and answering a multiple-choice question is a technical task that involves analyzing the various choices and selecting the best choice to get the job done and score well on the test. The score is the end result of taking the test. Even though a standardized test score is one of the most meaningful end results in most public schools, high steaks or not, many school do not teach a course in technical reading for elementary students.

Most elementary libraries are filled with personal reading such as fictional stories and informational picture books. In most American elementary schools, young students are encouraged to read personally. To get a child to read and enjoy the act of reading is the goal of almost all educators that are involved in the process of helping a child learn to read. The only caveat is that when children are assessed in reading comprehension, they are tested technically. In Texas, a shift in testing has occurred to have students read less narrative passages as grade levels go up and students get older, and answer test questions from them and to read more informative or expository passages and answer questions from them. Even if the test does provide a narrative passage, the test is still very technical in that the question and answer scheme is the most technical part of the test. Reading and following directions is an extremely technical task for any proficient reader.

Many of the incorrect answer choices in standardized assessments for young children are answers that are about feelings and ideas that a young reader may have after reading a story, however, the correct answer for the test question is not personal impressions or gleaned from the reader's emotions, but technical answers that are evidence specific. If a child practices to read personally, but is tested in technical reading skills, a breakdown may occur. Focusing on incorrect answer options is a way to
investigate if those kind of incorrect options are given (emotional, personal), and if the students are answering from a personal point of view as opposed to a (evidential, technical) test-taking aspect.

In the New York Times, on November 22, 2012, a short article written by Sara Mosle, entitled "What Should Children Read?" had an interesting debate that was reported about the type of reading that is needed for the future of a nation. The ideas centered around the CCSSI drafted by the National Governors Association and the Council of Chief State School Officers for a voluntary national unification of standards for the nation. All but four states, Alaska, Nebraska, Texas and Virginia quickly signed. In the near future, there will instructional impact with these new CCSSI, and discussion of government intentions to make these standards obligatory is occurring. Based on the structure of these standards, more informative reading instruction is called for in the nation curriculum:

The standards won't take effect until 2014, but many public school systems have begun adjusting their curriculums to satisfy the new mandates. Depending on your point of view, the now contentious guidelines prescribe a healthy - or lethal - dose of nonfiction.

For example, the Common Core dictates that by fourth grade, public school students devote half of their reading time in class to historical documents, scientific tracts, maps and other "informational texts" - like recipes and train schedules. Per the guidelines, 70 percent of the 12th grade curriculum will consist of nonfiction titles. Alarmed English teachers worry we're about to toss Shakespeare so students can study, in the words of one former educator, "memos, technical manuals and menus."

David Coleman, president of the College Board, who helped design and promote the Common Core, says English classes today focus too much on self-expression. "It is rare in a working environment," he's argued, "that someone says, 'Johnson, I need a market analysis by Friday but before that I need a compelling account of your childhood.'

Instructors are trained to focus on content and skills. The actual format to assess those skills and content gets, somehow, loss in the shuffle of instruction and understanding concepts. As a result of instructors not being adequately trained to teach formatting issues that could affect scores for many types of standardized assessments, boutique consulting firms and private tutors surface to address the great needs of format for those persons who can afford their services to get an edge on increasing test scores. Educational leaders within public school systems need to do the investigative work and find the answers to provide these types of "formatting solutions" for all students within the district. It is time that the "hidden knowledge" of the elite or wealthy, begins to be revealed to every child in the system, not just the subpopulations that can afford it.

In an article by Michael Fullan called "Turnaround Leadership" from The Educational Forum, Fullan described what a "turnaround leader" is (the kind of leadership needed for turning around persistently low-performing schools) and why some guidelines and principles of turnaround leadership need to be broadened for all types of educational leadership. In this article Fullan discusses some of the positive and negative elements of the turnaround leader. One of the negative ideas Fullan presents is the "apparent success" schools seem to have as a result of assessment labeling. He explains that those labels (especially with negative connotations) do not help schools to turnaround fully and become a thriving academic environment of best practice.

Fullan drew a distinction between "accountability" and "capacity building." Stating that "forms of accountability have elements of support," but " accountability involves targets, inspections, or forms of monitoring along with action consequences." One the other hand, "Capacity-building consists of developments that increase the collective power in the school in terms of new knowledge, competencies, increased motivation to engage in improvement actions, and additional resources (time, money, and access to expertise)" (Fullan, 2005).

However, these ideas become more complex with high-stakes accountability and Fullan's theory was that school improvement, with high-stakes state accountability as the focus, only allows schools to improve on the surface, not a deeper type of school reform that is needed for long-term improvement. His conclusion was that, "systems that use turnaround intervention as a main strategy for improvement is that they at least get some improvement in achievement scores (though in these cases it is a move from poor scores to adequate ones)." And, "apparent success was little increase in the internalizes commitment of teachers to take responsibility for further improvement" (Fullan, 2005).

Fullan, Bertani, and Quinn (2004) identified 10 lessons about district-wide reform dubbed "Phase Two Learnings" (1997-2004). These lessons indicate that districts are successful when they combine the following "drivers" of reform:

- a compelling conceptualization by district leaders-envisions both the content of reform and includes a special commitment to capacity-building strategies;
- a collective moral purpose-characterizes the whole district and not just a few individuals;
- the right bus-the structures, roles, and role relationships that represent the best arrangement for improving all schools in the district;
- capacity building-training and support for all key leaders;
- lateral capacity building-connecting schools within a district so that they learn from one another and build a shared sense of identity beyond the individual school;
- ongoing learning-districts learn as they go, including building powerful "assessment for learning" capacities that involve the use of student data for school and district improvement;
- productive conflict-some degree of conflict is expected when difficult change is attempted and, thus, is treated as an opportunity to explore differences;
- a demanding culture-care is combined with high expectations all around to address challenging goals;
- external partners-selective external groups are used to enhance internal capacity building; and
- focused financial investment-new monies are invested up front to focus on capacity development but are framed in terms of future accountability.

All of these ideas are great insights to turning around a school, but a focus on "capacity building and training key leaders and "lateral capacity building" of connecting schools with in a district and helping them learn from one another along with ongoing learning where districts learn as they go are three keys to support this study and help districts be productive in turning around a campus or a district.

This type of study would fall into several in not all of the above bullets for a part of school reform for the turnaround leader as well as all educational leaders. This study has been an informative investigation into the area of standardized testing that often does not get studied: the incorrect answer options. As discussed in Chapter II, interviews with the TEA Student Assessment Department and just the sheer absence of the DIF concept studies for regular students, this study became relevant for the future of educational leaders in data decision-making for annually improving instruction for academic achievement needed in the 21st century. Because multiple-choice standardized assessment have a 3 to 1 ratio, or in most cases, a 4 to 1 ratio of wrong answers to right answers, $75 \%$ to $80 \%$ of the test data are not analyzed with respect to questions about how students utilize context clues, comprehend, read critically, and think critically. By examining these incorrect answer options and the finalized data provided by the TEA, the concentrated percentages of incorrect choices, or percentage anomalies with $10 \%$ or higher selected by students in the state of Texas were analyzed.

## Implications and Summary for Further Research

This study took a different look at prearranged data for a large pool of regular students in state of Texas. Texas offers public data and these public data are limited to selected released tests and summary reports that accompany the test to make a data set furnished by the TEA. These public data are easy to obtain, and the data set is complete and finalized. Because Texas is one of the largest states in the nation, some implications may be inferred from this study that could be generalized to other states. This type of study DDF was informative enough with significant findings such as of $100 \%$ of all sixth grade students answered incorrectly with $10 \%$ or higher on each question in the skill
cluster for applying literary elements. Even though many of these sixth graders passed the test overall, there was a clear deficit in understanding for all of Grade 6 in this content area. A recommendation for further studies such as this one DDF should be conducted within Texas with the more rigorous STAAR test, and for other states that have standardized assessments. In the future, possibly a national study should be conducted for the CCSSI upcoming curriculum in 2014. Most likely, there will be an national assessment to accompany the CCSSI when this is fully implemented and in place within all the schools in the nation.

Content area of reading comprehension was a limitation that was selected due to the fact that comprehension of reading is a foundation of success for all other academic tasks. This study was further constrained to the sampling of Grades 3, Grade 6, and Grade 11/Exit Level. Third grade was a focus as the "entry gate" for students in Texas. As such, Grade 3 constituted a foundation for examining a concentration of incorrect answers on the 2009 TAKS test. This was limited for the purposes of this study, but a recommendation for all grade levels to be examined, and for all content areas to be examined as this would be the most beneficial for instructional leaders possibly in the nation, state and at district levels. Campus level leaders could find more specific DDF studies to meet their specific needs of their students. The concept of the DDF study should become more widely used and accepted to help turnaround leaders and leaders in general examine stands of thinking and reading more critically.

Finally a limitation in this study was present in focusing only on multiple-choice questions and answer options on these assessments. In the Exit Level or Grade 11/Exit Level exam, several open-ended questions were present, but these answers were not
supplied by the State and this type of open-ended answers would not objectively fit into this type of study. However, a recommendation that these types of questions and answers would also be examined for the future in a DDF style of study would also benefit future test takers and improve educational leaders with helping to streamline instruction. This type of open-ended examination may need to be a qualitative study with survey and interviews to probe into the mind of the test-taker and find out thinking stands and how information is processed on open-ended questions for a standardized assessment.

Overall, this type of study is a rare one, and if this kind of study became a protocol in practice, there could be some great "leaps" for helping test-takers improve critical thinking and testing skills. These types of studies could be published and shared to build the capacity needed to turnaround many schools that reflect low test scores. Educational leaders need to be working smarter, not harder. I believe that taking the finished data provided, and then rearranging that data for a closer inspection, is something all educational leaders need to consider for making a difference in their sphere of influence with educators. The findings of this data show that there is more to finalized data then meets the eye, and as a leader in the twenty-first century, there is a great need to think creatively and "outside the box" of conventional or traditional ways for "doing business." This type of study concept provides another effective tool in the toolbox of educational leaders today and tomorrow.

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## Appendix A

Approval From The University of Houston Human Subject Research Committee

# UNIVERSITY of HOUSTON <br> DIVISION OF RESEARCH 

January 16, 2013

Ms. Nancy Linden
coo Dr. Allen R. Warner
Educational Leadership \& Cultural Studies
Dear Ms. Nancy Linden,
Based upon your request for exempt status, an administrative review of your research proposal entitled "Comparing Incorrect Answer Percentage Dispersions in Statewide Reading Comprehension Scores and their Implications for School Leaders" was conducted on October 25, 2012.

At that time, your request for exemption under Category 4 was approved pending modification of your proposed procedures/documents.

The changes you have made adequately respond to the identified contingencies. As long as you continue using procedures described in this project, you do not have to reapply for review. * Any modification of this approved protocol will require review and further approval. Please contact me to ascertain the appropriate mechanism.

If you have any questions, please contact Alicia Vargas at (713) 743-9215.
Sincerely yours,


Kirstin Rochford, MPH, CIP, CPIA
Director, Research Compliance
*Approvals for exempt protocols will be valid for 5 years beyond the approval date. Approval for this project will expire October 1, 2017. If the project is completed prior to this date, a final report should be filed to close the protocol. If the project will continue after this date, you will need to reapply for approval if you wish to avoid an interruption of your data collection.

Protocol Number: 13097-EX

## Appendix B

Consent to Participate in Research Form
The Public Information Act documentation from The Texas Education Agency

## The Public Information Act

Texas Government Code, Chapter 552, gives you the right to access government records; and an officer for public information and the officer's agent may not ask why you want them. All government information is presumed to be available to the public. Certain exceptions may apply to the disclosure of the information. Governmental bodies shall promptly release requested information that is not confidential by law, either constitutional, statutory, or by judicial decision, or information for which an exception to disclosure has not been sought.

## Rights of Requestors

You have the right to:

- Prompt access to information that is not confidential or otherwise protected;
- Receive treatment equal to all other requestors, including accommodation in accordance with the Americans with Disabilities Act (ADA) requirements;
- Receive certain kinds of information without exceptions, like the voting record of public officials, and other information;
- Receive a written statement of estimated charges, when charges will exceed $\$ 40$, in advance of work being started and opportunity to modify the request in response to the itemized statement;
- Choose whether to inspect the requested information (most often at no charge), receive copies of the information or both;
- A waiver or reduction of charges if the governmental body determines that access to the information primarily benefits the general public;
- Receive a copy of the communication from the governmental body asking the Office of the Attorney General for a ruling on whether the information can be withheld under one of the accepted exceptions, or if the communication discloses the requested information, a redacted copy;
- Lodge a written complaint about overcharges for public information with the Office of the Attorney General. Complaints of other possible violations may be filed with the county or district attorney of the county where the governmental body, other than a state agency, is located. If the complaint is against the county or district attorney, the complaint must be filed with the Office of the Attorney General.


## Responsibilities of Governmental Bodies

All governmental bodies responding to information requests have the responsibility to:

- Establish reasonable procedures for inspecting or copying public information and inform requestors of these procedures;
- Treat all requestors uniformly and shall give to the requestor all reasonable comfort and facility, including accommodation in accordance with ADA requirements;
- Be informed about open records laws and educate employees on the requirements of those laws;
- Inform requestors of the estimated charges greater than $\$ 40$ and any changes in the estimates above 20 percent of the original estimate, and confirm that the requestor accepts the charges, has amended the request, or has sent a complaint of overcharges to the Office of the Attorney General, in writing before finalizing the request;
- Inform the requestor if the information cannot be provided promptly and set a date and time to provide it within a reasonable time;
- Request a ruling from the Office of the Attorney General regarding any information the governmental body wishes to withhold, and send a copy of the request for ruling, or a redacted copy, to the requestor;
- Segregate public information from information that may be withheld and provide that public information promptly;
- Make a good faith attempt to inform third parties when their proprietary information is being requested from the governmental body;
- Respond in writing to all written communications from the Office of the Attorney General regarding charges for the information. Respond to the Office of the Attorney General regarding complaints about violations of the Act.


## Procedures to Obtain Information

$\checkmark$ Submit a request by mail, fax, email or in person according to a governmental body's reasonable procedures.
$\checkmark$ Include enough description and detail about the information requested to enable the governmental body to accurately identify and locate the information requested.
$\checkmark$ Cooperate with the governmental body's reasonable efforts to clarify the type or amount of information requested.

## A. Information to be released

- You may review it promptly, and if it cannot be produced within 10 working days the public information officer will notify you in writing of the reasonable date and time when it will be available.
- Keep all appointments to inspect records and to pick up copies. Failure to keep appointments may result in losing the opportunity to inspect the information at the time requested.


## Cost of Records

- You must respond to any written estimate of charges within 10 business days of the date the governmental body sent it or the request is considered automatically withdrawn.
- If estimated costs exceed $\$ 100.00$ (or $\$ 50.00$ if a governmental body has fewer than 16 full time employees) the governmental body may require a bond, prepayment or deposit.
- You may ask the governmental body to determine whether providing the information primarily benefits the general public, resulting in a waiver or reduction of charges.
- Make a timely payment for all mutually agreed charges. A governmental body can demand payment of overdue balances exceeding $\$ 100.00$, or obtain a security deposit, before processing additional requests from you.
B. Information that may be withheld due to an exception
- By the 10th business day after a governmental body receives your written request, a governmental body must:

1. request an Attorney General opinion and state which exceptions apply;
2. notify the requestor of the referral to the Attorney General; and
3. notify third parties if the request involves their proprietary information.

- Failure to request an Attorney General opinion and notify the requestor within 10 business days will result in a presumption that the information is open unless there is a compelling reason to withhold it.
- Requestors may send a letter to the Attorney General arguing for release, and may review arguments made by the governmental body. If the arguments disclose the requested information, the requestor may obtain a redacted copy.
- The Attorney General must issue a decision no later than the 45th working day from the day after the attorney general received the request for a decision. The attorney general may request an additional 10 working day extension.
- Governmental bodies may not ask the Attorney General to "reconsider" an opinion.

| To request information from this governmental body, please contact: |
| :--- |
| By Mail: |
|  |
| By e-mail to: |
| By fax to: |
| In person at: |

For complaints regarding failure to release public information please contact your local County or District Attorney. Please ask and you will be provided with this information.

- You may also contact the Office of the Attorney General, Open Government Hotline, at 512-478-6736 or toll-free at 1-877-673-6839.
- For complaints regarding overcharges, please contact the Office of the Attorney General's Cost Rules Administrator at 512-475-2497.

If you need special accommodation pursuant to the Americans with Disabilities Act (ADA), please contact our ADA coordinator, $\qquad$ at $\qquad$

Pending PIR ID: 936
Title: Ms.
First Name: Nancy
Middle Initial: E
Last Name: Linden
Area Code: 713
Phone Number: 3927490
Extension:
Organization: University of Houston
Email Address: nancy@bookandbrain.com
Fax Area Code: 877
Fax Number: 7131754
Address 1: 10611 Glenway Drive
Address 2:
Address 3: 10611 Glenway Drive
City: Houston
State: TX
ZIP: 77070
ZIP extension: 3328
ORR Description: I need a statement about your public data Item Analysis. I have talked to several folks in the Student Assessment Division and they have confirmed that the Item Analysis is Raw Data or Original Data that is not converted in anyway using any formulas. In other words, $97 \%$ really means $97 \%$. I am writing a doctoral thesis and my committee need to be assured that my numbers are correct in my study. I cannot simply tell them verbally. I have to have some documentation about the type of data explaining exactly what an Item Analysis is and what it reflects. This seems so straight forward to me, but I need to go through this extra step to verify that I am doing diligence. If you have such a statement on the website, I have not found it. If you have a link to this statement, will you simply e-mail it to me? Or if you have some other document stating how you arrive at the Item Analysis, that would be so helpful.
My phone is (713) 392-7490 if you need to call me. Nancy Linden, thanks again!

Sending Attachments?: No
Consent to Withhold?: Yes
Preferred Delivery Format: E-mail
Submitted to Website on: 1/17/2013 4:43:00 PM

# Open Records Request <br> Release Documents at No Charge <br> January 24, 2013 

TEA PIR \#18960
Nancy E Linden
University of Houston
10611 Glenway Drive
Houston, TX 77070-3328
Dear Ms. Nancy Linden: On January 17, 2013, the Texas Education Agency (TEA) received your request for open records. Based on your request, TEA has included information responsive to your request in the body of this letter. The information you requested is provided to you with this letter and includes a copy of your original request. Additionally, there are no charges for fulfilling this request and PIR 18960 (Linden) is considered closed.

The statement you are seeking is available on the Texas Assessment of Knowledge and Skills (TAKS) Item Analysis Reports web page at http://www.tea.state.tx.us/student.assessment/taks/rpt/item/

If you have any questions or wish to discuss this matter further, please contact me at (512) 463-9536 or by email at AAPIR@tea.state.tx.us.

Sincerely,
Jennifer J Eaton
TEA Open Records Coordinator
$\begin{array}{ll}\text { Enclosure: } & \text { Original Request } \\ & \text { TEA Responsive Documents }\end{array}$

## Appendix C

Letter from The Texas Education Agency confirming request PIR 17683

from: AAPIR [aapir@tea.state.tx.us](mailto:aapir@tea.state.tx.us)<br>to: Nancy Linden [nancy@bookandbrain.com](mailto:nancy@bookandbrain.com)<br>date: Fri, Jun 29, 2012 at 10:18 AM<br>subject: RE: PIR 17683 (Linden) Additional Documents Provided<br>mailed: tea.state.tx.us

Ms. Linden,
Thank you for your questions regarding relationships between grade levels by percentage dispersions. We have reviewed our available data and have no further documents to provide that can show these comparisons.

Best wishes in your research, and please contact us if you would like to submit a new request in the future.

Thank You,
Jenny Eaton
Texas Education Agency
Open Records Coordinator
Student Assessment Division
512-463-9536

## Appendix D

The Texas Education Agency Item Analysis Summary Report - Grade 11, Spring 2009
 ITEM ANALYSIS SUMMARY REPORT

ALL STUDENTS

GRADE: 11-EXIT LEVEL STATEWIDE

REPORT DATE: SUMMER 2009 DATE OF TESTING: SPRING 2009


Item 19 on the Mathematics test and Item 22 on the Science test are not multiple-choice items. For these items, column "A,F" represents the correct answer
and $\mathrm{B}, \mathrm{G}$ represents an incorrect answer

* Correct answer choice
* Percent of students who did not answer
** Students who took the Braille version of the test are not included in this section.
A listing of the objectives is found on the Summary Report - Test Performance.


## Appendix E

The Texas Education Agency Item Analysis Summary Report Grade 6, Spring 2009

# 期页 Texas Assessment of Knowledge and Skills ITEM ANALYSIS SUMMARY REPORT ALL STUDENTS 

 DATE OF TESTING: SPRING 2009


Item 19 on the Mathematics test is not a multiple-choice item. For this item, column "A,F" represents the correct answer and "B,G" represents an incorrect answer.

Correct answer choice
** Percent of students who did not answer
A listing of the objectives is found on the Summary Report - Test Performance.

## Appendix F

The Texas Education Agency Item Analysis Summary Report - Grade 3 Reading Comprehension, Spring 2009

# Elem Texas Assessment of Knowledge and Skills ITEM ANALYSIS SUMMARY REPORT <br> ALL STUDENTS 

GRADE: 03 STATEWIDE

REPORT DATE: SUMMER 2009 DATE OF TESTING: MARCH 2009


* Correct answer choice
** Percent of students who did not answer
A listing of the objectives is found on the Summary Report - Test Performance.


## Appendix G

Texas Assessment of Knowledge and Skills Spring 2009 Performance Standards Panel Rec. English - Version Tests, Reading Grades 3-8

Texas Assessment of Knowledge and Skills
Spring 2009 Performance Standards - Panel Rec.** English-Version Tests

| Reading |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Grade 3 <br> March | Grade 3 April | Grade 4 | Grade 5 March | Grade 5 April | Grade 6 | Grade 7 | Grade 8 March | Grade 8 April |
| Objective |  |  |  | Numbe | of Items | Tested |  |  |  |
| 1: Basic Understanding | 15 | 15 | 15 | 13 | 13 | 13 | 12 | 12 | 12 |
| 2: Applying Knowledge of Literary Elements | 7 | 7 | 8 | 8 | 8 | 8 | 10 | 10 | 10 |
| 3: Using Strategies to Analyze | 6 | 6 | 7 | 8 | 8 | 8 | 10 | 10 | 10 |
| 4: Applying Critical-Thinking Skills | 8 | 8 | 10 | 13 | 13 | 13 | 16 | 16 | 16 |
| Total Number of Items | 36 | 36 | 40 | 42 | 42 | 42 | 48 | 48 | 48 |
| Met Standard (Raw Score)* | 23/36 | 24/36 | 28/40 | 28/42 | 29/42 | 27/42 | 34/48 | 33/48 | 34/48 |
| Met Standard (Scale Score) | 2100 | 2100 | 2100 | 2100 | 2100 | 2100 | 2100 | 2100 | 2100 |
| Commended Performance (Raw Score)* | 33/36 | 34/36 | 38/40 | 39/42 | 39/42 | 38/42 | 45/48 | 45/48 | 45/48 |
| Commended Performance (Scale Score) | 2400 | 2400 | 2400 | 2400 | 2400 | 2400 | 2400 | 2400 | 2400 |
| Number of Field Test Items (these items are not scored) | 10 | n/a | 10 | 10 | n/a | 10 | 10 | 10 | n/a |

* When the State Board of Education (SBOE) adopted the TAKS passing standards in November 2002, the board required that equivalent performance must be maintained on future test forms after the TAKS tests were administered in spring 2003. In September 2003, the SBOE adopted the TAKS scale scores that correspond to each of the TAKS phase-in standards. Since the TAKS tests may differ in difficulty across administrations, the raw score cuts may vary across test administrations. However, the scale score standards remain constant across years at each of the TAKS phase-in standards.
** For grades 3-10, the "Met Standard" level is equivalent to the Panel's Recommendation. For grade 11 (exit level), the TAKS exit-level standard in place at the time a student begins grade 10 is the standard that will be maintained throughout the student's high school career.


## Appendix H

Texas Assessment of Knowledge and Skills Spring 2009 Performance Standards Panel Rec. English - Version Tests, Reading Grade 9

Texas Assessment of Knowledge and Skills
Spring 2009 Performance Standards - Panel Rec.** English-Version Tests

| Reading |  |  |
| :---: | :---: | :---: |
|  |  | Grade 9 |
| Objective <br> 1: Basic Understanding <br> 2: Literary Elements and Techniques <br> 3: Analysis and Evaluation | Multiple-Choice Items <br> Short Answer Items Multiple-Choice Items Short Answer Items | Number of Items Tested 9 12 1 12 2 |
|  | Total Score Points Possible from the Multiple-Choice Items Total Score Points Possible from the Short Answer Items * <br> Total Score Points Possible | $\begin{gathered} 33 \\ \underline{9} \\ \hline \mathbf{4 2} \\ \hline \end{gathered}$ |
| Met Standard (Raw Score)** |  | 28/42 |
| Met Standard (Scale Score) |  | 2100 |
| Commended Performance (Raw Score)** |  | 37/42 |
| Commended Performance (Scale Score) |  | 2400 |

[^0]
## Appendix I

Texas Assessment of Knowledge and Skills Spring 2009 Performance Standards Panel Rec. English - Version Tests, Language Arts, Grade 11

Texas Assessment of Knowledge and Skills Spring 2009 Performance Standards - Panel Rec.** English-Version Tests

| English Language Arts |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Grade 10 | Grade 10 Makeup | Grade 11 |
| Objective | Number of Items Tested |  |  |
| 1: Basic Understanding | 8 | 8 | 8 |
| 2: Literary Elements and Techniques Multiple-Choice Items | 8 | 8 | 8 |
| Short Answer Items | 1 | 1 | 1 |
| 3: Analysis and Evaluation Multiple-Choice Items | 12 | 12 | 12 |
| Short Answer Items | 2 | 2 | 2 |
| 4-5: Written Composition Rating | 1 Writing Prompt | 1 Writing Prompt | 1 Writing Prompt |
| 6: Revising and Editing | 20 | 20 | 20 |
| Total Score Points Possible from the Multiple-Choice Items | 48 | 48 | 48 |
| Total Score Points Possible from the Short Answer Items * | 9 | 9 | 9 |
| Total Score Points Possible from the Written Composition ** | 16 | $\underline{16}$ | 16 |
| Total Score Points Possible | 73 | 73 | 73 |
| Met Standard (Raw Score including at least a 2 on the Written Composition)*** <br> Met Standard (Scale Score including at least a 2 on the Written Composition) <br> Number of multiple-choice items and short answer score points needed with a: | 48/73 | 44/73 | 44/73 |
|  | 2100 | 2100 | 2100 |
|  |  |  |  |
| 2 on the Written Composition | 40 | 36 | 36 |
| 3 on the Written Composition 4 on the Written Composition | 36 32 | $\begin{aligned} & 32 \\ & 28 \end{aligned}$ | $\begin{aligned} & 32 \\ & 28 \end{aligned}$ |
| Commended Performance (Raw Score including at least a 2 on the Written Composition)*** | 64/73 | 62/73 | 63/73 |
| Commended Performance (Scale Score including at least a 2 on the Written Composition) <br> Number of multiple-choice items and short answer score points needed with a: | 2400 | 2400 | 2400 |
|  |  |  |  |
| 2 on the Written Composition 3 on the Written Composition | 56 | 54 | 55 |
| 4 on the Written Composition | 48 | 46 | 47 |

* Short Answer items are rated on a scale of $0-3$ and are equal to a maximum of three score points (short answer rating $\times 1$ ).
*** For subsequent administrations, shifts may occur in the number of items (raw score) needed to achieve Met Standard and Commended Performance.


## Appendix J

Texas Assessment of Knowledge and Skills Summary Report - Test Performance, All Students not in Special Education, Reading - Grade 3



## Appendix K

Texas Assessment of Knowledge and Skills Summary Report - Test Performance, All Students not in Special Education, Reading - Grade 6



## Appendix L

Texas Assessment of Knowledge and Skills Summary Report - Test Performance, All Students not in Special Education, Language Arts - Grade 11



## Appendix M

Texas Assessment of Knowledge and Skills Release Test - Reading Grade 3
Administered March 2009
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## GRADE 3 READING

## Administered March 2009

## READING

## DIRECTIONS

Read each selection. Then read each question that follows that selection. Decide which is the best answer to each question. Mark the space for the answer you have chosen.

## SAMPLE

## A Rabbit Named Sticks

Lop-Eared Rabbit Village was on the north edge of a forest. The rabbits who lived there were called lop-eared because their ears drooped down around their faces. They were all very proud of their long, floppy ears. One young rabbit in Lop-Eared Rabbit Village was not so happy. His ears were different. They stood straight up. Everyone teased him and called him Sticks.
"Be proud. Your grandfather had ears just like yours," his mother often said to him.
3
But Sticks didn't like looking different. He wanted his ears to be long and floppy like everyone else's.


S-1 In paragraph 1, which word helps the reader know what the word drooped means?

$$
\begin{array}{ll}
\odot & \text { different } \\
\varpi & \text { floppy } \\
\varpi & \text { proud } \\
\varpi & \text { young }
\end{array}
$$

S-2 What problem does Sticks have in this story?
$\triangleright \quad$ His mother doesn't like his straight ears.
$\varnothing$ He wishes that he could be more like his grandfather.
$\varnothing \quad$ The other young rabbits in his village are jealous of him.
$\checkmark \quad$ He wants to look like the other rabbits in his village.

## Islands of the World ELCona IPlamb <br> by Shawn Douglas

Are you looking for a fun vacation spot? Do you like to sleep in a hotel, go shopping, and eat fancy meals? If so, Mona Island might NOT be the place for you! That's because Mona Island has no hotels, no museums, no shops, and no restaurants. None at all!

But if you like nature, Mona Island is an amazing place to take a vacation. Some of the animals living there are not found anywhere else in the world. There are beautiful beaches and caves to explore. The sea around the island has colorful fish. There are many things that make Mona Island an unusual place.

## Why Is Mona Island Unusual?

Mona Island is very small. On a map it looks like a tiny green lima bean floating in the big blue ocean. The only way to get there is by taking a long boat ride from the island of Puerto Rico.

The government of Puerto Rico takes care of the island and has made it a natural reserve. That means the island's animals and plants are protected from being harmed by people. Mona Island is different from most places because people are not allowed to live there. Only a few park rangers are able to stay.

The park rangers' job is to keep Mona Island safe and beautiful. They insist that rules be followed. One rule is that only 100 people at a time can visit the island. That way, the park rangers can make sure the land and animals remain safe.

Visitors to Mona Island must prepare wisely for their trip. Visitors can sleep only in certain areas and must bring their own tents. And if they want anything to eat or drink, they have to bring that along too. But people who take the trouble to come to Mona Island are rewarded with many wonderful sights.

## What Is There to See on Mona Island?

One thing that most people enjoy is getting to see the Mona Island iguana. This type of reptile grows to be about four feet long and lives only on Mona Island. It has scales that look like horns on top of its nose. The huge muscles on its face droop down and look like fat cheeks. It likes to lie around and warm itself in the sun. Almost 2,000 of these iguanas live on Mona Island.

Several types of sea turtles also live on Mona Island. They nest along the white sandy beaches. Some of these turtles weigh as much as 600 pounds. That's almost as heavy as two refrigerators!

People also come to the island to get a close-up view of many kinds of fish and other sea life. Visitors can scuba dive and snorkel in the crystal-blue waters. They wear masks and special equipment to be able to breathe underwater. They can swim far below the surface. The water is almost transparent. Through the clear water, divers can see the bright colors of the fish.

Visitors can also explore caves. Some of the caves even have paintings and
 drawings on the walls. This artwork was made by the Arawak and Taíno Indians who lived on the island hundreds of years ago.

After a full day of fun activities, visitors can settle in, listen to the night sounds, and view the stars in the huge sky. The night sky is a stunning sight. Because the island is far away from other places, it is surrounded by darkness, and the stars are easier to see. Visitors say that watching the stars is amazing. It's the perfect end to a perfect day.

1 Park rangers on Mona Island $\sigma \quad$ help visitors set up their tents
$\varnothing$ show people where to find food on the island
$\checkmark$ teach people how to swim underwater
$\sigma$ protect the land and the animals on the island

2 Paragraphs 7 and 8 are mostly about -
$\checkmark$ the muscles on an iguana
$\square \quad$ the color of the sand on Mona Island
$\checkmark$ the animals that can be seen on Mona Island
$\sigma$ the weight of the turtles on the beach

3 Read the chart and use it to answer the question.


Which sentence belongs on the blank lines?
$\checkmark$ They can see colorful fish underwater.
$\oslash$ They can find the island on a map.
$\sigma \quad$ They are able to see the stars in the sky.
$\sigma$ They can find the paintings in the caves.

4 Which word from paragraph 9 helps the reader know what transparent means?
$\checkmark$ clear
$\checkmark$ special
$\varnothing$ many
$\sigma$ bright

5 Where can artwork be seen on Mona Island?
$\sigma$ On the beaches
$\sigma$ In a museum
$\checkmark$ On the wall of the hotel
$\sigma \quad$ In the caves

6 What should visitors do before going to Mona Island?
$\checkmark$ Find a hotel and restaurants that they will enjoy
$\checkmark \quad$ Read about the capital city of Puerto Rico
$\checkmark$ Make sure they have a tent, food, and water
$\sigma$ Study information about the stars

7 What is the most likely reason the author wrote this article?
$\qquad$ To tell about a place that some people might enjoy
$\varnothing$ To show the reader where the island is located
$\checkmark$ To explain why animals live on the island
$\checkmark$ To give facts about people who work on the island

8 In paragraph 11, the word stunning means -
$\sigma$ busy
$\sigma$ famous
$\square$ crowded
$\triangleright$ beautiful

9 What is paragraph 6 mostly about?
$\varnothing$ Where visitors may sleep while staying on Mona Island
$\sigma$ What kind of food to bring to Mona Island
$\sigma$ Why visitors should go to Mona Island
$\checkmark$ How visitors should prepare for a trip to Mona Island

10 Read the web below and use it to answer the question.


Which of these best completes the web?
$\checkmark$ Visit with Taíno Indians
$\sigma$ Eat in fancy restaurants
$\sigma$ Look at bright stars
$\checkmark$ See old buildings

11 The author included the photos to show -
$\sigma$ where the island is
$\sigma$ the animals that live on the island
$\sigma$ the size of the island
$\sigma$ what the weather is like on the island


There was no doubt about it. The new kid who was moving in next door to Jason was good. Jason sat on the front steps of his house. He had watched in admiration as the new kid jumped out of the movers' truck that was parked in the driveway and right onto a skateboard. Wearing a bright red helmet and knee and elbow pads, the kid had traveled quickly down the sidewalk in front of Jason's house, weaving around anything in the way.

As Jason watched, Mrs. Tuttle's fluffy little white dog suddenly ran out onto the sidewalk. The kid jumped his skateboard over the ball of fur and flipped the skateboard up into his hands, just like a professional. Then he grabbed the leash and set off to return the runaway dog. "Wow!" Jason exclaimed. "I need to learn how to do those cool tricks!"

After returning the dog to Mrs. Tuttle, the kid rode his skateboard back to his house. Jason saw the kid make his way between workers who were carrying boxes and chairs into his new home. Jason felt shy about talking to the new kid, but he wanted to find out where that kid had learned to skateboard so well.

Jason sat on the porch steps, waiting for the kid to come back out. When he did, he was still wearing his helmet and other gear, and he was carrying the skateboard under one arm. Jason got up his courage and walked over to the new kid. "Hey, I saw you riding your skateboard," Jason said. "You're good."

The kid smiled and quietly said, "Thanks."
"Where are you from?" Jason asked.
"California," the kid answered.
Jason nodded and said, "My name's Jason."
The helmet came off, and Jason watched long brown hair tumble down. The kid said, "'m Amanda."

Krazy Kids, December 2004

Jason almost swallowed his gum. The new kid was a girl! After a few seconds he finally managed to say, "Hi."
"My mom told me that there's a skate park in the neighborhood. Is that right?" Amanda asked.

Jason shrugged. He knew Amanda was really good at riding a skateboard, and he could learn some things from her, like that flip she had just done. But he didn't want his friends to know he was learning something from a girl. His friends would tease him forever! Then he had an idea. "It's not too far, but you have to wear your helmet and knee and elbow pads," Jason said.
"No problem," Amanda said. "Let me ask my parents if I can go."
As Amanda ran inside to get permission from her parents, Jason stared down at his feet. "If she can just keep her helmet on, everything will be fine," he thought to himself.

Amanda came running out of her house, and she and Jason stopped by his house so he could get his gear and his parents' permission. Then they rode away.


The park was filled with kids, some riding on skateboards and others on skates. Several guys waved to Jason as he showed Amanda around. Soon, though, Amanda was showing everyone what she could do on her skateboard. Sometimes she looked as if she were flying in the air. Jason began to panic when he realized that all his friends had stopped skating and were watching her, especially his best friend Patrick. Jason wondered if he could sneak out of the park without anyone noticing.
"That's awesome!" Patrick said, skating over to Jason.
"Just moved in next door to me today," Jason said.
"Do you think I could learn some of those tricks?" Patrick wondered aloud. "I always crash when I try to flip my skateboard like that."

Jason took a deep breath and motioned Amanda over to him and Patrick. If Patrick judged Amanda on her skating abilities rather than on the fact that she was a girl, then things would be all right. Jason just hoped that Patrick would decide Amanda was O.K.

As Amanda skated up to the two boys and took off her helmet, Jason tried to think of what to say. Before he could open his mouth, Patrick said, "Wow, I never met a girl who could skate like that-or even a boy! Can you teach me that flip trick?"

Krazy Kids, December 2004

12 Where does Amanda want Jason to take her?
$\square$ Jason's house
$\sigma$ The skate park
$\sigma$ Mrs. Tuttle's house
$\sigma$ A neighborhood park

13 From the information in the selection, the reader can tell that Amanda probably -
$\sigma$ is better at skateboarding than most kids at the skate park
$\checkmark$ does not like people watching her on her skateboard
$\checkmark$ wishes that Jason had not brought her to the skate park
$\sigma \quad$ will not teach skateboard tricks to any of the boys

14 Paragraph 16 is mainly about -what Amanda rides on at the park
$\checkmark$ how Jason plans to escape from his friends at the park
$\checkmark$ who Jason knows at the park
$\varnothing$ what happens while Jason and Amanda are at the park

15 Which is the best summary of this selection?
$\triangleleft$ Jason is pleased that his new neighbor is great at skateboarding. Jason learns that the new kid is a girl but wants her to teach him a few skateboard tricks anyway. Jason worries about what his friends at the park will think, but his friends want to learn from Amanda, too.
$\varnothing$ Jason takes the new kid in his neighborhood to the skate park. While there, Jason sees many friends who are skating and skateboarding. His friends are surprised by the skateboard tricks the new kid is able to do.
$\curvearrowleft$ A new kid moves into Jason's neighborhood. The kid is very good at skateboarding. Jason watches the kid jump over a white dog and move through a crowd of workers. Finally Jason goes to meet the neighbor and learns that the new kid is a girl.
$๑ \quad$ When Jason agrees to take Amanda to the skate park, she must wear a helmet and knee and elbow pads. Jason hopes that his friends won't learn that Amanda is a girl, but when she meets Jason's friends, everyone sees who she is.

16 Jason wants to meet his new neighbor because he wants to -
$\sigma$ learn where the new kid is from
$\square$ know how the kid learned to skateboard so well
$\varnothing \quad$ take the kid to the skate park
$\square$ have the new kid meet his friends

17 What do Jason and Amanda do right before going to the skate park?
$\sigma$ Ask for permission
$\square \quad$ Catch a neighbor's dog
$\sigma$ Help carry boxes
$\oslash$ Meet new people

18 What does the word panic mean in paragraph 16 ?
$\checkmark$ To become afraid
$\varnothing$ To feel cared for
$\square$ To be surprised
$\oslash$ To grow tired

19 Which of the following hides the fact that the new kid is a girl?
$\triangleright$ Knee pads
$\checkmark$ Skateboard
$\checkmark$ Elbow pads
$\sigma$ Helmet

20 The reader can tell that Jason -
$\sigma$ doesn't know any girls who can skateboard as well as Amanda can
$\sigma$ goes to the skate park with his friends every day
$\sigma$ wishes Patrick had seen Amanda jump over the runaway dog
$\checkmark$ hasn't had much time to practice on his skateboard

21 In paragraph 10, Jason almost swallows his gum because he is -
$\sigma$ expecting the new kid to be a boy
$\sigma$ nervous about having a new neighbor
$\sigma$ excited about the skateboard tricks he will learn
$\triangleright$ angry that Amanda didn't tell him she was a girl

22 What happens after Jason and Amanda get to the skate park?
$\varnothing$ Amanda searches for her knee and elbow pads.
$\checkmark$ Jason and Amanda put on their gear.
$\sigma \quad$ People stop to watch Amanda on her skateboard.
$\oslash$ Jason and Amanda ask for permission to go skateboarding.

23 What is Jason's main problem at the skate park?
$\checkmark$ Amanda has not taught him any skateboard tricks.
$\checkmark \quad$ He doesn't want his friends to learn the truth about Amanda.
$\checkmark$ His friends are watching Amanda instead of talking to him.
$\leftharpoondown$ Amanda continues to do difficult tricks.

24 The reader can tell that Jason and Amanda will probably -
$\sigma$ get in trouble with their parents
$\checkmark$ find Mrs. Tuttle's dog in the neighborhood
$\sigma$ help the workers carry boxes to Amanda's house
$\sigma$ return to the park another day

## Patrick's Hero

1 turned ten and thought he was pretty brave, but his heart was pounding. It was very dark in his room at the cabin, not like his room at home. As he reached for the lamp, he heard the sound again. He quickly switched on the light and sighed in relief. Buffy's tail was beating against the floor. He had forgotten about Buffy.

Patrick wasn't used to dogs. His parents had always said pets were too much of a burden and a lot of work. His family was busy and didn't think they could care for an animal. But a week ago Uncle Jack had pleaded with Patrick's parents to keep Buffy until he returned. Uncle Jack would be working in another country for six months and couldn't take Buffy with him. He had promised that Buffy would be no trouble. Surprisingly, Patrick's parents had agreed to keep her, even though they were about to leave for the lake cabin.

At breakfast Patrick shared his scary story with his parents. "Do you see the trouble a dog can cause?" his mother asked. "Pets like company. After breakfast take Buffy outside to play. Your father and I have some repairs to make on the cabin."

Soon Patrick went out the door toward the lake behind the cabin. Buffy followed Patrick like a shadow on a sunny day. Patrick's father watched them go. "Looks like Buffy may be a good pet," he said.
"We'll see," Patrick's mother grumbled.
6
Patrick and Buffy spent the morning running and playing. Patrick's new friend showed that she could roll over, fetch a stick,
and even play tag. The sun had warmed the air, and Patrick said to Buffy, "Maybe we could cool off in the lake. Mom and Dad can see us from the cabin." hadn't visited the cabin since last year, and he wasn't a very good swimmer. His mother had told him he could wade in the water up to his knees. So after thinking it over for a while, he decided to go in the lake. After all, he wasn't alone. Buffy was with him.

The two friends jumped and splashed together in the lake. Patrick threw a stick, and Buffy retrieved it. No matter where Patrick threw it, Buffy swam after it like a trained athlete and returned it every time. Patrick was having so much fun playing with Buffy that he didn't realize he was so far from shore. Suddenly, the bottom of the lake seemed to disappear beneath his feet, and he went below the surface of the water.

Patrick sank like a rock to the bottom of the lake. When his feet finally touched squishy mud, he pushed up with all his might. He struggled to get to the top. His face came out of the water, and he rolled over on his back to float. "Help!" he cried. His body was too tired to move.

Just when Patrick felt hopeless, he heard a bark. He turned his head to see Buffy swimming toward him. She grabbed Patrick's shirt and began to swim, pulling him toward the shore.

Patrick was relieved when his feet could touch the bottom of the lake again. He slowly started walking toward shore and saw his mother running from the cabin.
"Patrick! Are you O.K.?" she screamed. Patrick could only nod and wave. shore. When they reached dry ground, Patrick sat down to catch his breath. Buffy sat on one side of him, and his mother sat on the other. Patrick looked up at his mother and then hung his head. In between breaths he said, "I'm sorry, Mom. I got busy playing with Buffy, and I forgot to be careful."

14 Patrick's mother wrapped one arm around Patrick, and with the other she reached out to pat Buffy. "I'm sorry, too," she said, smiling. "And I'm glad your uncle left Buffy with us. She's a good lifeguard. I guess she's not really that much trouble."


25 Patrick's mother runs to the lake
to -
$\checkmark$ go for a swim
$\sigma$ see if Buffy is causing problems
$\checkmark$ make sure Patrick is all right
$\checkmark$ watch Buffy fetch a stick

26 Who is the hero in this story?
$\checkmark$ Patrick's mother
$\checkmark$ Uncle Jack
$\checkmark$ Patrick's father
$\sigma$ Buffy

27 Which word means about the same as hesitant in paragraph 7?
$\checkmark$ Excited
$\sigma$ Careless
$\sigma$ Brave
$\sigma$ Unsure

28 Read the sentence below from paragraph 10.

> She grabbed Patrick's shirt and began to swim, pulling him toward the shore.

How does Patrick most likely feel at this moment?
$\sigma$ Amused by the dog's actions
$\sigma$ Thankful that the dog is there
$\sigma$ Sad that he isn't able to play
$\checkmark$ Worried that his shirt may be torn

29 Why is Patrick unable to move in the water?
$\checkmark \quad \mathrm{He}$ is too cold.
$\checkmark$ His parents are watching.
$\square \mathrm{He}$ is too tired.
$\checkmark$ His knees are shaking.

30 Paragraphs 6 through 8 are mostly about -
$\sigma$ why Patrick is not a good swimmer
$\sigma$ what Patrick and Buffy do together
$\sigma$ how often Patrick visits the cabin
$\checkmark$ where Patrick is allowed to go in the water

31 How does Patrick's mother change by the end of the story?
$\checkmark \quad$ She is upset that the family is at the cabin.
$\checkmark \quad$ She is happy that the family is taking care of Buffy.
$\checkmark$ She is angry that Patrick's clothes are wet.
$\varnothing$ She is curious about why the lake is dangerous.

32 The author wrote this story probably to -
$\sigma$ show the reader how to care for a dog
$\oslash$ explain games dogs play in water
$\square$ teach the reader to be brave in the water
$\checkmark$ tell about how a dog saves a boy

## Page 23

33 In paragraph 8, the word retrieved means -
$\sigma$ fell apart
$\checkmark$ brought back
$\checkmark$ reminded again
$\sigma$ made better

34 Patrick feels relieved in paragraph 11 because he -
$\sigma$ can give Buffy back to his uncle
$\sigma \quad$ is able to splash in the water
$\sigma$ knows he is no longer in danger
$\sigma$ can play with Buffy again

35 At the end of the story, Patrick is most likely -
$\sigma$ happy that his mother is not angry with him
$\sigma$ surprised that he is not a good swimmer
$\sigma$ hopeful that Uncle Jack will return soon
$\checkmark$ relaxed by the cool water in the lake

36 Which sentence from the story shows why Patrick's parents don't want a pet?
$\checkmark \quad$ He had forgotten about Buffy.
$\checkmark \quad$ His family was busy and didn't think they could care for an animal.
$\checkmark \quad$ Uncle Jack would be working in another country for six months and couldn't take Buffy with him.
$\checkmark$ Patrick and Buffy spent the morning running and playing.

## Appendix $\mathbf{N}$

Texas Assessment of Knowledge and Skills Release Test - Reading Grade 3 Administered March 2009, Answer Key

Texas Assessment of Knowledge and Skills - Answer Key

Grade: 03
Subject: Reading
Administration: March 2009
*Answer choices are not designated in the Grade 03 test booklet as "A," "B," "C," or "D." Instead, students respond to test items by marking the answer ovals in the test booklet.

| Item <br> Number | Correct Answer* | Objective Measured | Student Expectations |
| :---: | :---: | :---: | :---: |
| 01 | D | 01 | 3.7 (B) |
| 02 | C | 01 | 3.9, (C) |
| 03 | A | 04 | 3.9 (F) |
| 04 | A | 01 | 3.5 (E) |
| 05 | D | 01 | 3.7 (B) |
| 06 | C | 04 | 3.9 (F) |
| 07 | A | 03 | 3.11 (C) |
| 08 | D | 01 | 3.5. (E) |
| 09 | D | 01 | 3.9 (C) |
| 10 | C | 03 | 3.9, (I) |
| 11 | B | 03 | 3.11 (A) |
| 12 | B | 01 | 3.7 (B) |
| 13 | A | 04 | 3.9 (F) |
| 14 | D | 01 | 3.9.(C) |
| 15 | A | 01 | 3.9 (H) |
| 16 | B | 01 | 3.7. (B) |
| 17 | A | 03 | 3.9 (C) |
| 18 | A | 01 | 3.5. (E) |
| 19 | D | 02 | 3.11 (J) |
| 20 | A | 04 | 3.9 (F) |
| 21 | A | 02 | 3.11 (H) |
| 22 | C | 03 | 3.9 (C) |
| 23 | B | 02 | 3.11 (J) |
| 24 | D | 04 | 3.9, (F), |
| 25 | C | 02 | 3.11 (H) |
| 26 | D | 04 | 3.9 (F) |
| 27 | D | 01 | 3.8 (D) |
| 28 | B | 02 | 3.11 (H) |
| 29 | C | 01 | 3.7 (B) |
| 30 | B | 01 | 3.9 (C) |
| 31 | B | 02 | 3.11 (H) |
| 32 | D | 03 | 3.11 (C) |
| 33 | B | 01 | 3.5 (E) |
| 34 | C | 04 | 3.9, (F) |
| 35 | A | 02 | 3.11 (H) |
| 36 | B | 04 | 3.10 (C) |

## Appendix 0

Texas Assessment of Knowledge and Skills Objectives 1, 2 and 3 for Reading Comprehension Grade 3, Spring 2009

## Grade 3 Reading

For a more complete description of the objectives measured, please refer to the Revised TAKS Information Booklet for Grade 3 Reading at
http://www.tea.state.tx.us/student.assessment/taks/booklets/index.html.

Objective 1: The student will demonstrate a basic understanding of culturally diverse written texts.
(3.5) Reading/word identification. The student uses a variety of word identification strategies. The student is expected to
(D) use root words and other structural cues such as prefixes, suffixes, and derivational endings to recognize words (3); and
(E) use knowledge of word order (syntax) and context to support word identification and confirm word meaning (1-3).
(3.7) Reading/variety of texts. The student reads widely for different purposes in varied sources. The student is expected to
(B) read from a variety of genres [for pleasure and] to acquire information [from both print and electronic sources] (2-3).
(3.8) Reading/vocabulary development. The student develops an extensive vocabulary. The student is expected to
(C) use [resources and references such as beginners' dictionaries, glossaries, available technology, and] context to build word meanings and to confirm pronunciations of words (2-3); and
(D) demonstrate knowledge of synonyms, antonyms, and multi-meaning words [for example, by sorting, classifying, and identifying related words] (3).
(3.9) Reading/comprehension. The student uses a variety of strategies to comprehend selections read aloud and selections read independently. The student is expected to
(C) retell [or act out the order of] important events in stories (K-3); and
(H) produce summaries of text selections (2-3).

Objective 2: The student will apply knowledge of literary elements to understand culturally diverse written texts.
(3.11) Reading/text structures/literary concepts. The student analyzes the characteristics of various types of texts. The student is expected to
(H) analyze characters, including their traits, feelings, relationships, and changes (1-3);
(I) identify the importance of the setting to a story's meaning (1-3); and
(J) recognize the story problem(s) or plot (1-3).

## Grade 3 Reading (continued)

## Objective 3: The student will use a variety of strategies to analyze culturally diverse written

 texts.(3.9) Reading/comprehension. The student uses a variety of strategies to comprehend selections read aloud and selections read independently. The student is expected to
(C) retell [or act out] the order of important events in stories (K-3); and
(I) represent text information in different ways, including story maps, graphs, and charts (2-3).
(3.11) Reading/text structures/literary concepts. The student analyzes the characteristics of various types of texts. The student is expected to
(A) distinguish different forms of texts, including lists, newsletters, and signs and the functions they serve ( $\mathrm{K}-3$ ); and
(C) recognize the distinguishing features of familiar genres, including stories, [poems,] and informational texts (1-3).

Objective 4: The student will apply critical-thinking skills to analyze culturally diverse written texts.
(3.9) Reading/comprehension. The student uses a variety of strategies to comprehend selections read aloud and selections read independently. The student is expected to
(F) make and explain inferences from texts such as determining important ideas, causes and effects, making predictions, and drawing conclusions (1-3); and
(J) distinguish fact from opinion in various texts, including news stories and advertisements (3).
(3.10) Reading/literary response. The student responds to various texts. The student is expected to
(C) support interpretations or conclusions with examples drawn from text (2-3).

## Appendix $P$

Texas Assessment of Knowledge and Skills Release Test - Reading Grade 6 Administered April 2009
$\qquad$


GRADE 6 READING

## Administered April 2009

## READING

## Read this selection. Then answer the questions that follow it.

## Tangled Lines

1 in the small metal boat. He and his father had been to this fishing spot many times over the summer. Alan usually loved being here, but today his heart was heavy.

Alan's father leaned back and sighed comfortably. "I'm really glad we were able to have one last fishing weekend before you have to go back to school. It's a perfect day to relax," he said. His fishing line started to jerk. "And a perfect day to catch a big fish," he added. Alan's father reeled in a large catfish and scooped it up with the net. He held up the fish like a trophy.
3 "Dad expects everything to be the best," thought Alan. "I wonder what he'll say when I tell him I don't want to try out for the football team this year." Alan tried to push the thought out of his mind and concentrate on putting the worm on the hook. that bait on your hook," Dad said, reaching for Alan's fishing pole.
"I've got it, Dad," Alan answered, pulling away as he roughly put the worm onto the hook, nearly tearing it to pieces.

6
"O.K., but try to be a little more careful. You don't want it to fall apart," his father said, looking at the mangled bait. "Now, let me show you how to cast just right so you can catch the biggest fish."
"No, thanks," Alan mumbled.
"C'mon, you can do it! Just try," Dad said. "Watch how I do it." He demonstrated a perfect cast. Then he leaned back in the boat and pushed his hat down low over his forehead. "Now, you try."

My notes about what I am reading

You can do it! Just try. Watch how I do it. The words rang over and over in Alan's mind. It seemed to Alan that they were the only words his father had said all summer. Alan had told his father at the beginning of summer that he was thinking about trying out for his school's football team. Although Alan hadn't played much football before, he knew Dad would be pleased if he made the team. Dad always talked about how he had played football in high school and college. He was more than willing to help Alan learn the game.
10 The first day they practiced, Dad had thrown the ball to Alan. "You can catch it! Just try!" his father had called. Alan had run as fast as he could to catch the ball, but it hit his chest hard and bounced out of his hands. He stumbled and fell to the ground.
11 "Don't worry, Alan. You'll get it next time. Here, watch how I hold my hands to catch the ball," Dad had told him. All summer he and Dad had practiced football in the yard. Over and over again Alan would miss, and Dad would try to show him how to improve his skills. By the beginning of August, Alan had made some improvement, but he had also begun to loathe the game. He couldn't even stand the sight of a football.

12 Alan tried to bring his thoughts back to fishing. He raised his pole and threw the line out into the water, where it immediately became intertwined with his father's line. Alan tried to pull his line free from his father's, but the tangle only got worse.
13 "See, I can't! I don't want to! And I don't want to play football, either!" Alan blurted out. The words escaped before he knew it. Instantly he wished he could take them back.
14 "But I thought you liked football! You were getting really good at it," his father said.
15 "No, Dad, I just wanted to try it because you liked it. You were the one who was good at it, not me." Alan looked down at the water. "You always told me that I had to be the best. Well, I'm not the best."

My notes about what I am reading

16 His father shook his head sadly. "Son, I never said, 'Be the best.' Don't you remember? I always say, 'Do your best.'"
17 Alan sank farther down into his seat. The small boat rocked and then calmed. All around, everything was still and silent. Neither Alan nor Dad said a word in the uncomfortable silence.

It was probably only a few minutes, but it seemed like hours before either of them spoke. Finally Alan's father took out his pocketknife. "I guess we'll just have to cut these lines and start over," Dad said. With a quick tug of his knife, he cut the tangled lines and began pulling them in.

19 Alan reached into the tackle box and then fixed his line. He attached new bait to the hook, being more careful this time, and cast the line out as far as he could. Before long the bobber went under, and his line tightened.
"You've got a bite!" his father said, pointing. Alan jerked the pole to set the hook and began reeling in the line. But the line slackened, and the hook came up empty.
"It got away," Alan said, sighing.
"That's O.K.," Dad said as he cast his own line. "You can't expect to catch them all."

Alan glanced over at his father with a smile.


Page 6

1 What happens at Alan's first football practice with his father?

A Alan listens to his father's football stories.
B Alan misses the ball and then falls.
C Alan asks his father to take him fishing.
D Alan starts to improve his catching skills.

2 What are paragraphs 9 through 11 mainly about?

F Why Alan wants to try out for football
G How Dad played football in school
H How Alan grows to dislike football
J Why Dad knows so much about football

4 Which sentence from the story shows Alan's true feelings about football?

F All summer he and Dad had practiced football in the yard.
G Alan had told his father at the beginning of summer that he was thinking about trying out for his school's football team.
$\mathbf{H}$ It seemed to Alan that they were the only words his father had said all summer.
J He couldn't even stand the sight of a football.

5 What does intertwined mean in paragraph 12?
A Caught before
B Moved forward
C Pulled against
D Joined together

3 The author probably wrote this story to -
A highlight the challenges of learning to play a sport
B show the importance of communicating
C describe a boy's day from beginning to end
D persuade fathers and sons to get along

6 Which of these best summarizes the story?
F On an early morning in August, Alan and his father go fishing. Alan's father catches a big catfish, but Alan has trouble putting the worm on his hook. Alan finally gets a bite on his line but loses the fish.

G Alan and his father go on their last fishing trip before school starts. Alan thinks about all the difficulties he has had practicing football with his father. When they tangle their fishing lines, Alan tells his father how he really feels.

H When Alan tells his father that he is thinking about trying out for the football team, his father helps him practice. While on a fishing trip, Alan argues with his father. They sit in silence for a long time.

J While on a fishing trip, Alan's father tries to show him how to make the perfect cast to catch the biggest fish. However, Alan cannot put the worm on his own hook. Alan becomes upset because he is thinking about how he feels about football.

7 Why does the author have Alan remember his first practice with his father?

A To show the reader how good Dad was at football

B To explain why Alan is angry about having to go fishing

C To demonstrate that Dad is an able coach
D To help the reader understand how discouraged Alan is with football

8 At the end of the story, the reader can conclude that Alan's father will -

F encourage Alan to try out for a different sport

G try harder to understand how Alan feels
H apologize to Alan for the things he has said

J help Alan improve his skills as a fisherman

9 Which sentence from the story shows that Alan's father is trying to be helpful?

A "I'm really glad we were able to have one last fishing weekend before you have to go back to school."

B "But I thought you liked football!"
C Finally Alan's father took out his pocketknife.
D Over and over again Alan would miss, and Dad would try to show him how to improve his skills.

10 How does Alan's attitude change by the end of this story?

F He believes that his father thinks he is improving at football.

G He realizes that his father just wants him to try to do his best.

H He understands why his father wants him to make the football team.

J He sees that he should be happy to be like his father.

## Read this selection. Then answer the questions that follow it.

## Good to the Bone

1 Have you ever seen a dog fetch a stick, "shake hands," or roll over on command? These tricks may be entertaining, but dogs are capable of much more. With their keen senses, sharp instincts, and loyalty to their owners and trainers, dogs are not just steadfast companions. For hundreds of years, humans and dogs around the world have worked together to save the lives of both people and animals.

2 The breed most closely associated with rescue work is the Saint Bernard. These large dogs are named after Bernard of Montjoux, a monk who pursued a life of religious study and service. Around the year 1050, Bernard of Montjoux built a rest house for people traveling through the Alps, a mountain range that runs through Switzerland. The rest house was built high in a mountain pass, about 8,000 feet above sea level.
3 The route through the Alps held many dangers for travelers, including bandits and robbers. In addition, the mountain trails could be very steep, and in wintertime they were slippery and


Dogs of the Saint Bernard breed play in the Alps of Switzerland.

My notes about what I am reading
to protect themselves from bandits. By 1750 the large dogs that eventually came to be known as Saint reading Bernards were also being used to aid travelers. These strong mountain dogs could clear paths through the snow and lead the monks on rescue missions. The dogs' excellent sense of direction was especially valuable in blinding snowstorms and fog. The dogs could also smell victims trapped as far as 20 feet beneath the snow. The monks and their dogs together saved the lives of more than 2,000 people over the years.
5 Dogs are still used to save people's lives, but more recently people have started using dogs to save the lives of endangered animals. In Kenya, Africa, the elephant population decreased from 170,000 in 1963 to less than 16,000 in 1989. This decline was largely the result of illegal hunting, or poaching. Elephant tusks are a major source of ivory. Because ivory is so valuable, people kill elephants and sell their tusks. Although many people in Kenya tried to stop them, some poachers were able to hide the evidence of their crimes. In 2001, the Kenyan government decided it was time to try something new. That's when they brought in Mouser, Charlie, Blair, Megan, Jason, and Vicky.
6
These dogs were brought in from far away to join the fight against the poaching of elephants. Most of the dogs were former strays in London, England. They were
 chosen by the British army and trained at a special school for three months. The dogs learned to find ivory, rhino horn, and even weapons. Then the dogs and two British trainers made the trip to Naivasha, Kenya. The Kenya Wildlife Service (KWS) assigned 12
people to care for the dogs and take them out on ivory searches. One group of dogs was assigned to sniff for ivory and other illegal materials at airports and seaports. The dogs in the other group were trained to search Kenya's national parks for the poachers killing the elephants.

The dogs working in the parks used their natural hunting ability to lead police to poachers and those selling ivory. Because dogs rely on their sense of smell to locate their quarry, they can find people who have managed to hide their visible tracks. The Kenya Wildlife Service collected information about possible locations of illegal hunters. Then they took the dogs to the identified areas and ordered the dogs to "seek on." When the dogs caught the scent of ivory, they stood in that spot and barked.

8 People and dogs have lived together for centuries. The strong instincts of dogs have not only benefited humans but have also come to the aid of other animals as well, making the partnership between humans and dogs likely to continue for years to come.

My notes about what I am reading

11 According to the selection, the weather in the Swiss Alps was often so severe that people could not -

A visit the rest house
B find their way through the mountains
C hear the dogs barking at them
D call out to the monks for help

12 Why are dogs often able to locate poachers better than people can?

F Dogs are able to follow signs that are not visible.
G People are not able to endure lengthy searches.
H Dogs do not become fearful in dangerous situations.

J People are more often injured during ivory searches.

13 Which words from paragraph 3 best help the reader understand what treacherous means?

A trekking along
B from the rest house
$\mathbf{C}$ in wintertime
D held many dangers

14 How can the reader conclude that the problem of illegal poaching became more serious between 1963 and 1989 ?

F The Kenya Wildlife Service began training dogs to search for poachers.
G The elephant population decreased from 170,000 to less than 16,000 .

H Many poachers learned how to conceal their crimes.
J The British army trained dogs at a special school.

15 Look at the following chart.

| Tasks of St. Bernards in <br> Switzerland | Tasks of Dogs in Kenya |
| :--- | :--- |
| Clearing snowy paths | Seeking out illegal ivory |
|  | Signaling humans when <br> ivory is found |

Which information belongs in the empty space?
A Searching airports and seaports
B Attending special schools
C Navigating through snow and fog
D Discovering evidence of poachers

16 This selection is best described as -
F informative
G humorous
H persuasive
J expressive

17 The author organizes this selection by -
A relating the history of humans training dogs over thousands of years

B describing situations in which dogs and humans have achieved success together

C listing the breeds of dogs that are best known for assisting humans
D summarizing the stories of several rescue missions involving dogs

18 As used in paragraph 7, the word quarry means -

F the command of a trainer
G a wild animal
$\mathbf{H}$ the object of a search
J hidden food

19 Which sentence from the selection best supports the idea that people and dogs can do valuable work?

A The monks and their dogs together saved the lives of more than 2,000 people over the years.
B When the dogs caught the scent of ivory, they stood in that spot and barked.
C These large dogs are named after Bernard of Montjoux, a monk who pursued a life of religious study and service.
D People and dogs have lived together for centuries.

20 The reader can conclude that Saint Bernards made good rescue dogs mainly because they -

F had great strength and a strong sense of direction
G enjoyed searching for lost travelers
H knew how to avoid robbers and bandits
J knew the mountain paths better than the monks

## Read the next two selections. Then answer the questions that follow them.

## Terun's Climb

Terun awoke and listened carefully. The village was dark and silent except for the call of a few night birds. "It's time," he thought as he stood up and carefully stepped over his older brother Nipawe. Across the tent their father, a stern Apache warrior, stirred in his sleep. Terun waited. He didn't want anyone to know of his plan, although his father would no doubt be pleased-if Terun succeeded.
2 peeked through the patchy clouds. He knew that morning was at least an hour away. "Should I wait?" he wondered, noting the scent of rain on the breeze. Terun looked around the sleeping village. "No," he decided. "I must go now."

Terun had noticed the eagle's nest two days earlier while hunting with his father and brother. Fearing that Nipawe would claim it, Terun had said nothing. Nipawe was nearly a man, strong and confident like their father. Nipawe often teased Terun, telling him that he was still a child. Terun longed to prove himself as a hunter and warrior, but his heart was troubled by a secret.

Terun shuddered as he recalled a hunting trip last season. While his father and Nipawe were scouting ahead for game, a mountain lion had suddenly pounced at Terun from behind a rock. Its menacing teeth and angry snarl had locked Terun in the grip of fear. His heart had been pounding, and he was unable to move. Then as quickly as it had appeared, the animal raised its head and darted into the thick brush. Thankfully the mountain lion left. Fearing that it would come back, Terun was fumbling with his bow when his father and brother returned. They had heard the mountain lion's roar.
5 "Did you hit him?" Terun's father had asked.
6 "No, Father," he answered, hanging his head.
7 "I am still proud," his father said, surprising Terun.

My notes about what I am reading
"You have found your courage." That night his father bragged that Terun had scared away a mountain lion.

My notes about what I am The men of the village grunted their approval.
"You're not fooling me," Nipawe growled later when he and Terun were alone. "How is it that you returned with all of your arrows?" Ashamed, Terun said nothing. His brother was right. He had not found his courage
9 The sun was climbing the rim of the canyon when Terun arrived at the cliff. "There it is," he whispered, spotting the nest on a ledge. As a boy, the chief of Terun's tribe had taken a feather from an eagle's nest. People said that the chief possessed the great bird's courage. Terun wished for such courage. He too would snatch an eagle feather. Slowly but with great determination, he climbed to the nest.

Once he reached the nest, Terun knew he must hurry. If the eagle returned, it would attack, and Terun could fall to his death. He looked inside the nest and saw a single feather snagged in the twisted sticks. He grabbed it and quickly started down.


11
halfway down the cliff, Terun re area where the rock was smooth. He searched frantically for a crack or ledge below him but could not find one. Although he held tightly to the crack above, he could feel his hands slipping. He looked down, and the air rushed from his lungs. He was paralyzed by fear. Then he remembered his father's words: "You have found your courage." Terun closed his eyes and breathed deeply. Feeling along the rock, he found a small indentation. Gripping it, he lowered himself and searched carefully for another place to put his hand.
12 That afternoon Terun strode through his village with the feather. Terun walked up to his father and presented the feather to him. Even Nipawe seemed to approve. Terun realized he had found his courage-not in the feather but in himself.

My notes about what I am reading

## The Cry of the Wolf

Siniwai crouched behind a tree and watched the wolf pack. His breath came in short, hurried gasps, and his heart fluttered in his chest. He knew it was too late now. The wolves had seen him. If they attacked, he would try to outrun them. He closed his eyes briefly and tried to steady his body. He hoped the wolves would forget about him and begin their hunt. Then he would do what he had come to do. He remembered the wise old chief's words. Siniwai, a young Blackfoot warrior, had recently joined the tribe's hunting party. He was as skilled with the bow and arrow as any of the tribe's warriors, yet he had not been successful in his hunts. The sounds of the rushing river, the howling wind, and the rustling leaves of trees became the roars of mountain lions, the cries of wolves, and the growls of bears. Siniwai had worried so much that he couldn't concentrate on the hunt.
"To defeat your fears, you must become like a wolf. You must run with wolves and hunt with them," the chief had said.
"But they will hunt me," Siniwai had protested.
"Wolves do not hunt their own kind," the old man had said.

And so it was that Siniwai journeyed deep into the forest, not to hunt the wolves but to hunt with the wolves.

8
Siniwai spotted the pack leader, which was larger and more aggressive than the others. Then following an unseen and unheard command, the wolves began to move, swiftly but silently in a loping gait. They were running toward Siniwai! His legs weak and shaky

My notes about what I am reading
beneath him, Siniwai wondered whether the leader would attack him. The chief's words came back to him: "Wolves do not hunt their own kind."

Siniwai stood as tall as he could, trying to show no fear. The pack leader raced past him. The wolves did not attack. Siniwai turned and ran with them. He accidentally stepped on a brittle tree branch, and the snap seemed to echo throughout the forest. The leader turned his angry eyes on Siniwai and growled, chastising him for his carelessness.
10 Siniwai understood what he had done. He ran faster and closer to the pack. Siniwai knew that they had found the scent of their prey. The wolves ran faster, with mouths slightly open and teeth gleaming in the moonlight. He was among them now, close enough to see and feel the fire in their yellow eyes. Ahead a frightened animal desperately tried to escape. The lead wolf sounded the cry, and the pack joined in, barking and yelping. They were at full speed now, and Siniwai was one of them. His fear gone, he had become a wolf, singing the song of the hunter-the cry of the wolf!

My notes about what I am reading


## Use "Terun's Climb" (pp. 15-17) to answer questions 21-24.

21 Terun is able to overcome his anxiety on the cliff because he -

A has climbed the cliff once before
B remembers what his father said to him
C thinks of how surprised his brother will be
D knows someone will help him down from the cliff

22 Nipawe knows that Terun -
F plans to sneak out alone during the night
G is braver than he is
H did not shoot any of his arrows
J was unable to find an eagle's nest

23 Paragraphs 4 through 8 are important to the story because they -

A explain the reason Terun decides to get the eagle feather

B create a feeling of anger between Terun and his brother

C contrast the differences between Terun and his father
D describe the similarities between the eagle feather and the mountain lion

24 Which sentence from the story shows that Terun has learned from his experience?

F That afternoon Terun strode through his village with the feather.

G Terun realized he had found his courage-not in the feather but in himself.
$\mathbf{H}$ That night his father bragged that Terun had scared away a mountain lion.
J He didn't want anyone to know of his plan, although his father would no doubt be pleased-if Terun succeeded.

## Use "The Cry of the Wolf" (pp. 18-19) to answer questions 25-29.

25 Siniwai knows he must hunt with the wolves in order to -

A speak with the chief
B become a successful warrior
C join the tribe's hunting party
D learn how wolves attack their prey

26 What are paragraphs 9 and 10 mostly about?
F Siniwai becoming a part of the wolf pack
G What the lead wolf does to Siniwai
H Siniwai trying not to show fear
J Why Siniwai cries with the wolves

28 The reader can conclude that the wolves -
F run past Siniwai out of fear
G do not notice Siniwai hiding in the woods
$\mathbf{H}$ accept Siniwai as a fellow hunter
J do not want Siniwai along on the hunt

29 What does the word aggressive mean in paragraph 8 ?

A Fierce
B Quiet
C Trusting
D Anxious

27 Siniwai angers the wolf leader when he -
A challenges the wolf's right to lead the pack
B makes noise that could alert the prey
C is in the way as the pack begins to run
D is in a part of the woods where only animals live

## Use "Terun's Climb" and "The Cry of the Wolf" to answer questions 30-32.

30 The resolutions in both of these stories occur when Terun and Siniwai -

F win the approval of their village
G decide to go hunting alone
H conquer their fears
J face danger for the first time

31 What do the main characters learn in these stories?

A To respect their elders
B To hunt as an animal hunts
C To use their weapons with greater skill
D To believe in themselves

32 Both stories end with a feeling of -
F frustration
G accomplishment
H concern
J relief

## Read this selection. Then answer the questions that follow it.

## Ride On, Sybil

Many inspiring stories and legends have their origins in the American Revolution, a conflict between the British and their American colonies. In the late 1700s, the colonists began their fight for independence from British rule. This is the legend of Sybil Ludington, a courageous 16-year-old who rode more than 20 miles on horseback to help defend her country.

1
Sybil had been riding her horse Star all night-more on this night than in the last two weeks combined. Despite his exhaustion, Star seemed to understand the urgency of the night and raced on. The dirt roads had turned to mud under the heavy rain, making it hard for Sybil to see.
2 Scrapes from low-hanging tree branches covered Sybil's face and arms. However, treating them would have to wait until morning when she had completed her task. Her father, Colonel Ludington, was counting on her to inform the colonial soldiers of a British attack. Although the task was dangerous, Sybil was intent on helping her father, a man she fiercely admired. She was proud of his role in the fight for American independence.


My notes about what I am reading

Sybil thought back to earlier that evening when she was tucking her brothers and sisters into their beds. She and her mother had heard approaching hoofbeats. They had looked at each other in alarm and gone quietly to the front door, trying not to disturb the children. With the war in progress, any unexpected visitor might be an unwelcome guest. to yell, "Colonel Ludington! Fetch Colonel Ludington! I must speak to him at once!" Sybil recognized the rider as one of her father's soldiers. An urgent message like this could mean only one thing-the British were attacking!

Sybil ran to find her father, her heart pounding in her chest. The colonel was in the back room studying a map that was laid out across his sturdy oak desk. His eyeglasses sat low on his nose. As Sybil entered the room, Colonel Ludington glanced up and saw the fear in his daughter's eyes. He quickly followed her to the front yard and calmly greeted the messenger. Sybil felt better just hearing the quiet authority in her father's voice.

The messenger was out of breath and soaking wet. "The news isn't good," he said, his hat pressed to his chest. He told them that the British had raided Danbury, Connecticut, the town where American military supplies had been hidden. The British confiscated everything they could use, destroyed the remainder of the supplies, and set fire to the town. The British were now marching to their ships, hoping to slip away with the stolen goods before the colonial soldiers caught them.
"We need to inform our men right away," Colonel Ludington responded. "If we can gather in time, we can prevent the British from reaching their ships. But our soldiers are scattered all over Putnam County and beyond. Are you fit to ride, son?"

Sybil interrupted. "Father, let me ride. I know where to go, and you are needed here. Star and I are both rested."

Her father studied his 16-year-old daughter solemnly. Sybil stood tall and waited for his answer. "Very well," Colonel Ludington said. "Ride on, Sybil."

My notes about what I am reading

11 Nervous and excited, Sybil raced to the barn and forced herself to focus on saddling Star. She was not going to allow emotion to interfere with her mission. Her hands shook as she slipped the worn leather strap through the brass buckle.

Her mother entered the barn and offered her a bundle. "Take this cheese and rye bread. I've filled your father's canteen with water, and-" Her mother's eyes filled with tears. She embraced Sybil and returned to the warm glow of the house.
13 Sybil wished she could vanish into that safe light and nestle under the quilt on her bed. Everything was happening so quickly. Would she be able to alert the men in time? Would the British stop her?
14 "Time to go, boy." Sybil patted her horse, swung one leg over his back, and flew out into the darkness. and rain-soaked clothing, Sybil urged Star on, aware that with each passing minute the British were getting farther away. Darkness enveloped her like a blanket, protectively surrounding her. She thought of her father's confidence in her, and her courage was renewed.

16 The rain slowed, and the moon finally appeared from behind wispy black clouds. It shone brightly, illuminating Sybil's path. She tried to memorize its appearance. The moon was her companion, reaching out with its soft light and whispering encouragement to her.

17 Sybil continued to gallop from town to town, banging on closed shutters and alerting the men in charge. She was aware of the significance of her ride. She knew of Paul Revere's heroic ride just two years earlier, in 1775. When her journey ended, Sybil would have ridden nearly twice as far as Revere.
18 The sun was beginning to rise when Sybil reached the last house on her route. She patted Star and turned wearily to begin the long journey home. From a distance she heard marching boots and a British officer shouting orders. Sybil slowed her horse, hoping to go unnoticed. They would probably never suspect her-she looked like an ordinary young girl out for an early ride-but it was best to be safe.

My notes about what I am reading

33 Which words from paragraph 5 help create an anxious feeling?

A ran, pounding, fear
B studying, sturdy, glanced up
C map, authority, calmly
D back room, entered, followed

34 What are paragraphs 11 and 12 mostly about?
F The way Sybil saddles her horse
G The food Sybil's mother brings her
H Why Sybil's hands are shaking
J How Sybil prepares for her journey

35 Sybil slows her horse as she passes the British camp because she wants to -

A keep from raising the enemy's suspicion
B listen to the sounds of marching
C give her horse the chance to regain his strength

D find out what the enemy soldiers are doing

36 Read this sentence from paragraph 3.

Sybil thought back to earlier that evening when she was tucking her brothers and sisters into their beds.

The author uses this sentence to -
F set up a flashback
G provide suspense
H foreshadow an event
J establish the setting

37 How does the author organize the selection?
A By comparing Sybil's ride to Paul Revere's ride

B By listing the reasons why Sybil supports the war

C By giving the cause and listing the effects of the ride Sybil makes
D By describing Sybil's legendary ride and the events that led up to it

38 Which of these is the best summary of the story?

F Sybil is upset when a soldier arrives at her door. She turns to her father and offers her help. Her father allows her to ride her horse throughout the night.
G Sybil is worried when one of her father's soldiers comes to their house with news of the British troops. Sybil offers to alert the colonial soldiers. By making a daring night ride, she is able to spread the news before morning

H Sybil helps her father in the Revolutionary War. He agrees to let her ride her horse on a mission. Sybil knows she must get news to the soldiers.

J Sybil loves to ride and knows the roads in Putnam County. When her father needs someone to make a long journey, Sybil tells him that she and Star can do the job. Sybil rides her horse farther than Paul Revere did in his legendary ride.

39 Read this sentence from paragraph 11 of the story.

She was not going to allow emotion to interfere with her mission.

This sentence shows Sybil's -
A patience
B surprise
C hesitation
D determination

40 Look at the graphic organizer.


Which character trait best completes the graphic?
F Annoyed
G Humorous
H Quiet
J Responsible

41 What is Sybil's biggest conflict in the story?
A Completing her task in time
B Motivating Star to gallop faster
C Avoiding capture by the British troops
D Persuading her father to let her go

42 In paragraph 6, the word confiscated means -
F pushed around
G buried
H took control of
J replaced

## Appendix Q

Texas Assessment of Knowledge and Skills Release Test - Reading Grade 6 Administered April 2009, Answer Key

Texas Assessment of Knowledge and Skills - Answer Key

Grade: 06
Subject: Reading
Administration: April 2009

| Item Number | Correct <br> Answer | Objective Measured | Student Expectations |
| :---: | :---: | :---: | :---: |
| 01 | B | 01 | 6.10 (F) |
| 02 | H | 01 | 6.10 (F) |
| 03 | B | 03 | 6.12 (A) |
| 04 | $J$ | 04 | 6.11 (C) |
| 05 | D | 01 | 6.9 (D) |
| 06 | G | 01 | 6.10 (G) |
| 07 | D | 02 | 6.12 (J) |
| 08 | G | 04 | 6.10 (H) |
| 09 | D | 04 | 6.11 (C) |
| 10 | G | 02 | 6.12 (F) |
| 11 | B | 01 | 6.10 (F) |
| 12 | F | 03 | 6.10 (E) |
| 13 | D | 01 | 6.9 (B) |
| 14 | G | 04 | 6.10 (H) |
| 15 | C | 03 | 6.10 (L) |
| 16 | F | 03 | 6.12 (A) |
| 17 | B | 04 | 6.12 (I) |
| 18 | H | 01 | 6.9 (B) |
| 19 | A | 04 | 6.11 (C) |
| 20 | F | 04 | 6.10 (H) |
| 21 | B | 03 | 6.10 (E) |
| 22 | H | 01 | 6.10 (F) |
| 23 | A | 02 | 6.12 (G) |
| 24 | G | 04 | 6.11 (C) |
| 25 | B | 02 | 6.12 (F) |
| 26 | F | 01 | 6.10 (F) |
| 27 | B | 03 | 6.10 (E) |
| 28 | H | 04 | 6.10 (H) |
| 29 | A | 01 | 6.9 (B) |
| 30 | H | 02 | 6.12 (G) |
| 31 | D | 04 | 6.11 (D) |
| 32 | G | 04 | 6.12 (K) |
| 33 | A | 04 | 6.12 (K) |
| 34 | J | 01 | 6.10 (F) |
| 35 | A | 03 | 6.10 (E) |
| 36 | F | 02 | 6.12 (J) |
| 37 | D | 04 | 6.12 (I) |
| 38 | G | 01 | 6.10 (G) |
| 39 | D | 02 | 6.12 (F) |
| 40 | J | 03 | 6.10 (L) |
| 41 | A | 02 | 6.12 (G) |
| 42 | H | 01 | 6.9 ( ${ }^{\text {b }}$ ) |

## Appendix R

Texas Assessment of Knowledge and Skills Objectives 1, 2 and 3 for Reading Comprehension Grade 6, Spring 2009

## Grade 6 Reading

For a more complete description of the objectives measured, please refer to the Revised TAKS Information Booklet for Grade 6 Reading at http://www.tea.state.tx.us/student.assessment/taks/booklets/index.html.

Objective 1: The student will demonstrate a basic understanding of culturally diverse written texts.
(6.9) Reading/vocabulary development. The student acquires an extensive vocabulary through reading and systematic word study. The student is expected to
(B) draw on experiences to bring meanings to words in context such as interpreting [idioms,] multiple-meaning words, and analogies (6-8);
(D) determine meanings of derivatives by applying knowledge of the meanings of root words such as like, pay, or happy and affixes such as dis-, pre-, or un- (4-8); and
(F) distinguish denotative and connotative meanings (6-8).
(6.10) Reading/comprehension. The student comprehends selections using a variety of strategies. The student is expected to
(F) determine a text's main (or major) ideas and how those ideas are supported with details (4-8); and
(G) paraphrase and summarize text to recall, inform, or organize ideas (4-8).

Objective 2: The student will apply knowledge of literary elements to understand culturally diverse written texts.
(6.12) Reading/text structures/literary concepts. The student analyzes the characteristics of various types of texts (genres). The student is expected to
(F) analyze characters, including their traits, motivations, conflicts, points of view, relationships, and changes they undergo (4-8);
(G) recognize and analyze story plot, setting, and problem resolution (4-8); and
(J) recognize and interpret literary devices such as flashback, foreshadowing, and symbolism (6-8).

Objective 3: The student will use a variety of strategies to analyze culturally diverse written texts.
(6.10) Reading/comprehension. The student comprehends selections using a variety of strategies. The student is expected to
(E) use the text's structure or progression of ideas such as cause and effect or chronology to locate and recall information (4-8);

## Grade 6 Reading (continued)

(I) find similarities and differences across texts such as in treatment, scope, or organization (4-8); and
(L) represent text information in different ways such as in outline, timeline, or graphic organizer (4-8).
(6.12) Reading/text structures/literary concepts. The student analyzes the characteristics of various types of texts (genres). The student is expected to
(A) identify the purposes of different types of texts such as to inform, influence, express, or entertain (4-8);
(C) compare communication in different forms such as [contrasting a dramatic performance with a print version of the same story or] comparing story variants (2-8); and
(H) describe how the author's perspective or point of view affects the text (4-8).

## Objective 4: The student will apply critical-thinking skills to analyze culturally diverse written

 texts.(6.10) Reading/comprehension. The student comprehends selections using a variety of strategies. The student is expected to
(H) draw inferences such as conclusions or generalizations and support them with text evidence [and experience] (4-8); and
(J) distinguish fact and opinion in various texts (4-8).
(6.11) Reading/literary response. The student expresses and supports responses to various types of texts. The student is expected to
(C) support responses by referring to relevant aspects of text [and his/her own experiences] (4-8); and
(D) connect, compare, and contrast ideas, themes, and issues across text (4-8).
(6.12) Reading/text structures/literary concepts. The student analyzes the characteristics of various types of texts (genres). The student is expected to
(I) analyze ways authors organize and present ideas such as through cause/effect, compare/contrast, inductively, deductively, or chronologically (6-8); and
(K) recognize how style, tone, and mood contribute to the effect of the text (6-8).

## Appendix S

Texas Assessment of Knowledge and Skills Release Test - Language Arts Grade 11 Administered March 2009
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# EXIT LEVEL ENGLISH LANGUAGE ARTS 

## Administered March 2009

## READING AND WRITTEN COMPOSITION

## DIRECTIONS

Read the two selections and the viewing and representing piece. Then answer the questions that follow.

# Breakfast in Virginia 

by Langston Hughes

"Breakfast in Virginia," written by the African American author Langston Hughes, takes place in the United States during World War II, when racial segregation was both openly visible and commonly accepted. From the 1880s into the 1960s, the majority of states enforced segregation through Jim Crow laws. Many states and cities could impose legal punishments on people for associating with members of another race. The most common types of laws forbade intermarriage and ordered business owners and public institutions to keep their black and white clientele separated.

1 Two colored boys during the war. For the first time in his life one of them, on furlough from a Southern training camp, was coming North. His best buddy was a New York lad, also on furlough, who had invited him to visit Harlem. Being colored, they had to travel in the Jim Crow car until the Florida Express reached Washington.
2 The train was crowded and people were standing in WHITE day coaches and in the COLORED coach-the single Jim Crow car. Corporal Ellis and Corporal Williams had, after much insistence, shared for a part of the night the seats of other kindly passengers in the coach marked COLORED. They took turns sleeping for a few hours. The rest of the time they sat on the arm of a seat or stood smoking in the vestibule. By morning they were very tired. And they were hungry.
3 No vendors came into the Jim Crow coach with food, so Corporal Ellis suggested to his friend that they go into the diner and have breakfast. Corporal Ellis was born in New York and grew up there. He had been a star trackman with his college team, and had often eaten in diners on trips with his teammates. Corporal Williams had never eaten in a diner before, but he followed his friend. It was midmorning. The rush period was over, although the dining car was still fairly full. But, fortunately, just at the door as they entered there were three seats at a table for four persons. The sole occupant of the table was a tall, distinguished gray-haired man. A white man.
4 As the two brownskin soldiers stood at the door waiting for the steward to seat them, the white man looked up and said, "Won't you sit here and be my guests this morning? I have a son fighting in North Africa. Come, sit down."

My notes about what I am reading
"Thank you, sir," said Corporal Ellis, "this is kind of you. I am Corporal Ellis. This is Corporal Williams."

The elderly man rose, gave his name, shook hands with the two colored soldiers, and the three of them sat down at the table. The young men faced their host. Corporal Williams was silent, but Corporal Ellis carried on the conversation as they waited for the steward to bring the menus.
"How long have you been in the service, Corporal?" the white man was saying as the steward approached.

Corporal Ellis could not answer this question because the steward cut in brusquely, "You boys can't sit here."

9 "These men are my guests for breakfast, steward," said the white man.
10 "I am sorry, sir," said the white steward, "but Negroes cannot be served now. If there's time, we may have a fourth sitting before luncheon for them, if they want to come back."
"But these men are soldiers," said the white man.
12 "I am sorry, sir. We will take your order, but I cannot serve them in the state of Virginia."
13 The two Negro soldiers were silent. The white man rose. He looked at the steward a minute, then said, "I am embarrassed, steward, both for you and for my guests." To the soldiers he said, "If you gentlemen will come with me to my drawing room, we will have breakfast there. Steward, I would like a waiter immediately, Room E, the third car back."

The tall, distinguished man turned and led the way out of the diner. The two soldiers followed him. They passed through the club car, through the open Pullmans, and into a coach made up entirely of compartments. The white man led them along the blue-gray corridor, stopped at the last door, and opened it.
"Come in," he said. He waited for the soldiers to enter. It was a roomy compartment with a large window and
wo long comfortable seats facing each other. The man It was a roomy compartment with a large window and
two long comfortable seats facing each other. The man indicated a place for the soldiers, who sat down together. He pressed a button.

My notes about what I am reading
"I will have the porter bring a table," he said. Then he went on with the conversation just as if nothing had happened. He told them of recent letters from his son overseas, and of his pride in all the men in the military services who were giving up the pleasures of civilian life to help bring an end to Hitlerism. ${ }^{1}$ Shortly the porter arrived with the table. Soon a waiter spread a cloth and took their order. In a little while the food was there.
18 All this time Corporal Williams from the South had said nothing. He sat, shy and bewildered, as the Virginia landscape passed outside the train window. Then he drank his orange juice with loud gulps. But when the eggs were brought, suddenly he spoke, "This here time, sir, is the first time I ever been invited to eat with a white man. I'm from Georgia."
"I hope it won't be the last time," the white man replied. "Breaking bread together is the oldest symbol of human friendship." He passed the silver tray. "Would you care for rolls or muffins, Corporal? I am sorry there is no butter this morning. I guess we're on rations."
"I can eat without butter," said the corporal.
For the first time his eyes met those of his host. He smiled. Through the window of the speeding train, as it neared Washington, clear in the morning sunlight yet far off in the distance, they could see the dome of the Capitol. But the soldier from the Deep South was not looking out of the window. He was looking across the table at his fellow American.
22 "I thank you for this breakfast," said Corporal Williams.
"Breakfast in Virginia" from SHORT STORIES by Langston Hughes. Copyright © 1996 by Ramona Bass and Arnold Rampersad. Reprinted by permission of Hill and Wang, a division of Farrar, Straus and Giroux, LLC.

My notes about what I am reading

[^1]
## The Crystal Night

by Lore Metzger

When Adolf Hitler became chancellor of Germany in January 1933, I had just celebrated my twelfth birthday. I was a student in the all-girl high school of Landau, Rhineland-Palatinate. My thoughts and hobbies were typical of any budding teenager's, and my biggest worries were to get perfect grades and to be noticed just for a moment by one of the students of the all-male high school.

My childhood was an abundance of happy occasions: birthday parties, the annual children's masquerade at the city theater, long walks through Landau's beautiful parks, visits to the zoo, skating and sledding in winter, swimming, biking, and hiking in summer. I loved to climb high in the mountains, each crowned by romantic ruins, castles of kings and emperors of long ago. Life was joyous, carefree, safe.

Shortly after Hitler's rise to power, menacing signs sprang up everywhere, at the swimming pool, the zoo, the parks, the theaters, the restaurants: "Jews forbidden." Jewish homes were soiled with swastikas and hate slogans, Jewish stores were boycotted, Jewish men and even children were beaten in the streets. In school, Jewish students, now "nonAryans," were segregated from their fellow students. To have to sit in the so-called Jew corner, to have to listen to the most degrading remarks and avoid all contact with classmates who until then had been my friends, made those years agony for me. More and more of my Jewish classmates left Germany with their families.

For the longest time my parents refused to think about emigration, but in 1938 they finally made the decision to go to America. The German government no longer allowed Jews to take money out of the country, but we could take what we wanted of our household possessions as long as we paid a special tax. By November all the plans for the big move had been made. We were to set sail for America on the S.S. Washington on November 28.

During the dreary days of early November, the damp, cold mood of Mother Nature reflected our own only too well. Through the terrible years of the Nazi regime, our home, with its beautifully furnished rooms and magnificent garden, had always been a center of peace and comfort. Now my brother and I could read the sadness and fear in our parents' eyes. They had both been born in Landau, as had my grandparents. They had both served in the military during World War I, and they were deeply involved in the social, cultural, and economic life of Landau. My father didn't know how he would support his family in a strange land, with no knowledge of English and few resources. My mother couldn't sleep for worrying about her aged father, who would have to be left behind because the American consulate wouldn't issue a visa to anyone over seventy. We were all so preoccupied with the emotions of leaving our home and the preparations for the move that we hardly noticed the news item
that was to carry such enormous consequences. In Paris, an enraged Polish Jew shot and killed an employee of the German embassy when he learned that his parents had been deported from Germany back to Poland.

At seven o'clock on the morning of November 10, one of our maids came into my bedroom and awakened me with soft, halting words: "Honey, if you want to see the temple again get up now, because it's on fire." Shaking all over, I dressed and ran outside, without stopping for a coat. As soon as I left the house, I could detect a burning odor in the foggy air. I stopped in front of the hotel about a block from the temple and stood there paralyzed by shock and disbelief. Flames were shooting out of the stained-glass rose window, and a second later more flames engulfed the beautiful five-domed sanctuary. How long I remained there I cannot remember.

In tears, I ran back home. My parents were sitting down to breakfast, and I was just about to tell them of the dreadful thing I had witnessed when I heard loud male voices in the hall. In my confusion, I had left the front door open. Suddenly six or eight men pushed their way in, and without so much as a word, one of them yanked the tablecloth off the table, sending the breakfast dishes crashing to the floor. Another grabbed my father by the arm and barked, "You are under arrest!" When my father asked why, he was told, "Today we get all the Jews." We watched, stunned, as they led him away.

Moments later a dozen storm troopers burst into the room brandishing axes,
crowbars, hammers, and revolvers. Like beasts of prey fallen upon their victims, they went from room to room, systematically smashing furniture and dishes, cutting up oriental rugs, tearing open feather pillows, even slashing canvases in their frames-my mother's own paintings. As they were about to destroy a recently completed picture, my mother found the courage to say, "What do you want from us? We have served Germany faithfully both in peace and in war," and with that she pointed to the china cabinet, where the military decorations bestowed upon her and my father lay on a black velvet pillow, along with my grandfather's medals from the Franco-Prussian War. When the men saw these, one of them immediately gave the command to stop, but it was too late.

No sooner had they gone than one of our faithful servants arrived and broke down at the sight of the devastation. Struggling to compose herself, she told us she had heard that during the coming night all Jewish houses were to be set afire and all Jewish boys killed. She wanted to take my brother and hide him in the forest, but my mother declined her courageous offer and tearfully sent her away, not wanting to endanger her life as well.

Darkness fell early that November warm clothes, and we left our home and went through the desolate park in the direction of the Jewish cemetery. There we
see Crystal Night, page 3
spent the night, wandering around in a daze or sitting on the tombstones of my grandparents' graves.

At daybreak we returned to the park, where we had a perfect view of our home through the leafless trees. It had not been burned. We saw a large car pull up in front of the house. Two SS men got out and went inside. I was terrified and wanted to run back to the safety of the cemetery, but my mother thought they might have news of my father, so we hurried across the park. As we entered the house, the two men were voicing their disgust at the destruction all around them. Oddly enough, they were the same two officers who had inspected our belongings several weeks before to determine the exit tax. They assured my mother that they themselves would see to it that the government paid for repairs. "We would not want you to go to America and talk about us Germans as barbarians," they told her.

After they left, my mother sent my brother and me to bed. I dreamed of the telephone, which rang and rang and rang, until I finally realized that this was no dream. The phone-miraculously undamaged-was indeed ringing. I stumbled to the den through the debris and picked it up. A harsh male voice said, "Pack your bags and be at the railroad station by noon. Be sure to take all your money and jewelry with you." My mother, who had been out when the call came, returned to this dreadful news and began packing. Shortly before noon on November 11, the three of us left our home for the last time.

Lugging our heavy suitcases, we walked past the temple, which was still burning, and past the ransacked homes of our friends. Worst of all, we walked past the people of Landau, our former neighbors, who stared at us with wordless hostility. Some of them forced us off the sidewalk into the busy street.

A cold drizzle was falling as we reached the plaza in front of the station. There about two hundred women and children were huddled together, trembling and scared, knowing nothing of the fate of their husbands and fathers, or of their own. True to her greatness, my mother made it her business to go around and speak to everyone encouragingly, especially the children.

One by one, the women and children were taken to a small room in the station, ordered to disrobe, and examined by members of the Nazi women's group, who wanted to be sure that no money or jewelry was hidden on their bodies. All the valuables we brought with us had already been confiscated, except wedding bands. A little after eight o'clock, we boarded a train that took us to Mannheim, on the other side of the Rhine River. That day the Palatinate was to be made judenfrei-free of Jews.

We were fortunate to have distant relatives who ran a small hotel in Mannheim. These good people sent a taxi and umbrellas and money to the station. By a miracle, their place had not been touched the day before, and I could hardly
believe my eyes when we stepped into the warmly lit foyer. It was difficult to comprehend that such things as unbroken furniture still existed. The dining room table was set, awaiting us, and on it was the most beautiful sight of all: two burning Sabbath candles. It was Friday night, and the Sabbath had begun. After the events of the past two days, the radiance of their flickering light gave me an indescribable feeling of peace. Suddenly I discovered a new pride in being a Jew, and in my heart I knew that God would never forsake us.

The next day my father was released from the Dachau concentration camp. He traced us to Mannheim with the help of
our former chauffeur, and we were reunited at last. The two SS men kept their word, and my mother was allowed to return to Landau to pack our repaired furniture.

Twenty-three years later, in 1961, my husband and I went back to Landau. For the first time in my life I saw bombed-out houses, whole blocks leveled by air strikes, and I was grateful-yes, grateful-for I realized that the events that drove us from home, the horrors of the Hitler years, of that Crystal Night, had spared my family the horrors of war.
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Breaking the Fast


March 10, 1968-Delano, CA-Senator Robert Kennedy (left) breaks bread with Union Leader César Chávez as Chávez ends a 23 -day fast in support of nonviolence in the strike against grape growers. The strike began in 1965 when Chávez rallied his union workers to boycott grape producers in support of better working conditions. Before Chávez's fast, farmworkers were often harassed, threatened, and beaten. The bread is the first solid food for Chávez since he began his fast. The bread breaking took place after a mass of thanksgiving officially ending the hunger strike.

## Use "Breakfast in Virginia" (pp. 4-6) to answer questions 1-11.

1 What is one difference between Corporal Ellis and Corporal Williams?

A Corporal Williams is black, and Corporal Ellis is white.
B Corporal Williams is from the South, and Corporal Ellis is from the North.

C Corporal Ellis wants to eat breakfast, but Corporal Williams is not hungry.
D Corporal Ellis likes the elderly man, but Corporal Williams does not.

2 In paragraph 8, the word brusquely means -
F harshly
G harmlessly
H curiously
J loudly

3 Which of these is the best plot summary of the selection?

A Corporal Williams and Corporal Ellis are traveling on a segregated train during World War II. When the two soldiers are told they cannot eat in the dining car, an elderly white man tells the steward that the men are his guests. Despite the man's efforts, the soldiers are forbidden to sit in the car. The elderly man apologizes to the soldiers for the steward's behavior and asks them whether they would like to dine with him in his compartment.
B Corporal Williams and Corporal Ellis are two African American soldiers traveling aboard a train headed to Washington, D.C. The two soldiers have difficulty finding a place to dine aboard the train because of Jim Crow laws. Corporal Ellis, who is from New York, decides that they should attempt to eat in the dining car. Corporal Williams, who is from Georgia, has never eaten in a diner before but nonetheless follows his friend.

C Corporal Williams and Corporal Ellis are aboard a train bound for Washington, D.C., during World War II. Both soldiers are African American and have no access to food in the Jim Crow coach. In the dining car an elderly white man asks them to join him, but the steward will not permit them to eat with whites. The elderly man insists that the soldiers eat with him in his private compartment, where he treats them with respect and courtesy.
D Corporal Williams and Corporal Ellis befriend an elderly white man aboard a train during World War II. The two soldiers find themselves dining in the man's private compartment. The man tells the soldiers of his own son, who is fighting in North Africa. During breakfast Corporal Williams says that this is the first time he has dined with a white man. He then thanks the elderly man for his kindness.

4 Read the following dictionary entry.
service \'sər-vəs \} n 1. a meeting for worship 2. one of a nation's military forces 3. a contribution to the welfare of others 4. a building providing maintenance and repair

Which definition best matches the way the word service is used in paragraph 7 ?

F Definition 1
G Definition 2
H Definition 3
J Definition 4

5 Why is the train setting of the story important?

A It highlights the effects of segregation.
B It shows that transportation was difficult during the war.
C It stresses the cruelty of the steward.
D It emphasizes the importance of the passing landscape.

6 What is Corporal Williams's primary internal conflict?

F He doesn't know how he will be able to get a meal.

G He doesn't know how to respond to the elderly man's kindness.

H He knows that once he gets off the train, he will have to go to war.
J He worries about traveling from the South to the North.

7 Which line best demonstrates how indignant the elderly man feels?

A The sole occupant of the table was a tall, distinguished gray-haired man.

B "I am embarrassed, steward, both for you and for my guests."
C The elderly man rose, gave his name, shook hands with the two colored soldiers, and the three of them sat down at the table.
D "I will have the porter bring a table," he said.

8 In paragraph 21, the dome of the Capitol symbolizes -

F the possibility of equality for all people
G the distance the train has traveled
H the potential victory over Hitlerism
J the difficulty of being a soldier

9 Which of these best conveys the reality of Jim Crow laws?

A "I can eat without butter," said the corporal.
B They took turns sleeping for a few hours.
C "You boys can't sit here."
D For the first time his eyes met those of his host.

10 The reader can infer that the elderly man -

F identifies with the two corporals because his son is a soldier
G believes there should be two separate types of cars on the train
H performs an act of kindness because he feels superior to the two soldiers
$\mathbf{J}$ is on the train because he is going to visit his son

11 The author uses sentence fragments at the beginning of paragraph 1 and at the end of paragraph 3 to -

A quicken the pace of the story for the reader

B highlight the brutality of war for everyone involved

C emphasize the ethnicity of the major characters
D show the reader that the two soldiers are very brave

## Use "The Crystal Night" (pp. 7-10) to answer questions 12-22.

12 Which words from paragraph 8 best help the reader understand the meaning of the word ransacked in paragraph 13 ?

F smashing furniture and dishes
G beasts of prey
$\mathbf{H}$ military decorations
J my mother found the courage to say

13 What caused Landau's temple to burn?
A The building was old and made mostly of wood.

B It was bombed during the war by the Russians and Americans.
C Angry Germans set fire to it after a Polish Jew killed a German in Paris.

D Fleeing German Jews burned the temple so the Germans could not occupy it.

14 Paragraphs 13 through 15 are mainly about -

F the family and other Jews fleeing their homes

G the family boarding the train to flee to their relatives
$\mathbf{H}$ the family's decision to pack up their belongings
J the kindness of the narrator's mother toward her neighbors

15 Why was the family's house not destroyed?
A The German soldiers did not have time to raid the house.
B The narrator's mother was able to put out the fire.

C The U.S. government instructed the Germans not to harm it.
D The narrator's parents had served in the German military.

16 In paragraph 8, the author uses a simile to -
F describe how courageous her mother was
G depict the power of the soldiers' weapons
$\mathbf{H}$ illustrate the brutality displayed by the German soldiers
J show that her mother and father had served Germany

17 In paragraph 16, the two burning Sabbath candles symbolize -

A unity
B fire
C night
D hope

18 Which of these best describes the primary conflict faced by the narrator and her family?

F They had to replace the belongings damaged by the German soldiers.
G They could no longer practice their religion freely.

H They were forced to separate because of the impending war.
J They had to leave their home and country to survive.

19 Paragraphs 2 and 3 are important to the selection because they -

A contrast the narrator's life before and after Hitler's rise to power
B provide a reason why the narrator's family had to leave Landau

C detail the narrator's nostalgia for her childhood

D explain that the narrator is Jewish

20 In paragraph 8, the author's use of vivid verbs -

F shows how significant the war medals were to her mother
G expresses how afraid of the German soldiers she was

H portrays the abrupt and frenzied nature of the soldiers' invasion

J details the family's reaction to the soldiers' invasion

21 How was the narrator's visit to Landau in 1961 important?

A She fully understood how fortunate she and her family had been to escape.
B She needed to revisit Landau to remember what had happened.

C It enabled her to finally let go of her past.
D It allowed her husband to understand what she had gone through.

22 Which of these best expresses the narrator's realization of the danger her family faced?

F During the dreary days of early November, the damp, cold mood of Mother Nature reflected our own only too well.

G After they left, my mother sent my brother and me to bed.
$\mathbf{H}$ We were fortunate to have distant relatives who ran a small hotel in Mannheim.
J Now my brother and I could read the sadness and fear in our parents' eyes.

## Use "Breakfast in Virginia" and "The Crystal Night" (pp. 4-10) to answer questions 23-25.

23 What historical element do the selections have in common?

A Both show how Jim Crow laws were enforced.
B Both detail the persecution of Jews.
C Both occur while Hitler was in power.
D Both highlight the separation between the South and the North.

24 What makes the persecuted characters in both selections feel better?

F Sleep
G Hospitality
H Travel
J Humor

25 Both selections end on a note of -
A sadness
B elation
C fear
D gratitude

## Use the visual representation on page 11 to answer questions 26-28.

26 The Delano Courier-Times is -
F César Chávez's union
G the newspaper publishing the photo
H Robert Kennedy's political slogan
J the organization promoting a nonviolent resolution

27 The photographer chooses to capture both men looking away from the camera in order to -

A focus the viewer's attention on the act of breaking bread
B show that the men have no interest in being photographed
C represent a moment in which both men are unaware of the camera

D indicate that the men's physical characteristics do not matter

28 The use of the term "breaks bread" -
F highlights the struggle between politicians and union leaders
G emphasizes the symbolic nature of the act
H mirrors the violence of the strike
J foreshadows the future of the farmers

## Appendix T

Texas Assessment of Knowledge and Skills Release Test - Reading Grade 11
Administered Spring 2009, Answer Key

## Texas Assessment of Knowledge and Skills - Answer Key

## Grade: Exit Level Subject: ELA Administration: March 2009

The letter $F$ indicates that the student expectation listed is from the English III TEKS

| Item <br> Number | Correct Answer | Objective Measured | Student Expectations |
| :---: | :---: | :---: | :---: |
| 01 | B | 01 | F. 7 (F) |
| 02 | F | 01 | F. 6 (B) |
| 03 | C | 01 | F. 7 (F) |
| 04 | 6 | 01 | F. 6 , (E) |
| 05 | A | 02 | F. 11 (B) |
| 06 | G | 02 | F. 111 (C) |
| 07 | B | 02 | F. 10 (B) |
| 08 | F | 02 | F. 111 (F) |
| 09 | C | 03 | F. 10 (B) |
| 10 | F | 03 | F. 7 , (G) , |
| 11 | C | 03 | F. 12 ( A$)$ |
| 12 | F | 01 | F. 6 (B) |
| 13 | C | 01 | $F .7$ (F) |
| 14 | F | 01 | $F \cdot 7$ (F) |
| 15 | D | 01 | F. 7 (F) |
| 16 | H | 02 | F. 11. (D) |
| 17 | D | 02 | F. 11 (F) |
| 18 | 3 | 02 | F. 11. (C) |
| 19 | A | 03 | F. 7 (E) |
| 20 | H | 03 | F. 12 (A) |
| 21 | A | 03 | F. 7 (G) |
| 22 | $J$ | 03 | F. 10 (B) |
| 23 | C | 02 | F. 11 (E) |
| 24 | G | 03 | F. 7 , (G), |
| 25 | D | 03 | F. 12 (A) |
| 26 | G | 03 | F. 19 (B) |
| 27 | A | 03 | F. 19 (B) |
| 28 | G | 03 | F. 19 (B) |
| 29 | * | 02 | F. 10 (B) |
| 30 | * | 03 | F. 10 (B) |
| 31 | * | 03 | F. 10 (B) |
| 32 | H | 06 | F. 2.1 (C) |
| 33 | D | 06 | F. 2 (C) |
| 34 | F | 06 | F. 2 (C) |
| 35 | A | 06 | F. 3 (B) |
| 36 | H | 06 | F. 3 (B) |
| 37 | B | 06 | F. 3 (B) |
| 38 | 3 | 06 | F. 3 (B) |
| 39 | B | 06 | F. 3 (A) |
| 40 | H | 06 | F. 3 (A) |
| 41 | B | 06 | F. 3 (B) |
| 42 | G | 06 | F. 3 (B) |
| 43 | D | 06 | F. 2 (C) |
| 44 | J | 06 | F. 2 (C) |
| 45 | D | 06 | F. 3 (B) |
| 46 | G | 06 | F. 3 (B) |
| 47 | B | 06 | F. 3 (A) |
| 48 | H | 06 | F. 3 (A) |
| 49 | A | 06 | F. 3 (A) |
| 50 | G | 06 | F. 2 (C) |
| 51 | C | 06 | F. 3 (B) |
| Writing I | ask, * | 04. \& 05 | F. 1 (B) |

*A scoring guide is used to determine the scores for the written composition and short-answer items.

## Appendix U

Texas Assessment of Knowledge and Skills Objectives 1, 2 and 3 for Reading Comprehension Exit Level, Spring 2009

## Exit Level English Language Arts

For a more complete description of the objectives measured, please refer to the Revised TAKS Information Booklet for Exit Level English Language Arts at
http://www.tea.state.tx.us/student.assessment/taks/booklets/index.html.

## Objective 1: The student will demonstrate a basic understanding of culturally diverse written texts.

(6) Reading/word identification/vocabulary development. The student acquires an extensive vocabulary through reading and systematic word study. The student is expected to
(B) rely on context to determine meanings of words and phrases such as figurative language, connotation and denotation of words, analogies, [idioms,] and technical vocabulary;
(C) apply meanings of prefixes, roots, and suffixes in order to comprehend; and
(E) use reference material such as glossary, dictionary, [thesaurus, and available technology] to determine precise meanings and usage.
(7) Reading/comprehension. The student comprehends selections using a variety of strategies. The student is expected to
(F) produce summaries of texts by identifying main ideas and their supporting details.
(8) Reading/variety of texts. The student reads extensively and intensively for different purposes and in varied sources, including American literature. The student is expected to
(B) read in varied sources such as diaries, journals, textbooks, maps, newspapers, letters, speeches, memoranda, [electronic texts, and other media]; and
(C) read American and other world literature, including classic and contemporary works.

Objective 2: The student will demonstrate an understanding of the effects of literary elements and techniques in culturally diverse written texts.
(10) Reading/literary response. The student expresses and supports responses to various types of texts. The student is expected to
(B) use elements of text to defend, clarify, and negotiate responses and interpretations.
(11) Reading/literary concepts. The student analyzes literary elements for their contributions to meaning in literary texts. The student is expected to
(A) compare and contrast varying aspects of texts such as themes, conflicts, and allusions both within and across texts;
(B) analyze relevance of setting and time frame to text's meaning;
(C) describe and analyze the development of plot and identify conflicts and how they are addressed and resolved;

## Exit Level English Language Arts (continued)

(D) analyze [the melodies of] literary language, including its use of evocative words and rhythms;
(E) connect literature to historical contexts, current events, [and his/her own experiences]; and
(F) understand literary forms and terms such as author, drama, biography, myth, tall tale, dialogue, tragedy and comedy, [structure in poetry, epic, ballad,] protagonist, antagonist, paradox, analogy, dialect, and comic relief as appropriate to the selections being read.

Objective 3: The student will demonstrate the ability to analyze and critically evaluate culturally diverse written texts and visual representations.
(6) Reading/word identification/vocabulary development. The student acquires an extensive vocabulary through reading and systematic word study. The student is expected to
(F) discriminate between connotative and denotative meanings and interpret the connotative power of words; and
(G) read and understand analogies.
(7) Reading/comprehension. The student comprehends selections using a variety of strategies. The student is expected to
(E) analyze text structures such as compare/contrast, cause/effect, and chronological ordering for how they influence understanding; and
(G) draw inferences such as conclusions, generalizations, and predictions and support them with text evidence [and experience].
(8) Reading/variety of texts. The student reads extensively and intensively for different purposes in varied sources, including world literature. The student is expected to
(D) interpret the possible influences of the historical context on a literary work.
(10) Reading/literary response. The student expresses and supports responses to various types of texts. The student is expected to
(B) use elements of text to defend, clarify, and negotiate responses and interpretations.
(12) Reading/analysis/evaluation. The student reads critically to evaluate texts and the authority of sources. The student is expected to
(A) analyze the characteristics of clearly written texts, including the patterns of organization, syntax, and word choice;
(B) evaluate the credibility of information sources, including how the writer's motivation may affect that credibility; and
(C) recognize logical, deceptive, and/or faulty modes of persuasion in texts.
(19) Viewing/representing/interpretation. The student understands and interprets visual representations. The student is expected to
(B) analyze relationships, ideas, [and cultures] as represented in various media; and

## Exit Level English Language Arts (continued)

(C) distinguish the purposes of various media forms such as informative texts, entertaining texts, and advertisements.
(20) Viewing/representing/analysis. The student analyzes and critiques the significance of visual representations. The student is expected to
(B) deconstruct media to get the main idea of the message's content; and
(C) evaluate and critique the persuasive techniques of media messages such as glittering generalities, logical fallacies, and symbols.

## Appendix V

Texas Assessment of Knowledge and Skills Passages and Five Standout Questions in Grade 3 for Reading Comprehension, Spring 2009

The first selection from the TAKS assessment is a story about a new girl moving into a neighborhood. The neighbor boy sees that she can do amazing advanced skateboarding tricks. Excited to meet her, thinking she is a boy, he introduces himself and she takes off her helmet, he discovers she is not a boy, but a girl. Her tricks are so well performed that he still wants to befriend her to learn how she flips and weaves on her skateboard. He is worried a little of what his friends would think if he is learning tricks from a girl. But, in the end his best friend accepts her and asks her to teach him as well.

Three of the highest percentages of incorrect choices were missed from this selection:

## Skateboard Tricks By Michael Porter

1 There was no doubt about it. The new kid who was moving in next door to Jason was good. Jason sat on the front steps of his house. He had watched in admiration as the new kid jumped out of the movers' truck that was parked in the driveway and right onto a skateboard. Wearing a bright red helmet and knee and elbow pads, the kid had traveled quickly down the sidewalk in front of Jason's house, weaving around anything in the way.

2 As Jason watched, Mrs. Tuttle's fluffy little white dog suddenly ran out onto the sidewalk. The kid jumped his skateboard over the ball of fur and flipped the skateboard up into his hands, just like a professional. Then he grabbed the leash and set off to return the runaway dog. "Wow!" Jason exclaimed. "I need to learn how to do those cool tricks!"

3 After returning the dog to Mrs. Tuttle, the kid rode his skateboard back to his house. Jason saw the kid make his way between workers who were carrying boxes
and chairs into his new home. Jason felt shy about talking to the new kid, but he wanted to find out where that kid had learned to skateboard so well.

4 Jason sat on the porch steps, waiting for the kid to come back out. When he did, he was still wearing his helmet and other gear, and he was carrying the skateboard under one arm. Jason got up his courage and walked over to the new kid. "Hey, I saw you riding your skateboard," Jason said. "You're good."

5 The kid smiled and quietly said, "Thanks."
6 "Where are you from?" Jason asked.
7 "California," the kid answered.
8 Jason nodded and said, "My name's Jason."
9 The helmet came off, and Jason watched long brown hair tumble down. The kid said, "I'm Amanda."

10 Jason almost swallowed his gum. The new kid was a girl! After a few seconds he finally managed to say, "Hi."

11 "My mom told me that there's a skate park in the neighborhood. Is that right?" Amanda asked.

12 Jason shrugged. He knew Amanda was really good at riding a skateboard, and he could learn some things from her, like that flip she had just done. But he didn't want his friends to know he was learning something from a girl. His friends would tease him forever! Then he had an idea. "It's not too far, but you have to wear your helmet and knee and elbow pads," Jason said.

13 "No problem," Amanda said. "Let me ask my parents if I can go."
14 As Amanda ran inside to get permission from her parents, Jason stared
down at his feet. "If she can just keep her helmet on, everything will be fine," he thought to himself.

15 Amanda came running out of her house, and she and Jason stopped by his house so he could get his gear and his parents' permission. Then they rode away.

16 The park was filled with kids, some riding on skateboards and others on skates. Several guys waved to Jason as he showed Amanda around. Soon, though, Amanda was showing everyone what she could do on her skateboard. Sometimes she looked as if she were flying in the air. Jason began to panic when he realized that all his friends had stopped skating and were watching her, especially his best friend Patrick. Jason wondered if he could sneak out of the park without anyone noticing.

17 "That's awesome!" Patrick said, skating over to Jason.
18 "Just moved in next door to me today," Jason said.
19 "Do you think I could learn some of those tricks?" Patrick wondered aloud. "I always crash when I try to flip my skateboard like that."

20 Jason took a deep breath and motioned Amanda over to him and Patrick. If Patrick judged Amanda on her skating abilities rather than on the fact that she was a girl, then things would be all right. Jason just hoped that Patrick would decide Amanda was O.K.

21 As Amanda skated up to the two boys and took off her helmet, Jason tried to think of what to say. Before he could open his mouth, Patrick said, "Wow, I never met a girl who could skate like that-or even a boy! Can you teach me that flip trick?"

The first of five of the highest percentage answer option was item 15 on this assessment. Option A was the correct answer with $67 \%$, C was in second place with
$15 \%$, B was next with $10 \%$, and D had $8 \%$. This type of question is classified as a higher level-thinking question according to Bloom's Taxonomy (or a TI in QAR) that asks for the "best summary," a synthesis of the information in the passage. Most of the answer options have three sentences, and the summary to be recognized by the reader is broken into three parts: a beginning, middle and end of the action taking place in the narrative.

Answer option A has all three parts of the action in the story: the beginning meeting the new neighbor, the middle -finding out she is a girl not a boy, and the ending - the friends accept her and want to learn from her on the stake board. Answer option B with $10 \%$ selection is incorrect as it has statements that are true and provides a beginning and a middle statement about the action, but this answer leaves off the ending resolution to the action of the narrative. Answer option C has $15 \%$ selection with highly detailed and verbatim ideas expressed in the beginning of the narrative, but no middle action events are stated or resolution stated. And Answer option D with $8 \%$ selection consists of true statements, yet has no beginning action stated, just the middle and the ending events expressed.

A conversation with instructional or turnaround educational leaders could resemble something like the following: With answer options $\mathrm{B}, \mathrm{C}$, and D as the incorrect options, all three response options have a common pattern of the absence of logic for the structure of a summary. The reader must first know what the structure of a summary to then deconstruct the elements that make up a summary to answer this question correctly. Only $67 \%$ of the third grade regular readers in Texas were able to identify this structure correctly in question \#15. The question follows:
15. Which is the best summary of this selection? (TI Question/Answer Response)
A. Jason is pleased that his new neighbor is great at how Jason plans to escape from what Amanda rides on at the park his friends at the park who Jason knows at the park skateboarding. Jason learns that the new kid is a girl but wants her to teach him a few skateboard tricks anyway. Jason worries about what his friends at the park will think, but his friends want to learn from Amanda, too.
(67\% of the student population in Texas selected A. as the correct answer. This answer also had the components of a "true summary", there is a beginning event sentence, a middle event sentence and an ending event sentence. )
B. Jason takes the new kid in his neighborhood to the skate park. While there, Jason sees many friends who are skating and skateboarding. His friends are surprised by the skateboard tricks the new kid is able to do.
(10\% selected B. This answer distracted students with having a middle event sentence and an ending event sentence, but there is no beginning event sentence.)
C. A new kid moves into Jason's neighborhood. The kid is very good at skateboarding. Jason watches the kid jump over a white dog and move through a crowd of workers. Finally Jason goes to meet the neighbor and learns that the new kid is a girl.
(15\% selected C. This answer offers a beginning event sentence, but no middle or ending event sentences. It does offer true statement details that are very distracting.)
D. When Jason agrees to take Amanda to the skate park, she must wear a helmet and knee and elbow pads. Jason hopes that his friends won't learn that Amanda is a girl, but when she meets Jason's friends, everyone sees who she is.
(8\% selected D. This answer option also had no beginning and a few details of the middle and the ending action, but the generalized events are not mentioned here to create

## a good cohesive summary statement.)

An implication here is that $33 \%$ of the third grade students in Texas do not understand the structure of a summary statement. That is, 98,987 students in the population did not fully comprehend the concept of a true summary statement. A recommendation for instructional and turnaround educational leaders is that it is important to examine interventions in such a way that "match" the task at hand. A scenario could be the following: A turnaround campus would obtain data indicating low summarization scores, and educational leaders on that campus would build a campus plan for teachers to teach students summary statements everyday with practice to understand the concept of a summary. This strategy is a good intervention and a good place to start, and should be a part of the regiment of learning about summaries, however, general direction leads to intervention that may end up with the teacher teaching the students how to write "in their own words" that is a common technique for teaching summarization.

This strategy would be an example of a typical intervention and once mastered in the classroom by practice all school year, the instructor may feel that the students are ready for the assessment in the springtime. However, students writing summaries about material they have just read, stops short for young readers identifying summary statements with someone else's words. Being able to recognize a "true summary" in another person's words "matches" the task at hand. It also provides an avenue of critical thinking and reading of the text to examine the evidence and use logic to put the pieces together for recognizing the best possible summary. The difference types of choices with the intervention on how to teach will make a big difference in the increase of scores. One way could be a "stride" another way could be a "leap."

A "stride" would be if a campus instructional leader stated the obvious and set goals in each classroom for the teachers to teach "how to make" a summary each week in second and third grades for the sake of improving the deficit in the scores on their campus. A gain would present if attention and focus was on this skill, however, if the skill was about how to identify a summary in someone else's words and this skill was practiced on a daily bases, more of a "leap" could be present in the gains of the next assessment.

Both types of intervention are good ways to learn the concept of a summary statement, and both should be implemented in the classroom. But the emphasis should be on recognition of a summary already written as well as examining incorrect summaries and comparing and contrasting those statements to the "true summary" statement. In third grade the components of a summary are presented in the incorrect answer options. It is these components that are assessed. As far as having the skill to write the summary statement as a third grader, this skill is not assessed. Some educational leaders might be appalled at what they think is advice or guidance from leaders of "teaching to the test," however, in this case, third grade readers may be able to make their own summary statements in class, but be unable to recognize a "true summary" on the assessment. Teaching how to write your own summary statement, in your own words may appear impressive to other educators and parents, but it is putting the preverbal "cart before the horse" if students cannot recognize the components of a summary in someone else's words first. So an implication question that could arise from this type of findings a conversation could be: Does mastery of writing a summary with a student's own words indicate that a student knows how to recognize a summary in the words of an author?

An educator may say, "Well isn't making a summary in your own words, a more advanced skill than simply recognizing a summary in someone else's words?" And the answer to that may be "yes" it very well could be a more advanced step in the process in the understanding of a summary. However, if test scores indicated that $33 \%$ of the students do not recognize a "true summary" when comparing and contrasting with other summary type statements, then mastery of making a summary in your own words does not seem to correlate with recognizing a summary in someone else's words. Consequently, students might be able to preform the more advanced skill without a connection to the foundational skill. Or just because students can successfully make a summary does not make they can adequately recognized one. And in this case, assumptions and generalization do not help a camps make a "leap." Alignment and adjustments should be made to teach and match the assessment. This suggestions could be the type of conversation that would come from these findings.

The next question that had a high percentage of incorrect selection was item 21 about the same reading passage above. Option A was selected by $76 \%$ of students as the correct answer; B was the highest incorrect answer with $11 \%$ selection; then C was selected by $7 \%$; and finally B was incorrectly chosen by $6 \%$. The correct answer (option A) referred to paragraph 10 for support in the question stem, however evidence also needed to be gleaned from more than just paragraph 10 to answer this question correctly. The reader needed to read several paragraphs before and after paragraph 10 to infer correctly, the full meaning of why Jason swallows his gum. This answer was selected by $76 \%$ of the students in Texas, however $24 \%$ of the students selected incorrect answer options that may have been selected from more of a personal reading point of view than a
technical reading point of view using both logic and evidence. Option B offered a little evidence from the text to support this idea of being "nervous about having a new neighbor." In paragraph 3, reference was present of Jason being "shy" about meeting the new neighbor, and also in paragraph 4 the selection mentions that Jason "got up his courage and walked over to the new kid." Thus, this information could be inferred from the previous reading, but only $6 \%$ of the test-takers selected this option. Option C had $7 \%$ selection where a truthful statement was made about the text in general, but not the reason why Jason almost swallows his gum. Option D, with $11 \%$ selection the highest of the three in percent, was more about a personal feeling that the reader may have experienced from being somewhat deceived from a personal reading point of view instead of from reading the passage focusing on evidence and using the best logic to answer correctly with a technical reading point of view. Question 21 is as follows:
21. In paragraph 10, Jason almost swallows his gum because he is - (TI Question/Answer Response)
A. expecting the new kid to be a boy
(76\% selected the correct answer A. This answer is correctly placing words to describe the surprise action one might have and could have of "swallowing hard" or possibly "swallowing gum.")
B. nervous about having a new neighbor
( $6 \%$ selected $B$. This answer could be inferred from the experienced of the reader. There is mention in the story of the main character being shy and waiting to meet the new neighbor. If not read technically, a student could be distracted by this type of wording in this incorrect answer.)
C. excited about the skateboard tricks he will learn
(7\% selected C. This incorrect answer is very distracting because the statement is a true statement. This was a part of the story and mentioned several times both by Jason, the main character and his friend at the ending of the story.)
D. angry that Amanda didn't tell him she was a girl
(11\% selected D. This is a good example of a student's emotions and "reading into" the story. Quite possibly, a student in the third grade reading this passage might feel anger, especially if a male student, and select this answer based on an emotional response instead of a technical response.)

Another conversation about these findings could be that this type of question and incorrect answer options illustrate an idea of personal reading as opposed to technical reading. Here readers could be distracted by the personal feelings and emotions that they might feel if they were in the place of the main character. Apparently 32,966 or $11 \%$ of the third grade students thought that the main character felt "angry" that Amanda did not reveal that she was a girl. No such expression was explicitly stated within the text to give this implied idea. The only way readers would select this incorrect answer option would be by "reading in" to the story their own personal thoughts and feelings. Some other observations from the remaining incorrect answer options are both $B$ and $C$ are verbatim statements taken from the text. These two incorrect answers do not involve a thinking process or prompt the reading to infer. So, 38,960 or $13 \%$ of the students in third grade were not inferring while answering this question. These students could have been simply locating stated expressions within the text. These ideas could provide for good discussions and some clues for turnaround instructional leaders to obtain by simply
focusing on the rationale of why these answers could possibly be selected as incorrect.
Question 23 also had a high percentage of incorrect selections, with only $74 \%$ of the correct answer chosen with option B. The question asked was, what was the "main problem at the skate park?" Option C had a $12 \%$ selection; option A had a $8 \%$ selection, and option C had a $6 \%$ selection. All three of the incorrect answer options were answers that could be a "main problem" personally to the reader in with third grade readers' personal feelings or experiences. None of the incorrect answer choices had evidence to support them except option C wherein $12 \%$ of the test-takers selected it. Option C used one single fact in the narrative, that Jason's friends were watching Amanda, but coupled with the ideas of "instead of talking to him" made this option not supported by the text. The question follows:
23. What is Jason's main problem at the skate park? (TI Question/Answer

## Response)

A. Amanda has not taught him any skateboard tricks.
( $8 \%$ selected $A$. This is a true statement about the story, but it is not the main problem stated in the story. This could become a "main problem" in the future, but there is not enough evidence for this from the passage.)
B. He doesn't want his friends to learn the truth about Amanda.
(74\% selected correct answer B. This was stated in the story in several different ways. There is both evidence and logic in selecting this answer. The main problem was that Jason was worried about the identity of Amanda as revealed to his friends.)
C. His friends are watching Amanda instead of talking to him.
(12\% selected C. This was a true statement but it was not the focus of Jason's
main problem. A student could be distracted and answer this from a personal view point putting themselves in the position of Jason, but this would be answering from a personal point of view and not a technical point of view using the evidence from the passage and the logical thinking needed to answer this systematically with use of technical reading.) D. Amanda continues to do difficult tricks.
(6\% selected D. This is also a true statement answer and could be distracting again if the reader is making this passage a personal or emotional read, but from a technical reader's point of view, this is not the "main problem" the text illustrates to the reading audience.)

A conversation about these incorrect choices could be that all of these choices were statements of "truth" from the passage. For this example, $27 \%$ of the students or 80,916 students in third grade selected statements that were true, however, these choices were incorrect for this question. A discussion could occur regarding curriculum choices that help students of this age learn that just because something is a true statement does not always mean that it is the correct answer. If more patterns such as this one emerge, or are concentrated within a district, then these types of conversations about findings like this one could give that "leap" that turnaround leaders are searching for on standardized assessments.

The last two of the top five incorrect answers come from the last selection titled, Patrick's Hero, in the assessment. This reading selection is about a dog a family is watching for a relative who is going overseas for a while. The dog plays with the family's son, Patrick, and helps to bring Patrick to safety after playing in the lake. Patrick could not swim very well and the dog, Buffy, rescues him out of deep water. The
passage follows:

## Patrick's Hero

1 Patrick woke to a loud whump-whump-whump. He had just turned ten and thought he was pretty brave, but his heart was pounding. It was very dark in his room at the cabin, not like his room at home. As he reached for the lamp, he heard the sound again. He quickly switched on the light and sighed in relief. Buffy's tail was beating against the floor. He had forgotten about Buffy.

2 Patrick wasn't used to dogs. His parents had always said pets were too much of a burden and a lot of work. His family was busy and didn't think they could care for an animal. But a week ago Uncle Jack had pleaded with Patrick's parents to keep Buffy until he returned. Uncle Jack would be working in another country for six months and couldn't take Buffy with him. He had promised that Buffy would be no trouble. Surprisingly, Patrick's parents had agreed to keep her, even though they were about to leave for the lake cabin.

3 At breakfast Patrick shared his scary story with his parents. "Do you see the trouble a dog can cause?" his mother asked. "Pets like company. After breakfast take Buffy outside to play. Your father and I have some repairs to make on the cabin."

4 Soon Patrick went out the door toward the lake behind the cabin. Buffy followed Patrick like a shadow on a sunny day. Patrick's father watched them go. "Looks like Buffy may be a good pet," he said.
"We'll see," Patrick's mother grumbled.
6 Patrick and Buffy spent the morning running and playing. Patrick's new friend showed that she could roll over, fetch a stick and even play tag. The sun had
warmed the air, and Patrick said to Buffy, "Maybe we could cool off in the lake. Mom and Dad can see us from the cabin."

7 When he got to the lake, Patrick was a little hesitant. He hadn't visited the cabin since last year, and he wasn't a very good swimmer. His mother had told him he could wade in the water up to his knees. So after thinking it over for a while, he decided to go in the lake. After all, he wasn't alone. Buffy was with him.

8 The two friends jumped and splashed together in the lake. Patrick threw a stick, and Buffy retrieved it. No matter where Patrick threw it, Buffy swam after it like a trained athlete and returned it every time. Patrick was having so much fun playing with Buffy that he didn't realize he was so far from shore. Suddenly, the bottom of the lake seemed to disappear beneath his feet, and he went below the surface of the water.
$9 \quad$ Patrick sank like a rock to the bottom of the lake. When his feet finally touched squishy mud, he pushed up with all his might. He struggled to get to the top. His face came out of the water, and he rolled over on his back to float. "Help!" he cried. His body was too tired to move.

10 Just when Patrick felt hopeless, he heard a bark. He turned his head to see Buffy swimming toward him. She grabbed Patrick's shirt and began to swim, pulling him toward the shore.

11 Patrick was relieved when his feet could touch the bottom of the lake again. He slowly started walking toward shore and saw his mother running from the cabin.

12 "Patrick! Are you O.K.?" she screamed. Patrick could only nod and wave.
they reached dry ground, Patrick sat down to catch his breath. Buffy sat on one side of him, and his mother sat on the other. Patrick looked up at his mother and then hung his head. In between breaths he said, "I'm sorry, Mom. I got busy playing with Buffy, and I forgot to be careful."

14 Patrick's mother wrapped one arm around Patrick, and with the other she reached out to pat Buffy. "I'm sorry, too," she said, smiling. "And I'm glad your uncle left Buffy with us. She's a good lifeguard. I guess she's not really that much trouble."

In this selection, question 27 is a word-meaning question in which the reader can use context clues to help decipher the meaning of the word. Only $56 \%$ of the test-takers in Texas answered this question correctly. The other three choices were all definitions connected with possible personal feelings about the events in the text than the word meaning itself. With all the incorrect options, ideas were present that could have been inferred from the text as well.
27. Which word means about he same as hesitant in paragraph 7? (SI Question/Answer Response)
A. Excited
(18\% selected A. All of these incorrect answer options have to do with personal experience. One might "read into" the text the idea of excited due to the personal emotional experience that could be similar in a youngsters life at third grade.)

## B. Careless

(10\% selected B. There is mention of Patrick not being careful while playing in the water as it go deeper, so this answer is pulling distraction from another true event
that took place in the story.)
C. Brave
(16\% selected C. There was a certain amount of bravery from the dog Buffy to bark and save Patrick in the water. So an element of being brave was implied in the actions of the dog. This is another great distraction that seemed to work well, due to $16 \%$ of the students selected this incorrect option.)

## D. Unsure

( $56 \%$ selected the correct option D. For this answer to be selected correctly, the reader should have gone back to the passage and read the word to replace the possible unknown word "hesitant." This is a technique that is commonly taught in elementary school when using context clues or trying to find out what a word means. With 44\% of the students in Texas missing this correct answer, I have to wonder if there was random guessing for the most part.)

A conversation between educational leaders about word meaning and vocabulary development might emerge from this type of examination of incorrect answer choices. When examining the incorrect answers here, $44 \%$ or 131,907 of the third graders need to have some type of intervention with vocabulary. If a closer inspection of the word choices is made with the incorrect answer options, these words are all part of inferred ideas from the action in this story. It would be informative to help students learn how to discern the difference between inferred overall emotional responses, and targeted specific events in the story. A new level of understanding could occur in reading comprehension from examining these types of errors and finding out what students were thinking when they answered these types of word meaning questions, or what they were thinking about
the passage as a whole when they encountered this type of specific question.
Finally, the last question of the top five examples is reviewed. Question 34 does indeed ask the reader about feelings, but the character's feelings from the evidence is revealed in paragraph 11. In this question, $76 \%$ of the test-takers selected correctly leaving a high percentage of incorrect choices. Option D had a $12 \%$ selection; option B had a $9 \%$ selection; and option A had a 3\% selection. In this case, the question is asking the reader to synthesize with the evidence provided in the text and how the character must feel based on the events that took place in the narrative. The correct answer does reflect this thought structure and the correct answer option is stated in such a way that the ideas are inferred from the reading. The other three choices are all ideas that are stated verbatim from some other paragraphs in the passage. Option A had stated evidence in paragraph 2; Option B had stated (words and phrases) evidence in paragraph 8; and Option D (the highest percentage option) had evidence in paragraph 6 and 8.
34. Patrick feels relieved in paragraph 11 because he - (TI Question/Answer Response)
A. can give Buffy back to his uncle
(3\% selected A. This answer does have an element of truth in the detail that at the beginning of the story, Buffy was only temporary in the family and was only being kept because the uncle was going overseas to work.)
B. is able to splash in the water
( $9 \%$ selected B. This detail was mentioned as well in the passage, but it is not an indicator of "relieve.")
C. knows he is no longer in danger
(76\% selected the correct answer C. This is a type of question of either prior knowledge of the word "relieved" or of an investigation of the events around paragraph 11. The reader can infer that the emotion attributed to the main character, Patrick, was relief from not drowning in the water and being safe on dry land.)
D. can play with Buffy again
(12\% selected D. This answer would be a nice side benefit of being alive and not drowned to death, but this answer is not the best answer. It is a very good answer and for most youngsters at the third grade level, they might not even register this life threatening event, they may just hyper focus on what is important to them and that is playing.)

A conversation about this example could be that the textual answers draw the reader in for distraction. All the incorrect answers were "familiar" now to the reader as they are stated from the passage. An instructional strategy for the teaching of reading comprehension could be to focus awareness on the answers that are stated directly in the text. So, from this closer analysis of the possible motivations for why some of these incorrect answers could be chosen by students, some generalizations could emerge from these conversations. In the form of questions some additional implications could be: Do all true statements always make correct answers? If the answer statement is expressed in the passage does that mean it is a correct answer? When you read a test question, can you determine the difference of when that question is asking for a part of the passage or the whole of the passage? When you answer a test question, do you use evidence to support your answer or just have a reaction to the question? These possibilities could be some of the ideas that arise from conversations from this type of DIF study. These types of implication could help that educational leader see more deeply into the greater needs
of campus instruction other then simply teach more of the same obvious techniques or ideas represented by the finished data.


[^0]:    * Short Answer items are rated on a scale of 0-3 and are equal to a maximum of three score points (short answer rating x 1 ).
    ** For subsequent administrations, shifts may occur in the number of items (raw score) needed to achieve Met Standard and Commended Performance.

[^1]:    ${ }^{1}$ Hitlerism—Nazism or National Socialism—was a political belief promoting an exclusive German race and a strong and centrally governed state. The term is most often used in connection with Adolf Hitler's dictatorship of Nazi Germany from 1933 to 1945.

