

# Chapter 8 Texas Assessment of Knowledge and Skills (TAKS), TAKS (Accommodated), TAKS–Modified (TAKS–M), and Linguistically Accommodated Testing (LAT)



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## Overview

In 1999 the 76th Texas Legislature enacted SB 103, mandating implementation of a new statewide testing program. The new testing requirements, subsequently named the TAKS, were implemented in spring 2003. Since the initial implementation of TAKS in 2003, TAKS (Accommodated), TAKS–M, and LAT have been implemented as part of the TAKS assessment program. In 2009 the 81st Texas Legislature passed HB 3, which called for a unified comprehensive assessment program—STAAR to replace the existing TAKS assessment program for all grades and courses beginning in spring 2012 for students in grade 9 and below. Consequently, during the 2011–2012 school year, TAKS, TAKS (Accommodated), TAKS–M, and LAT administrations were available only to students in grades 10 and 11. The required assessments for the 2011–2012 school year by grade for TAKS, TAKS (Accommodated), TAKS–M, and LAT are illustrated in Table 8.1.

**Table 8.1.** 2011–2012 TAKS Assessments

<b>2011–2012 TAKS Assessments</b>	
<b>Grade</b>	<b>Assessments</b>
10	<b>TAKS, TAKS (Accommodated), TAKS–M, and LAT</b> <ul style="list-style-type: none"> <li>• English Language Arts</li> <li>• Mathematics</li> <li>• Science</li> <li>• Social Studies</li> </ul>
11/Exit Level	<b>TAKS, TAKS (Accommodated), and TAKS–M</b> <ul style="list-style-type: none"> <li>• English Language Arts</li> <li>• Mathematics</li> <li>• Science</li> <li>• Social Studies</li> </ul>

A description of the TAKS, TAKS (Accommodated), and TAKS–M assessments and the LAT process is provided below.

### **TAKS**

TAKS is an assessment designed to measure the extent to which a student has learned and is able to apply the knowledge and skills defined in the state-mandated curriculum, the TEKS. Every item on every TAKS assessment is directly aligned to the TEKS currently in effect for the content area and grade being tested. In the 2011–2012 school year, TAKS was administered for grades 10 and 11 (exit level) ELA, mathematics, science, and social studies. Retest opportunities were also available to exit level students.

### **TAKS (Accommodated)**

TAKS (Accommodated) is an assessment designed for students receiving special education services who meet the eligibility requirements for specific accommodations. This is a general assessment based on the same grade-level academic achievement standards as TAKS. The TAKS (Accommodated) form includes format changes (larger font, fewer items per page) and contains no embedded field-test items. TAKS (Accommodated) assessments were available for grade 10 and exit level ELA, mathematics, science, and social studies, the same grades and content areas as TAKS in 2012. Retest opportunities were available to students.

### **TAKS–Modified (TAKS–M)**

TAKS–M is an alternate assessment based on modified academic achievement standards designed for students receiving special education services who meet participation requirements. TAKS–M has been designed to meet federal requirements mandated under the NCLB. According to federal regulations, all students, including those receiving special education services, are assessed on



grade-level curriculum. TAKS–M covers the same grade-level content as TAKS, but TAKS–M assessments have been changed in format (larger font, fewer items per page, etc.) and test design (shorter test blueprint, fewer answer choices, simpler vocabulary and sentence structure, etc). TAKS–M also contains no embedded field-test items.

TAKS–M was administered for grades 10 and 11 ELA, mathematics, science, and social studies.

### **Linguistically Accommodated Testing (LAT)**

LAT is an assessment administration process developed for TAKS for use with eligible recently arrived English language learners (ELLs) who have been granted a LEP exemption under state law but are required to be assessed in certain grades and content areas under federal law. The LAT process enables eligible recently arrived ELLs to be assessed with linguistic accommodations that help them better understand the language used on the assessments, and therefore provide a more true representation of their learning.

LAT administrations of TAKS were available for grade 10 ELA, mathematics, and science in 2012. LAT administrations of TAKS were available for all LEP-exempt ELLs including those receiving special education services for TAKS, TAKS (Accommodated), and TAKS–M.

State regulations that went into effect in the 2009–2010 school year extended LAT testing provisions to a small number of students determined to be unschooled ELL asylees and refugees who would otherwise not qualify for the LEP exemption or exit level LEP postponement.

The *Language Proficiency Assessment Committee Decision-Making Process for the Texas Assessment Program Manual* outlines LAT testing provisions. This manual is available on the [Information on State Assessments for English Language Learners](#) page of the Texas Education Agency’s (TEA) Student Assessment Division website.

## **Participation Requirements**

### **TAKS–M**

TAKS–M has specific participation requirements that must be carefully considered when recommending this assessment for students receiving special education services. All students have the right to be instructed in grade-level TEKS curriculum so that they can reach their academic potential. The participation requirements for TAKS–M describe the type of grade-level instruction of the TEKS that a student should be receiving to participate in TAKS–M.

The TAKS–M participation requirements were developed as a result of recommendations from the TAKS–M steering committee and educator advisory committees to assist students’ ARD committees in determining which students should be assessed with TAKS–M. The members of the ARD committee must weigh the



benefits of rigorous and challenging expectations with the possibilities of success, given each student’s individual strengths, needs, instruction, and accommodations. Keeping these high standards in mind, the ARD committee must choose the assessment that best matches the educational needs of each individual student. ARD committees should promote high expectations in determining the annual measurable goals documented in each student’s IEP. It is important to emphasize that the academic instructional decisions made by the ARD committee and documented in the IEP must always guide assessment decisions.

Students receiving special education services who have a disability that significantly affects academic progress in the grade-level curriculum and precludes the achievement of grade-level proficiency within a school year may be assessed with TAKS–M.

An ARD committee might decide that a student’s knowledge and skills in one or more subject areas can best be assessed with TAKS–M if the student meets all of the following participation criteria.

#### The student

- needs extensive modifications and accommodations to classroom instruction, assignments, and assessments to access and demonstrate progress in the grade-level TEKS;
- demonstrates academic progress in such a way that even if significant growth occurs during the school year, the ARD committee is reasonably certain that the student will not achieve grade-level proficiency as demonstrated by multiple valid measures of evidence;
- requires an alternate form of TAKS that is more closely aligned with instructional modifications in order to demonstrate knowledge of the grade-level TEKS; and
- meets some but not all of the following criteria:
  - requires supports to access the general curriculum that may include assistance involving communication, response style, physical access, or daily living skills;
  - requires direct, intensive, individualized instruction in a variety of settings to accomplish the acquisition, maintenance, and generalization of skills;
  - accesses and participates in the grade-level TEKS through activities that focus on prerequisite skills;
  - demonstrates knowledge and skills routinely in class by methods other than paper-and-pencil tasks; or
  - demonstrates performance objectives that may include real-life applications of the grade-level TEKS, as appropriate to the student’s abilities and needs.



Any student who meets these participation requirements may take TAKS–M, but only two percent of the tested population can count as proficient for AYP performance calculations.

## Testing Requirements for Graduation

To be eligible to receive a diploma from a Texas public high school, students in general education are required to pass a total of four content area TAKS assessments: ELA, mathematics, science, and social studies.

The law further specifies that certain content must be assessed on the exit level assessments.

- The ELA assessment must include English III and writing.
- The mathematics assessment must include Algebra I and geometry.
- The science assessment must include biology and integrated physics and chemistry.
- The social studies assessment must include early American and U.S. history.

For students receiving special education services taking exit level TAKS, TAKS (Accommodated), or TAKS–M, passing the assessment is not a requirement for graduation. A student’s ARD committee determines how a student will graduate. For exit level TAKS or TAKS (Accommodated), the ARD committee will determine whether the student will participate in retest opportunities. However, grade 11 TAKS–M assessments are not considered exit level assessments, and there are no retest opportunities for TAKS–M.

## Test Development

Maintaining a student assessment system of the highest quality involves completing a set of tasks that must be executed during the test-development process. The procedures described in [chapter 2, “Building a High-Quality Assessment System,”](#) outline the test-development process for the Texas assessment program, which includes the TAKS, TAKS (Accommodated), TAKS–M, and LAT assessments. TEA relies heavily on input from educators and assessment specialists to ensure an equitable and accurate measure of learning for Texas public school students. Detailed information regarding each step of the test development process is in [chapter 2, “Building a High-Quality Assessment System.”](#)

## Item Development

Because the items for the TAKS and TAKS–M assessments are developed on a three-year cycle, no item development occurred during the 2011–2012 school year.



## **Additional Considerations for TAKS–M**

The test development process for TAKS–M follows as closely as possible the procedures used for development of other statewide assessments in Texas, coupled with additional requirements specific to TAKS–M. The blueprints for TAKS–M are aligned to the grade-level TEKS curriculum in the same manner as the TAKS assessments and include the same grade-level content standards as the TAKS blueprints but with fewer items.

Issues of validity, reliability, fairness, accessibility, and consistency in meaning are carefully considered as a part of the item modification and review processes. As TAKS–M items are developed and reviewed, attention is also given to the standards of fairness and the principles of alignment and universal design. Within the principles of universal design, each item has precisely defined constructs, has maximum legibility, has maximum readability and comprehensibility, is adaptable to accommodations, is accessible and non-biased, and considers special populations.

Using results from a literature review of modifications that are appropriate for students with disabilities who are eligible to be assessed with TAKS–M, TEA modified existing TAKS items and developed modification guidelines for reading/ELA, mathematics, science, social studies, and writing to ensure that the modifications did not affect the construct of the items, and the item modifications would be consistent across development years.

## **Training**

For each test administration in the 2011–2012 school year, ESC personnel and district coordinators were provided a district testing coordinator packet contained the information and materials necessary for overseeing test administrations, including coordinator and test administrator manuals that provided an overview of the statewide testing program. Packets and manuals were provided for the TAKS program, which include instructions for TAKS (Accommodated), TAKS–M, and LAT.



## 2012 Directions for District Coordinators, Campus Coordinators, and Test Administrators

The *2012 Directions for District Coordinators, Campus Coordinators, and Test Administrators – TAKS, TAKS (Accommodated), TAKS–M, and LAT* explains the responsibilities of district and campus testing coordinators for the TAKS program, including TAKS (Accommodated), TAKS–M, and LAT assessments. This manual outlines preparation and administration procedures for each program for the 2012 calendar year.

## Test Administrations

### Overview

During the 2011–2012 school year, more than 2,395,000 TAKS and TAKS (Accommodated) assessments were administered, and more than 80,000 TAKS–M assessments were administered. Districts administered the TAKS, TAKS (Accommodated), and TAKS–M assessments to eligible examinees, as indicated in Table 8.2.

**Table 8.2.** TAKS and TAKS–M Assessments Administered in 2011–2012

TAKS and TAKS–M Assessments Administered in 2011–2012	
Assessment	Students Tested
<b>TAKS/TAKS (Accommodated)</b>	
Grade 10 English Language Arts	316,020
Grade 10 Mathematics	311,257
Grade 10 Science	311,058
Grade 10 Social Studies	310,707
Exit level English Language Arts	288,219
Exit level Mathematics	285,073
Exit level Science	286,385
Exit level Social Studies	287,039
<b>TAKS–M</b>	
Grade 10 English Language Arts	9,849
Grade 10 Mathematics	12,005
Grade 10 Science	10,036
Grade 10 Social Studies	8,701
Grade 11 English Language Arts	9,415
Grade 11 Mathematics	11,637
Grade 11 Science	10,096
Grade 11 Social Studies	8,489



## Online Testing

In addition to paper administrations, in 2011–2012 the TAKS exit level retests were offered online for ELA, mathematics, social studies, and science. Participation in the online administrations was voluntary, and districts could register at the district, campus, student, and content-area levels. Table 8.3 gives information about the scope of the online TAKS administrations.

**Table 8.3.** 2011–2012 TAKS Online Test Administrations

<b>2011–2012 TAKS Online Test Administrations</b>		
<b>Content Area</b>	<b>Number of Districts</b>	<b>Number of Online Tests Delivered</b>
<b>October 2011 TAKS Exit Level</b>		
English Language Arts	70	2,657
Mathematics	71	4,163
Science	74	3,840
Social Studies	70	2,285
<b>March 2012 TAKS Exit Level</b>		
English Language Arts	59	1,085
Mathematics	58	2,053
Science	60	1,856
Social Studies	52	789
<b>April 2012 TAKS Exit Level</b>		
English Language Arts	44	539
Mathematics	51	1,193
Science	49	1,051
Social Studies	30	258
<b>July 2012 TAKS Exit Level</b>		
English Language Arts	66	2,053
Mathematics	70	3,061
Science	69	2,333
Social Studies	63	1,094

### THE ONLINE TEST DELIVERY SYSTEM

The TAKS exit level online tests are delivered using the Assessment Management System, delivered through Pearson Access. This system provides secure online tools for authoring tests, delivering tests, and reporting students' results. The Assessment Management System meets the stringent security requirements of the Texas assessment program and protects the integrity of test items and student data.



The Assessment Management System enables test administrators to control

- which assessment is administered,
- when it is administered,
- the number of testing sessions, and
- which students are assigned to each session.

Using the *Test Session Management* screen, a test administrator can monitor each student's current status while the test session is in progress.

Further information about the Assessment Management System, such as an overview of the system, information on delivery and reporting, and a list of frequently asked questions, is available on [Pearson's Texas State Assessments website](#).

## Make-up Testing

### Spring 2012 Make-Up Testing

For the 2011–2012 school year, make-up tests were allowed for TAKS, TAKS (Accommodated), and TAKS–M content-area assessments and grade levels that were included in the calculation of AYP. Features of the 2012 make-up test policy include the following:

- The assessments involved were those included in the AYP calculation: grade 10 ELA and mathematics.
- A separate test form for the TAKS and TAKS (Accommodated) grade 10 ELA make-up test was administered on an assigned day (March 8, 2012).
- The regular testing schedule was maintained, with districts allowed to give make-up tests during the remainder of the week, including Saturday, to those students who were absent on the regularly scheduled test administration day.
- No make-up tests were allowed for the science and social studies assessments or for any subject-area assessment at grade 11 or exit level.

## Out-of-District Testing

For the summer TAKS assessments (all subjects at exit level), students who are unable to retest at their home district's designated test site may test out of district. Enrolled out-of-district students are required to complete the out-of-district registration form, and exit level students must also present picture identification. For example, a student from Houston who spends the summer in Dallas and who wants to test in Dallas is required to register to test out-of-district. Out-of-district testing also applies to students who are part of the Texas Tech or University of Texas high school programs.



## Out-of-School Testing

Individuals who have completed all graduation requirements but have not passed all four TAKS exit level assessments (or, if applicable, the TAKS assessments required of students for whom the TAAS assessment) was the graduation requirement) and who are no longer enrolled in a district may retake the appropriate assessment(s) each time they are administered. Districts are required to publicize the designated dates, the precise location(s) and times of testing, and the actions that out-of-school individuals interested in retesting must take to ensure access to the testing areas and to testing materials.

A district may select out-of-school testing site(s) within the district or collaborate with an ESC or neighboring district to test out-of-school examinees at an alternate testing site. Districts are provided with registration packets so individuals who are no longer enrolled in school may register for the exit level assessment. Out-of-school examinees may register online or by mail. Registered individuals receive an admission letter informing them of the date, time, and location of testing. Districts may accept walk-in examinees, as long as the examinee can provide proper identification. Test results are mailed to the individual and to the district from which the examinee is eligible to receive a diploma.

## Educational Materials Required for Testing

### DICTIONARIES AND THESAURUSES

English-language dictionaries and thesauruses must be provided to students for the reading and written composition portions of the grade 10 and 11/exit level ELA assessments.

There must be at least one dictionary for every five students; it is also recommended that there be one thesaurus for every five students, if possible. Students may also use a combination dictionary/thesaurus. An ESL dictionary that uses simple English and pictures to define words, may be provided for ELLs.

A dictionary or thesaurus may not be used on the revising and editing section of the TAKS, TAKS (Accommodated), and TAKS–M ELA assessments. The ELA assessments contain two sections; the first section contains the written composition and reading portion, and the second section contains the revising and editing portion. After a student completes the first section, the test administrator collects the student's dictionary and thesaurus. The student then may begin the revising and editing portion of the assessment.

### CALCULATORS

For the mathematics assessments at grades 10 and 11/exit level, districts must provide each student with a graphing calculator for the entire administration. Students may use their own calculators instead of those provided by the



district. Any kind of graphing calculator may be used except one with a typewriter-style keypad (known as QWERTY) or one that includes a computer algebra system (CAS). All types of memory, including standard memory, RAM, ROM, and flash ROM, must be cleared to factory default both before and after testing. In addition any programs or applications must be removed or disabled prior to the test administration.

Calculators may also be used on the science assessments at grades 10 and 11/exit level. Students must have access to four-function, scientific, or graphing calculators. Again, students may use their own calculators instead of those provided by the district. There must be at least one calculator for every five students. If students share a calculator, the memory must be cleared after each student uses it. The guidelines for kinds of graphing calculators, clearing of memory, and removal of programs and applications for the science assessments are the same as those listed for mathematics.

## Testing Accommodations

Accommodations are provided on an individual basis and take into consideration the needs of each student. It is neither appropriate nor effective to provide “one size fits all” accommodations to students. For example, one student with a visual impairment might use large-print instructional materials, whereas another student with a visual impairment might benefit more from a magnification device. In most cases, accommodations are appropriate for a student and should not be provided to an entire group of students, such as those in the same class or disability category.

### Accommodations for Students with Disabilities

Accommodations are categorized in four ways: presentation (P), response (R), setting (S), and timing and scheduling (T). Linguistic accommodations specific to the second language learning needs of ELLs are addressed in the next section.

- Presentation (P) accommodations allow students to access information in alternate formats other than regular print. These alternate modes of access may include auditory, multi-sensory, tactile, and visual modes.
- Response (R) accommodations allow students to complete activities, assignments, and assessments using methods other than paper-and-pencil or machine-scorable responses. Response accommodations may also include allowing students to solve or organize problems using some type of supplemental aid.
- Setting (S) accommodations change the location in which an assessment or assignment is given or the conditions of the assessment setting.
- Timing and scheduling (T) accommodations increase the standard length of time to complete an assignment or assessment or possibly change the way the time is organized.



### **ORAL ADMINISTRATION**

Oral administration is an accommodation that allows test questions and answer choices for mathematics, science, and/or social studies assessments to be read aloud or signed to eligible students taking TAKS, TAKS (Accommodated), or TAKS–M. Districts are instructed to indicate on the answer document whether a student received an oral administration of the assessment. Additional information regarding oral administration, including eligibility requirements, is in the [2010–2011 Accommodations Manual](#), which was used for the 2011–2012 administration because no changes in requirements or instructions occurred between the school years.

### **STUDENTS WITH VISUAL IMPAIRMENTS**

Test administrators receive specific instructions for testing visually-impaired students with large-print or braille test booklets. Districts are instructed to indicate on the answer document whether a student used a large-print or braille version of an assessment. Large-print test booklets are available for all TAKS, TAKS (Accommodated), TAKS–M and LAT operational administrations. Braille test booklets are available for TAKS, TAKS (Accommodated), and TAKS–M operational administrations.

## **Linguistically Accommodated Testing**

LAT administration procedures for TAKS were developed to help recently arrived ELLs who were considered exempt from testing under state law to meet federal assessment requirements and AYP accountability measures. LAT administrations of TAKS were implemented in spring 2005 for mathematics, spring 2007 for reading/English language arts, and spring 2008 for science.

The federal ELL assessment requirements differ slightly for mathematics and science versus reading/ELA. All LEP-exempt recent immigrants are required to participate in LAT administrations of TAKS mathematics and science in AYP grades. For reading/ELA, however, first-year LEP-exempt immigrants take just the reading component of the TELPAS assessment. All other LEP-exempt recent immigrants must take a LAT administration of the TAKS reading/ELA assessments in AYP grades.

The linguistic accommodations used in the LAT process are categorized according to whether they provide indirect or direct linguistic support. Indirect support accommodations are built into the test administration procedures for all LAT students. The indirect support accommodations for LAT administrations of mathematics, science, and reading/ELA assessments include clarification of test directions and breaks at the request of the student. In addition, students participating in LAT reading/ELA administrations are assessed over two days.

Allowable accommodations providing direct linguistic support for LAT mathematics and science assessments include linguistic simplification, reading assistance, bilingual dictionaries, bilingual glossaries, and oral translation.



Secure LAT linguistic simplification guides are provided to test administrators for use with the linguistic simplification accommodation for TAKS, including TAKS (Accommodated). These guides provide suggested linguistic simplifications and delineate subject-area terms that cannot be simplified. The accommodations made during LAT administrations must not include explanations, definitions, pictures, gestures, or examples related to mathematical or scientific terminology, concepts, or skills assessed because such assistance would invalidate the test results.

Allowable accommodations providing direct linguistic support for LAT reading/ELA include bilingual dictionaries, English dictionaries, reading aloud a word or phrase, reading aloud the entire test item, oral translation of a word or phrase, and clarification of a word or phrase. During LAT reading/ELA administrations students must not be provided any direct or indirect assistance or reinforcement that identifies or aids in the identification of the correct response to a test item.

Decisions concerning accommodations that provide direct linguistic support must be made and documented by the language proficiency assessment committee (LPAC). In the case of an ELL receiving special education services, decisions are made by the student's ARD committee in conjunction with the LPAC. The decisions must be based on the individual needs of the student and whether the accommodation is used routinely in instruction and testing.

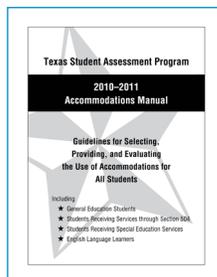
In addition to linguistic accommodations, students taking LAT administrations might be eligible to receive accommodations related to a disability or other special need.

More information about LAT accommodations is available in the [2012 Directions for District Coordinators, Campus Coordinators, and Test Administrators—TAKS, TAKS \(Accommodated\), TAKS-M, and LAT](#).

More information about exemption eligibility criteria is available in the [LPAC Decision-Making Process for the Texas Assessment Program](#) manual.



## Accommodations Manual



More information about testing accommodations for the Texas assessment program administered in the 2011–2012 school year is available in the *2010–2011 Accommodations Manual*.

## Scores and Reports

There are a variety of reports that show a student's performance on the assessments on TAKS and TAKS–M. See below for information about the types of scores given on reports and the types of reports available.

### Description of Scores

Scores for the TAKS and TAKS–M assessments consist of the number of items answered correctly (raw scores), scale scores, and the resulting performance level associated with the student's score.

#### RAW SCORE

The number of items that a student answers correctly on a STAAR subject-area assessment is the student's raw score. The raw score can be interpreted only in terms of the specific set of test questions. However, because the difficulty of items might vary among test forms over time, raw scores alone cannot be used to compare performance across assessments or administrations. To make these comparisons of student performance, raw scores must be converted to scale scores.

#### SCALE SCORE

A scale score is a conversion of the raw score onto a "scale" that is common to all test forms for that assessment. Scale scores allow direct comparisons of student performance between specific sets of test questions from different test administrations.

The scale score can be used to determine whether a student attained Met Standard or Commended Performance. Performance-level cut scores for TAKS and TAKS–M are discussed in the [Performance Standards](#) section of this chapter.

Scale scores can also be used to compare the performance of an individual student with the performance of a demographic group, a program group, or an entire campus or district at a particular grade level. For example, the scores for

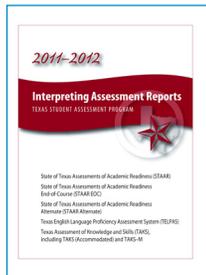
a Hispanic student in a gifted and talented program could be compared with the average scores of Hispanic students, gifted and talented students, all the students on a campus, or any combination of these aggregations at that grade.

### ADDITIONAL PERFORMANCE INFORMATION

Other scores can provide information about a student’s relative strengths or weaknesses in core academic areas. For example, objective-level data can identify areas in which a student might be having difficulty. This identification can help campuses plan the most effective instructional intervention. Finally, individual student test scores might be used in conjunction with other performance indicators to assist in making placement decisions.

### Report Formats

Two types of reports are provided for the various testing programs: standard and optional. Standard reports are provided automatically to districts. Information contained in standard reports satisfies mandatory reporting requirements. To receive optional reports that present student performance data in additional formats and, in some instances, in greater detail, a district must have completed the *Administration Details* screen in the Assessment Management System. Generally districts are required to pay a nominal fee for each optional report requested.



For more information refer to the TEA publication [Interpreting Assessment Reports](#).

### Use of Test Results

Test results can be used to evaluate the performance of a group over time. Average scale scores and the percentage of students meeting standards can be analyzed across administrations within the same grade and content area to give insight into whether student performance is improving across years. For example, the average scale score for students who receive special education services taking the TAKS grade 10 science assessment can be compared for spring 2011 and spring 2012.

Test scores can be used to compare the performance of different demographic or program groups. Within the same testing program (e.g., TAKS or TAKS–M), test scores can be analyzed within the same content area of any single administration to determine which demographic or program group had the highest average scale score, the lowest percentage meeting the standard, the highest percentage achieving commended performance, etc. Other scores can be used to help evaluate the



academic performances of demographic or program groups in core academic areas. Refer [chapter 4, “State of Texas Assessments of Academic Readiness \(STAAR\),”](#) for further information on the use of test results.

## Parent Brochures

TEA’s Student Assessment Division produces a series of brochures titled “Understanding the Confidential Student Report—A Guide for Parents” to help parents understand their child’s TAKS or TAKS–M test results. Each brochure provides a brief summary of the TAKS or TAKS–M program, explains a sample CSR so parents can understand their child’s test report, and gives a brief summary of each test objective for each content area tested. The brochures, developed in both English and Spanish, are provided to districts each spring for distribution with individual student TAKS performance results.

## Performance Standards

Performance standards relate levels of test performance directly to what students are expected to learn as expressed in the statewide curriculum. This is done by establishing cut scores that distinguish performance levels or categories, such as Met Standard and Commended Performance. Standard setting is the process of establishing cut scores on an assessment that define the performance levels.

## Performance Level Descriptors

For TAKS, including TAKS (Accommodated), TAKS–M, and LAT, the performance levels are:

- Commended Performance
- Met Standard
- Did Not Meet Standard

Descriptions of these performance levels, known as the general PLDs, are as follows:

### COMMENDED PERFORMANCE

This category represents high academic achievement. Students in this category performed at a level that was considerably above the state passing standard for that test. Students demonstrated a thorough understanding of the knowledge and skills measured at this grade.



### **MET STANDARD**

This category represents satisfactory academic achievement. Students in this category performed at a level that was at or somewhat above the state passing standard for that test. Students demonstrated a sufficient understanding of the knowledge and skills measured at this grade.

### **DID NOT MEET STANDARD**

This category represents unsatisfactory academic achievement. Students in this category performed at a level that was below the state passing standard for that test. Students demonstrated an insufficient understanding of the knowledge and skills measured at this grade.

## **Standard Setting for TAKS**

The performance standards for TAKS were originally set in 2002 (2005 for grade 8 science) by the SBOE. When a set of performance standards has been adopted for an assessment, the standards apply as long as they are judged to be appropriate for defining student performance levels on the assessment. It is recommended that performance standards be reviewed when a change occurs in the assessment program.

In October 2008 TEA convened several panels of educators to evaluate the appropriateness of the TAKS performance standards originally set in 2002. This review of the standards occurred because a vertical scale for TAKS was developed in 2008 and implemented in 2009 (as required by state legislation) after the standards review. The panels recommended changes to the performance standards for certain grades in reading and mathematics so the standards reflected an appropriate increase in expectations for student performance from grade to grade without lowering student performance expectations. The panels' recommended changes to the performance standards went into effect in spring 2010. The performance standards for TAKS also apply to TAKS (Accommodated) and LAT versions of TAKS.

The grade 11/exit level assessments test a student's level of academic preparation for graduation from high school as well as his or her readiness to enroll in an institution of higher education. To address these requirements, the THECB established a Higher Education Readiness Standard for grade 11/exit level TAKS ELA and mathematics in spring 2004.

Details about the TAKS and TAKS–M standard-setting process is available on the [TAKS Standard Setting](#) page of TEA's Student Assessment Division website.

## **Standard Setting for TAKS–M**

The standards used to define student performance for TAKS–M assessments in 2011–2012 were set in August 2008 and August 2009. The standards set in August 2008 were for the AYP grades and subjects, and the standards set in August 2009 were for the non-AYP grades and subjects. In August 2008, panels of educators were



convened to recommend cut scores that were then reviewed by TEA and later approved by the commissioner of education. The same process occurred for the non-AYP grades and subjects in August 2009. A description of the standard-setting process and the approved cut scores for the AYP grades and subjects is available in chapter 9 of the [2007–2008 TAKS–M Technical Report](#). A description of the standard-setting process and the approved cut scores for the non-AYP grades and subjects is available in chapter 5 of the [2008–2009 Technical Digest](#).

## Scaling

As with many of the other programs in the Texas assessment program, the TAKS, TAKS (Accommodated), and TAKS–M assessments use the RPCM to place test items on the same scale across administrations. Once performance standards have been set for an assessment, its initial scale is then transformed to a more user-friendly metric to facilitate interpretation and reporting of the test scores. Details of the RPCM scaling method used in Texas are provided in [chapter 3, “Standard Technical Processes.”](#)

## Reporting Scales

TAKS and TAKS–M grade 10 and 11 assessments report scale scores on a horizontal scale score system. Horizontal scale scores allow direct comparisons of student performance between specific sets of test questions from different test administrations.

The Met Standard and Commended Performance standards were used in developing the reporting scale score system for TAKS and TAKS–M. The SBOE established the performance standards for most TAKS assessments at each grade level and test content area in November 2002. For TAKS–M, horizontal scale scores were established after the commissioner of education approved performance standards in August 2008 and August 2009.

Using the procedures described in [chapter 3, “Standard Technical Processes,”](#) a unique scale transformation was then developed in each grade and content area so the resulting set of scale scores would have the panel-recommended Met Standard performance level cut set at a scale score of 2100 and the panel-recommended Commended Performance level cut set at a scale score of 2400. Once established, these same transformations are applied each year to the Rasch proficiency level estimates ( $\theta$ ) for that year’s set of test questions. Specifically, this transformation is accomplished by first multiplying any given student proficiency ( $\theta$ ) by a slope ( $A$ ) and subsequently adding an intercept ( $B$ ). This operation is given by the equation below:

$$SS_{\theta} = A \times \theta + B \quad (1)$$



$A$  and  $B$  in Equation (1) are referred to as the horizontal scaling constants. Values for the TAKS, including TAKS (Accommodated), and TAKS–M horizontal scaling constants are provided in Tables 8.4 and 8.5 for the assessments that were administered in 2011–2012. The linear transformation in Equation (1) was applied to the resulting Rasch student proficiency estimates at each possible total score point of the assessment, yielding the final RSSS conversion tables for TAKS and TAKS–M.

**Table 8.4.** Horizontal Scaling Constants for TAKS

<b>Horizontal Scaling Constants for TAKS</b>		
<b>TAKS Assessment</b>	<b>A</b>	<b>B</b>
Grade 10 ELA	97.06539	1983.74478
Grade 10 Mathematics	141.04372	2038.64598
Grade 10 Science	160.42781	1996.84492
Grade 10 Social Studies	145.20813	2046.85382
Grade 11/exit level ELA	113.48162	2017.62369
Grade 11/exit level Mathematics	140.58107	2064.71415
Grade 11/exit level Science	129.47777	2070.86750
Grade 11/exit level Social Studies	126.47555	2093.29680

**Table 8.5.** Horizontal Scaling Constants for TAKS–M

<b>Horizontal Scaling Constants for TAKS–M</b>		
<b>TAKS–M Assessment</b>	<b>A</b>	<b>B</b>
Grade 10 ELA	134.72852	2077.43297
Grade 10 Mathematics	179.35075	2141.14306
Grade 10 Science	234.15548	2032.68030
Grade 10 Social Studies	150.70833	2048.59339
Grade 11 ELA	117.61938	2004.04611
Grade 11 Mathematics	200.22692	2117.07936
Grade 11 Science	188.18216	2021.17049
Grade 11 Social Studies	153.48409	2069.99386



## Equating

### Overview

In the 2011–2012 school year, TEA conducted equating activities including pre-equating and post-equating for the TAKS and TAKS–M assessments. In addition, results from field-test equating and comparability analysis that were conducted in previous years applied to some of the TAKS and TAKS–M assessments administered in 2011–2012. Refer to [chapter 3, “Standard Technical Processes,”](#) for detailed information about equating.

### Pre-Equating

In general, pre-equating is conducted for TAKS–M assessments, exit level retests, and LAT forms. Because the retest population and LAT population are not representative of the general population, a pre-equated scoring table is used for newly developed forms for retest administrations and LAT administrations. Additionally, the pre-equating process is used for TAKS–M to facilitate reporting on the same schedule as TAKS.

### Post-Equating

Post-equating for the TAKS operational assessments uses the conventional common-item non-equivalent groups equating design as described in the technical details and procedures in [chapter 3, “Standard Technical Processes.”](#) In general, post-equating is conducted for the TAKS primary test forms.

The samples used for post-equating TAKS multiple-choice only assessments are typically in excess of 100,000 students per grade and subject and are representative of the TAKS test-taking population. For assessments including short answer responses and/or written compositions in addition to multiple-choice items (i.e., the grades 10 and 11 ELA assessments), essentially the entire student population is used in post-equating.

### Field-Test Equating

In the past, field-test equating for TAKS included both embedded designs and stand-alone designs. TAKS–M conducted stand-alone field test equating.

In the 2011–2012 school year, field-test equating was not conducted for any of the TAKS or TAKS–M assessments due to the transition from the TAKS program to the STAAR program.

### Comparability Analyses

When assessments are administered both online and on paper (as is the case for the TAKS exit level retests), the *Standards for Educational and Psychological Testing* (AERA, APA, NCME, 1999) require comparability between test scores



resulting from online and paper modes to be evaluated. For each operational TAKS administration, the online and paper versions of the assessments consist of identical items.

Comparability studies were conducted with TAKS exit level assessments from 2005 through 2010 to determine if the paper and online results were comparable and did not advantage students who tested in either mode. Based on recommendations from the TTAC, policy decisions about score adjustments to online tests have been based on the information from this set of comparability studies. The policy decisions used since April 2010 are listed below.

- For ELA it was determined that the cut scores on the RSSS conversion table for students taking the retest online should be changed such that the online Met Standard cut point is one raw score point easier and the Commended Performance cut point is one raw score point more difficult than those on the paper RSSS conversion table.
- For mathematics it was determined that the cut scores should be changed such that both the Met Standard and Commended Performance cuts for online are one raw score point easier than the corresponding cuts for paper.
- For science and social studies it was determined that the paper RSSS conversion tables should be used for students testing online with no changes to the raw score cuts.

## Reliability

During the 2011–2012 school year, reliability for TAKS and TAKS–M test scores was estimated using statistical measures such as internal consistency, classical standard error of measurement, conditional standard error of measurement, and classification accuracy. Refer to [chapter 3, “Standard Technical Processes,”](#) for detailed information about reliability.

### Internal Consistency

For the primary TAKS and TAKS–M assessments administered in 2011–2012, the internal consistency estimates ranged from 0.76 to 0.92. Internal consistency estimates across grades and content areas were found to be of a similarly high level, with no noticeable increases or decreases across content areas or grades. For the different student groups, estimates were found to be similar; for TAKS grade 10 mathematics, for example, the reliability for the total group was 0.92, for female only was 0.91, for male only was 0.92, for African American only was 0.90, for Hispanic only was 0.91, and for white only was 0.92.

Because internal consistency estimates typically decrease as the number of test items decrease, internal consistency estimates for scores at the objective level are generally lower than the overall test score. This implies, as expected, that interpretations of a student’s objective-level scores are not as reliable as those from the full assessment. For example, the TAKS–M grade 11 science objective “Interdependence of Organisms



and the Environment” has eight items. The estimated reliability for the scores in this reporting category is 0.63. Therefore, interpretations of the objective-level scores should be made taking the lower reliability into account.

The internal consistency estimates at the overall level as well as by objective and by student groups for all primary 2011–2012 TAKS and TAKS–M assessments are provided in [Appendices F](#) and [G](#), respectively.

### **Classical Standard Error of Measurement**

For the primary TAKS and TAKS–M assessments in 2011–2012, SEM values range were approximately between 2 to 3 raw score points across grades/content areas. The SEM values for all primary 2011–2012 TAKS and TAKS–M assessments are provided in [Appendices F](#) and [G](#), respectively.

### **Conditional Standard Error of Measurement**

[Appendices F](#) and [G](#) provide CSEM values for all primary 2011–2012 TAKS and TAKS–M assessments.

### **Classification Accuracy**

The classification accuracy results for TAKS and TAKS–M indicates there were similar classification accuracy rates across grades within a content area. [Appendices F](#) and [G](#) provide classification accuracy rates for all primary 2011–2012 TAKS and TAKS–M administrations respectively.

## **Validity**

The results of TAKS and TAKS–M assessments are used to guide educational planning related to the knowledge and skills that students are acquiring in each academic content area. Validity evidence for an assessment can come from a variety of sources including test content, response processes, internal structure, relationships with other variables, and the consequences of testing.

Texas collects validity evidence annually to support the various uses of TAKS and TAKS–M scores. Texas follows national standards of best practice to continue to build its body of validity evidence. The sections that follow describe how these types of validity evidence are collected for the TAKS and TAKS–M assessments in 2011–2012. Refer to [chapter 3, “Standard Technical Processes,”](#) for more detailed information about validity.

### **Evidence Based on Test Content**

#### **TAKS**

Validity evidence based on test content refers to evidence of the relationship between tested content and the construct the assessment is intended to measure. The TAKS test scores are designed for making inferences about



students' knowledge and understanding of the TEKS. Validity evidence supporting TAKS test content comes from two sources, the established test-development process followed in developing the TAKS assessments and documentation of expert judgments about the relationship between parts of the TAKS assessment and the test construct. The following test development activities contributed content validity evidence for the TAKS assessments administered during the 2011–2012 school year.

- Standards-referenced assessments, such as TAKS, are based on an extensive definition of the content they assess. Therefore, test validity is content based and tied directly to the statewide curriculum. To achieve the highest level of content validity, the process of aligning TAKS to the curriculum was carefully approached and included review by numerous committees of Texas educators.
- When TAKS was designed as the standards-referenced general assessment to measure the TEKS, advisory committees, consisting of educators from school districts across the state, were formed for each content area at each grade level. Teachers, test development specialists, and TEA staff worked together in these committees to identify the TEKS student expectations that were important to assess and to develop test objectives, item development guidelines, and test-item types. In addition, committees met to review and edit TAKS items for content and bias and to review field-test data.
- The item writers as well as reviewers for each stage of development verified the alignment of items with the objectives to ensure that the items measure appropriate content. The sequential stages of item development and item review provide many opportunities for Texas educators to offer suggestions for improving or eliminating items and to offer insights into the interpretation of the statewide curriculum.

Detailed information regarding the test development process can be found in [chapter 2, "Building a High-Quality Assessment System."](#)

### **TAKS–M**

Because TAKS–M is a modified version of TAKS, the test development processes for both assessments play an intricate role in building validity evidence. To achieve the highest level of content validity, the process of aligning both TAKS and TAKS–M to the curriculum was carefully approached and included review by numerous committees of Texas educators.

When TAKS–M was designed as the alternate assessment based on modified achievement standards, special education content specialists developed detailed modification guidelines so that the modifications made to the TAKS items were consistent. After the items were modified, educator committees for each content area at each grade reviewed the original TAKS item and the modified TAKS–M version of the item to make sure that the modified item still measured the same underlying skill as the original item. In this way, the alignment between the TEKS curriculum and the TAKS items carries through to the TAKS–M items.



## Evidence Based on Response Processes

Response processes refer to the cognitive behaviors required to respond to items. Texas collects evidence supporting that the way students respond to items on the TAKS and TAKS–M assessments supports the accurate measurement of the construct. Student response processes on the TAKS and TAKS–M assessments differ due to item type and administration mode.

### ITEM TYPES

Four types of responses are required by students across the TAKS assessments, including multiple-choice questions on all assessments, gridded-response questions on mathematics and science assessments, short answer responses on ELA assessments, and written compositions on ELA and writing assessments. Texas gathers theoretical and empirical evidence supporting that the way students respond to these types of items does not add construct-irrelevant variance. In addition, Texas gathers evidence to show that the response processes do not advantage or disadvantage one or more student groups.

The evidence Texas gathers for TAKS comes from several sources. When item types were initially considered for inclusion in TAKS assessments, the item types were pilot tested. Once item types are determined to be appropriate for TAKS, evidence about student responses is gathered for every item through educator and expert reviews and analyses of individual student responses to these items based on field testing. Educator reviews of the item content involve educators' evaluation that the content assessed by the item is appropriately assessed with the planned item type and judgments that students should be able to accurately demonstrate their knowledge of the construct by responding to each item in its planned format. When items are field-tested, data are gathered about students' responses to items and the statistical information, such as item difficulty, item point-biserial correlations, and differential item functioning, are evaluated taking item type into consideration.

TAKS–M also includes item types that require students to respond in various ways. These item types include: multiple-choice items and written compositions. Theoretical and empirical evidence has been gathered to suggest that the way students respond to these types of items does not add construct-irrelevant variance.

The evidence Texas gathers for TAKS–M also comes from several sources. When item types were initially modified for TAKS–M, the items were reviewed by educator committees to help ensure that the modifications made the items accessible to the student population eligible to take TAKS–M. In addition, educator review of the items is completed to gather evidence that the response processes do not advantage or disadvantage certain student groups (for example: males or females, different ethnic groups, and different disability groups). The process for the review of item content involves (1) an evaluation by educators that the content assessed by the item is appropriately assessed



with the planned item type and (2) a judgment by educators that students should be able to accurately demonstrate their knowledge of the content by responding to each item in its planned format. When items are field-tested, data are gathered about students' responses to items, and statistical information—such as item difficulty and item point-biserial correlations—is evaluated taking item type into consideration.

### SCORING PROCESS

The process used to score items can provide additional validity evidence based on response processes. This type of validity evidence is predicated on accurate scoring.

For multiple-choice items this means that the student responses are accurately scored. As part of the equating process, statistical keychecks are conducted for all TAKS, including TAKS (Accommodated), TAKS–M, and LAT assessments. The statistical keycheck is a procedure in which the statistical properties of all items on every test form are computed. Items whose statistics do not meet pre-determined criteria (refer to the Item Analyses section of [chapter 3, “Standard Technical Processes”](#)) are flagged for further review by content experts to verify that they are correctly keyed and scored.

For constructed response items, such as short answer responses and written compositions, rubrics are used by human readers to score student responses. TEA has implemented a rigorous scoring process for the constructed response items that includes training and qualification procedures for readers, ongoing monitoring during scoring, adjudication, and resolution processes for responses that do not meet the exact agreement scoring requirements, and rescoring of responses about which concerns have been raised regarding the assigned score by districts, campuses, or teachers. Throughout the years TEA has reported on the reliability and validity of the performance task scoring process. In the context of scoring constructed response items, reliability is expressed in terms of reader agreement and correlation between first and second readings on a response. Validity is further evaluated through the use of validity papers, which are student responses from the current administrations that are representative of different levels of writing performance based on the scoring rubrics. Validity papers are identified by scoring supervisors and scoring directors and approved by the TEA English language arts and writing team. Then they are given to readers systematically on a daily basis throughout the scoring project. An important feature of validities is that these papers are not identifiable as such; in fact, they are indistinguishable from unscored student responses. Each reader's daily scores on validity papers are compared with the scores approved by TEA. Validity papers are used throughout the scoring project as a primary quality control measure, the purpose of which is to ensure that readers are scoring accurately and reliably on a daily basis and across time.

Tables 8.6–8.9 summarize reader agreement rates (reliability) by grade for the TAKS and TAKS–M primary administrations and results of the use of validity papers by grade through the spring 2012 operational administration. Reader agreement rate is expressed in terms of absolute agreement (the first reader's score equals the second reader's score). Validity is expressed in terms of exact agreement between the score



assigned by a given reader and the “true” score assigned by Pearson and approved by TEA. Student response scores are based on the score that has been agreed upon independently by at least two of three readers. Only a fourth reader, limited to senior scoring staff, can determine the final score when a response has been given discrepant scores by three independent readers.

**Table 8.6.** Summary of Scorer Agreement (Reliability) for 2012 TAKS

TAKS Assessment	Number of Responses Read	Agreement Rate (%) After 2 Readings	Number of Third Readings	Agreement Rate (%) After 3 Readings
Grade 10 ELA Written Composition	322,825	81%	109,844	99%
Grade 10 ELA Short Answer	968,475	84%	260,256	99%
Exit Level ELA Written Composition	294,826	82%	108,206	99%
Exit Level ELA Short Answer	884,478	87%	227,478	99%

**Table 8.7.** Summary of Validity Results for 2012 TAKS

TAKS Assessment	Agreement Rate (%)
Grade 10 ELA Written Composition	82%
Grade 10 ELA Short Answer	87%
Exit Level ELA Written Composition	77%
Exit Level ELA Short Answer	87%

**Table 8.8.** Summary of Scorer Agreement (Reliability) for 2012 TAKS–M

TAKS–M Assessment	Number of Responses Read	Agreement Rate (%) After 2 Readings	Number of Third Readings	Agreement Rate (%) After 3 Readings
Grade 10 ELA Written Composition	10,163	76%	2,465	99%
Grade 11 ELA Written Composition	9,901	75%	2,455	99%

**Table 8.9.** Summary of Validity Results for 2012 TAKS–M

TAKS–M Assessment	Agreement Rate (%)
Grade 10 ELA Written Composition	83%
Grade 11 ELA Written Composition	81%

#### ADMINISTRATION MODE

Sufficient numbers of students took the TAKS exit level retests online in the 2009–2010 school year, allowing Texas to conduct comparability studies. In these studies, Texas conducted analyses to evaluate comparability of interpretations at the test level and at the item level. In the 2011–2012 school year, no comparability studies were conducted for TAKS exit level retests due to the consistently small number of students participating in the TAKS exit level retest online. Instead, in the 2010–2011 school year, a policy decision was applied to the online tests such that the paper score conversion table are used as the online score conversion table for science and social studies. A different online score conversion table is produced by modifying the paper table for mathematics and ELA. The adjusted scores account for differences in student responses across administration mode. Refer to the [Equating](#) section of this chapter for details about the policy decision for online tests.

#### Evidence Based on Internal Structure

Two measures of internal consistency, the KR20 and the stratified coefficient alpha, were used for TAKS and TAKS–M. These two consistency measures also provide reliability evidence for the assessments. As a result the internal consistency evidence for TAKS and TAKS–M is available in the [Reliability](#) section of this chapter.

#### Evidence Based on Relationships to Other Variables

Another way that Texas provides validity evidence for TAKS and TAKS–M assessments is by analyzing the relationship between performance on TAKS and TAKS–M and performance on some other measure, sometimes called criterion-related validity. By



examining this relationship evidence can be collected supporting that the relationships found are consistent with those expected at the level of the construct underlying the proposed test score interpretations.

From 2005 to 2010 a grade correlation study was conducted annually to compare the pass/fail rates of Texas students on the TAKS assessments with their passing credit/not passing credit rates in their past related courses. These studies provided one source of evidence of the test-criterion relationships. The most recent grade correlation study was conducted during the 2009–2010 school year. The study compared the passing rates of students on their 2009 TAKS grade 10 ELA assessment with their passing rate for the English II course. Only those students who had both TAKS and course data available were considered for comparison. Results indicated that 82% of students who passed the TAKS assessment also pass their related courses. Seven percent of students passed the TAKS assessment but did not pass their related course; 9% of students passed their related course but did not pass the TAKS assessments; and 3% of students failed to pass the TAKS assessment or their related courses. For more details on the study, refer to the [Grade Correlation Study](#) report on TEA's Student Assessment Division website.

Several analyses were done to support that TAKS–M assessments and item scores are related to outside variables as intended and are weakly related, if at all, to irrelevant characteristics. Correlations between TAKS–M content area scale scores were calculated. As shown in Table 8.10, the correlations between content area scores ranged from 0.47 to 0.69. These correlations are considered moderate, which suggests that scores across content areas are related and neither redundant nor irrelevant. This is expected because the constructs being measured are both academic content areas but assess different types of knowledge and skills.

**Table 8.10.** Overall TAKS–M Correlations Between Content Area Scores

Content Areas Compared (Using Scale Scores)	N-Count	Correlation
ELA & Mathematics	17,117	0.47*
ELA & Science	16,148	0.57*
ELA & Social Studies	15,380	0.60*
Mathematics & Science	19,462	0.56*
Mathematics & Social Studies	16,614	0.50*
Science & Social Studies	16,684	0.69*

\*Indicates that correlations were significant at the  $p \leq .01$  level.



The correlations between the total test score and the TAKS–M objective scores were also calculated within grade and content area. Across all content areas and grades, the correlations between each objective and test score ranged from 0.50 to 0.88. The magnitudes of these correlations were found to support theoretical relations between objectives and the overall test. More specifically, the range of correlations within ELA across all grades was 0.79 to 0.87. For mathematics the range of correlations was 0.50 to 0.65. Science had a correlation range of 0.62 to 0.88, while social studies had a correlation range of 0.62 to 0.84.

Additional validity evidence was collected in the form of discriminant validity, which demonstrates that the TAKS–M test scores are unrelated to demographic variables (e.g., gender and ethnicity). Theoretically, student characteristics such as ethnicity and gender should not relate to their performance on the assessment; therefore, the lack of meaningful empirical relationships between these measures is expected.

To investigate the relationship between TAKS–M test scores and demographic variables, correlations were computed specifically for gender and ethnicity. The correlation between TAKS–M test scores and ethnicity was 0.115, and the correlation between TAKS–M scores and gender was -0.030. Both the gender and ethnicity correlations are very small and do not indicate a meaningful relationship between TAKS–M scores and either demographic variable.

### **Evidence Based on Consequences of Testing**

Another method to provide validity evidence is by documenting the intended and unintended consequences of administering an assessment. Validity evidence that shows the TAKS assessment is having a positive impact on student learning and instruction was collected through educator surveys during the 2008–2009 school year. Evidence of the consequential validity of the LAT process for eligible ELLs was gathered through a voluntary survey in spring 2010. Validity evidence showing the impact of administering the TAKS–M assessment was collected through educator surveys during the 2008–2009 school year. Refer to the [2009–2010 Technical Digest](#) for expanded information about these consequential validity surveys.

### **Measures of Student Progress**

Student progress within the TAKS assessment program was measured using the TPM. The TPM was implemented for TAKS, TAKS (Accommodated), and LAT versions of TAKS for the first time in 2009. The TPM for TAKS–M and LAT versions of TAKS–M was implemented for the first time in 2010. The TPM was developed to meet HB 1, SB 1031, and HB 3 legislative requirements for a measure of annual improvement in student achievement. The TPM used a multi-level regression-based projection model that estimates whether a student is likely to pass the TAKS or TAKS–M assessments at a future grade. For TAKS, TAKS (Accommodated), and LAT versions of TAKS, this measure was based on (1) the student's current performance on TAKS, (2) the student's previous-year performance (if available) in the subject of interest on TAKS, and (3) the TAKS scores of all the students on the campus that the student attends. For TAKS–M



and LAT versions of TAKS–M, the measure was based on (1) the student’s current performance on TAKS–M, (2) the student’s previous-year performance (if available) in the subject of interest on TAKS–M, and (3) the TAKS–M scores of other students in the same enrolled grade in the student’s school district.

In 2012 TPM projections were reported only to students in grade 10 because students in grades 3–9 transitioned to the STAAR program. TPM projections were reported for grade 10 ELA, mathematics, science, and social studies and were provided on the CSR and on the student data file. More detailed information about the TPM is available on the [TAKS Texas Projection Measure](#) page on TEA’s Student Assessment Division website.

## Sampling

In 2011–2012 there were no research studies, audits, or field tests conducted for TAKS or TAKS–M. Therefore, sampling was not required.

## Test Results

[Appendices F](#) and [G](#) provide scale score distributions and statistics, RSSS conversion tables as well as mean p-values and reliability estimates by objective and content area for TAKS and TAKS–M assessments administered in 2011–2012. Tables 8.11 and 8.12 show spring 2012 pass rates for TAKS and TAKS–M.

**Table 8.11.** TAKS Spring 2012 (Primary Administration) Pass Rates

<b>Mathematics</b>	Grade 10	74%
	Exit Level	91%
<b>English Language Arts</b>	Grade 10	91%
	Exit Level	93%
<b>Science</b>	Grade 10	75%
	Exit Level	94%
<b>Social Studies</b>	Grade 10	94%
	Exit Level	98%

**Table 8.12.** TAKS–M Spring 2012 Pass Rates

<b>Mathematics</b>	Grade 10	69%
	Grade 11	61%
<b>English Language Arts</b>	Grade 10	84%
	Grade 11	74%
<b>Science</b>	Grade 10	52%
	Grade 11	56%
<b>Social Studies</b>	Grade 10	71%
	Grade 11	61%