# Chapter **4** State of Texas Assessments of Academic Readiness (STAAR)

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# **Overview**

In May 2007, the 80<sup>th</sup> Texas Legislature enacted Senate Bill (SB) 1031, which expanded the role of the end-of-course (EOC) assessment program. The bill phased out the Texas Assessment of Knowledge and Skills (TAKS) assessments for grades 9–11 and replaced them with the EOC assessments as a component of new high school graduation requirements, beginning with the incoming freshman class of 2011–2012. Additionally, SB 1031 required the EOC assessments to include items that measure students' postsecondary readiness.



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In 2009, the 81<sup>st</sup> Texas Legislature passed House Bill (HB) 3, which called for a unified, comprehensive assessment program, the State of Texas Assessments of Academic Readiness (STAAR<sup>®</sup>), to replace the existing TAKS program for all grades and courses beginning in spring 2012 for students first enrolled in grade 9 or below. The Texas Education Agency (TEA), in collaboration with the Texas Higher Education Coordinating Board (THECB) and Texas educators, developed the STAAR program. The EOC assessments that were previously in development to fulfill the requirements of SB 1031 were updated to meet the additional legislative requirements for STAAR. The legislative requirements of HB 3 included

- increasing the rigor and relevance of both standards and assessments;
- assessing postsecondary readiness;
- developing an aligned system of assessments that connect performance from the postsecondary readiness standards in Algebra II and English III down to grade 3 mathematics and reading, from course to course and from grade to grade; and
- developing a progress measure designed to provide an early-warning indicator for students who are not on track to meet the passing standard, who might not be successful in the next grade or course, who might not be ready for advanced coursework in mathematics and English in high school, or who might not be ready for postsecondary work in mathematics and English.

Beginning in fall 2009, TEA began the development and implementation of STAAR on the schedule shown in Figure 4.1.



Figure 4.1. STAAR Development and Implementation Schedule

The performance standards for the STAAR EOC assessments were established prior to the spring 2012 test administration. Extensive research studies were conducted to support the standard-setting process and to ensure that the STAAR EOC assessments meet requirements for rigor and alignment. Because of the aligned nature of the program, the performance standards for the STAAR 3–8 assessments could not be set

until after the approval of the standards for STAAR EOC assessments. Standards for the STAAR EOC assessments were approved and implemented in spring 2012, while standards for all other STAAR assessments were approved and implemented in January 2013.

In June 2013, the 83<sup>rd</sup> Texas Legislature passed HB 5, which reduced the number of STAAR EOC assessments needed for graduation from fifteen to five—Algebra I, English I, English II, biology, and U.S. history. Only the five STAAR EOC assessments required by HB 5 were administered in 2014–2015. To meet the requirements of HB 5, the English I and English II assessments were redesigned as combined reading and writing assessments, and the redesigned assessments were first administered in spring 2014.

In the 2014–2015 school year, students were required to take the STAAR EOC assessments for courses in which they were enrolled. Students in grades 3–8 who received instruction in courses above their enrolled grade were required to take the STAAR assessments for those courses in which they received instruction if the content covered the entire curriculum for that course. The revised Texas Essential Knowledge and Skills in mathematics, which were adopted by the State Board of Education (SBOE) in April 2012, were first implemented in classrooms and in the grades 3–8 mathematics assessment program in the 2014–2015 school year. In July 2015, TEA convened standard-setting committees that recommended performance standards for STAAR grades 3–8 mathematics that aligned to the new mathematics TEKS.

# STAAR

STAAR is an assessment program designed to measure the extent to which a student has learned and is able to apply the knowledge and skills defined in the statemandated curriculum, the Texas Essential Knowledge and Skills (TEKS). Every item on every STAAR assessment is directly aligned to the TEKS currently in effect for the grade/subject or course being tested. In grades 3–8, students are tested in mathematics and reading. In addition, students are tested in writing at grades 4 and 7, science at grades 5 and 8, and social studies at grade 8. During the 2015–2016 school year, STAAR EOC assessments were available to students in Algebra I, Algebra II, English I, English II, biology, and U.S. history.

# **STAAR Spanish**

The STAAR Spanish assessments are designed to measure the academic skills of students who receive academic instruction in Spanish while they learn English. The STAAR Spanish assessments are offered at grades 3–5, including grades 3–5 mathematics and reading, grade 4 writing, and grade 5 science. The English and Spanish versions of STAAR assessments have the same test blueprint and assess the same TEKS student expectations for reading, mathematics, and science. Because of differences in the English and Spanish languages, the writing student expectations assessed are similar but not exactly the same.



# STAAR L

STAAR L is a linguistically accommodated English version of the STAAR mathematics, science, and social studies assessments. STAAR L is administered to English language learners (ELLs) who meet eligibility requirements to receive a substantial degree of linguistic accommodation in these content-area assessments.

# STAAR A

STAAR A is the STAAR general assessment administered online with accommodations integrated into the online system. STAAR A is designed for students with disabilities who meet specific eligibility requirements. STAAR A was administered for the first time in spring 2015.

The assessments available by grade level and course for STAAR, STAAR Spanish, STAAR L, and STAAR A are listed in Table 4.1.

Grade/Course	Content Area	
Grade 3 (English, Spanish, STAAR L*, and STAAR A)	mathematics and reading	
Grade 4 (English, Spanish, STAAR L*, and STAAR A)	mathematics, reading, and writing	
Grade 5 (English, Spanish, STAAR L*, and STAAR A)	mathematics, reading, and science	
Grade 6 (English, STAAR L*, and STAAR A)	mathematics and reading	
Grade 7 (English, STAAR L*, and STAAR A)	mathematics, reading, and writing	
Grade 8 (English, STAAR L*, and STAAR A)	mathematics, reading, science, and social studies	
End-of-Course Assessments (English, STAAR L**, and STAAR A**)	Algebra I, Algebra II, English I, English II, English III, biology, and U.S. history	

#### Table 4.1. 2015–2016 STAAR Assessments

\*The STAAR L assessments are available only for mathematics, science, and social studies. \*\*STAAR A and STAAR L assessments are not available for Algebra II and English III.

# **Participation Requirements**

According to federal regulations, all students must be assessed on grade-level curricula. Consequently, all students are expected to participate in the Texas assessment program. For ELLs, test participation decisions are made in accordance with agency guidelines by each student's language proficiency assessment committee (LPAC). Table 4.2 provides a summary of the guidelines LPACs use in determining the appropriate STAAR assessment for an ELL. Additional information is available on the LPAC Resources page on TEA's Student Assessment Division website. For STAAR A, assessment decisions are made in accordance with agency guidelines by each student's Admission, Review, and Dismissal (ARD) committee or Section 504 committee. Table 4.3 provides a summary of the STAAR A eligibility requirements.

Participation requirements for STAAR Alternate 2 are described in chapter 5, "STAAR Alternate 2".

#### Table 4.2. ELL Participation in STAAR

ELL Participation in STAAR			
STAAR	<ul> <li>General state assessment</li> <li>Taken by ELLs not administered an assessment below</li> <li>Some linguistic accommodations permitted</li> </ul>		
STAAR Spanish	<ul> <li>Available for students in grades 3–5 for whom a Spanish version of STAAR most appropriately measures their academic progress</li> <li>Not permitted for an ELL whose parent or guardian has declined bilingual/ESL program services</li> <li>Linguistic accommodations not permitted because students testing in native language</li> </ul>		
STAAR L*	<ul> <li>Linguistically accommodated STAAR mathematics, science, and social studies assessments</li> <li>Available for ELLs who         <ul> <li>are not most appropriately assessed with STAAR Spanish, AND</li> <li>have not yet attained a TELPAS reading advanced high rating in grade 2 or above, AND</li> <li>have been enrolled in U.S. schools for 3 years or less starting with first grade (5 school years or less if a qualifying unschooled asylee or refugee)</li> </ul> </li> <li>Not permitted for an ELL whose parent or guardian has declined bilingual/ESL program services</li> <li>More substantial linguistic accommodations permitted than for STAAR</li> </ul>		

\*For the STAAR L EOC assessments, eligibility can be carried over from spring to the July and December administrations.

Table 4.3. STAAR A Eligibility Requirements

#### **STAAR A Eligibility Requirements**

- To be eligible for STAAR A, the student must
  - have an identified disability and be receiving special education services, or
  - be identified with dyslexia or a related disorder as defined in Texas Education Code (TEC) §38.003, and be receiving Section 504 services.
- The ARD or Section 504 committee (in conjunction with the LPAC if the student is an ELL) must determine for each subject for which STAAR A is being considered.

# **Testing Requirements for Graduation**

Students who were enrolled in grade 9 or below for the first time in the 2011–2012 school year are required to take the STAAR EOC assessments rather than TAKS as their testing requirement for graduation. With the passage of HB 3, performance on the STAAR EOC assessments was linked to a student's graduation program. The provisions of HB 3 were modified by HB 5 passed in June 2013. Under HB 5, in order to graduate, a student must score at or above the Level II: Satisfactory Academic Performance standard on five STAAR EOC assessments: Algebra I, English I, English II, biology, and U.S. history. Prior to spring 2014, students were eligible to meet their English I and English II graduation requirements using performance on the separate English reading and writing assessments.

SB 149, 84<sup>th</sup> Texas Legislature, Regular Session, 2015, revised the state's assessment graduation requirements. Beginning in May 2015, a student who failed to achieve the STAAR EOC assessment graduation requirements for no more than two courses could receive a Texas high school diploma if the student qualified to graduate by means of an individual graduation committee (IGC) under the TEC, §28.0258.

The ARD committee makes educational decisions for a student receiving special education services, including decisions related to state assessments and decisions related to graduation requirements as described in Texas Administrative Code §89.1070.

# **Test Development**

Maintaining a student assessment program of the highest quality involves many steps during the test development process. For detailed information regarding each step of the test development process, refer to chapter 2, "Building a High-Quality Assessment System." Chapter 2 outlines the processes that are used to develop a framework for each STAAR assessment and explains ongoing test development. TEA relies greatly on input from educators to ensure that all measures of learning for Texas public school students are equitable and accurate.

STAAR test development activities are summarized below.

In 2010 and 2011, TEA convened advisory groups composed of curriculum specialists, teachers, and professors who provided input and guidance about which of the TEKS standards were eligible for assessment and which were critical for student success and therefore should be emphasized on the assessments. From this information, TEA developed a set of readiness and supporting standards that focus the assessment at each grade/subject and course and that provide a vertical link between the assessments from grade to grade or from course to course. From these standards, a draft set of TEKS student expectations eligible for assessment on STAAR and a draft test blueprint were developed for each grade/subject and course assessed. The

drafts of these assessed curricula and test blueprints were subsequently approved and published.

- With input from both national- and state-level writing experts, scoring rubrics were developed to guide the scoring of English I, English II, and English III short answer reading items and written compositions and grades 4 and 7 written compositions. After the draft rubrics were used to evaluate field-test responses, TEA convened rubric validation committees made up of Texas writing educators to review the field-test results and validate the rubrics. Rubrics for reading short answer, expository, and literary writing were validated in summer 2010. Rubrics for persuasive and analytical writing, as well as grades 4 and 7 personal narrative and expository writing, were validated in summer 2011. These draft rubrics were also subsequently approved and published.
- The 2016 STAAR assessments were constructed to conform to the assessment blueprints and all established test construction guidelines for STAAR. Most items placed on the 2016 STAAR 3–8 assessments were developed and fieldtested through embedded field testing on operational STAAR assessments in 2012–2015 and through stand-alone field tests for grades 4 and 7 writing in 2011. For STAAR EOC assessments, the items eligible for placement were developed and field-tested through both stand-alone field testing and embedded field testing in operational EOC assessments administered in 2008 through 2015.
- Item development activities continue annually to create multiple versions of STAAR, to support the annual release of test questions and test forms, and to build the item bank to a depth necessary to support the program. These items are subsequently field-tested, and their data results are reviewed. Field-tested items that meet established criteria are added to the bank. No field testing was conducted for STAAR 3–8 assessments in 2016 as a step to implement House Bill 743 requirements.
- An additional design aspect is a focus on student preparedness for success in subsequent grades and courses, and ultimately for postsecondary readiness. This ongoing focus is supported by the development of items that have a high level of cognitive complexity and that align closely with the cognitive complexity evident in the TEKS. Items developed for STAAR meet these established guidelines. For example, open-ended items that require students to derive a numerical answer independently are developed for science and mathematics courses. Process skills in mathematics, science, and social studies are assessed in context, not in isolation, which allows for a more integrated and authentic assessment of these content areas. In reading, greater emphasis is given to critical analysis than to literal understanding. In writing, prompts have been developed to support expository, persuasive, and analytical writing.
- STAAR EOC test items are also developed so that they can be delivered in both paper and online test formats. A plan was created to evaluate the

comparability of EOC assessment items delivered in paper mode and those delivered in online mode. The plan also sought to minimize potential formatting issues, such as a student having to scroll down a screen through a long item, since such issues might create a different student experience when testing online than when testing on paper. Studies were conducted between 2009 and 2014 to evaluate the performance of EOC assessment items in both paper and online formats.

## Item Development Approach for STAAR Spanish

Passages and items for STAAR Spanish reading and writing are developed originally in Spanish. This approach allows the Spanish language arts curriculum to be assessed in a more authentic and meaningful manner. Items for STAAR Spanish mathematics and science are transadapted. Transadaptation involves translating items from English and adapting them as necessary to ensure cultural and linguistic accessibility.

TEA staff, Texas educators, and Spanish language experts work to develop the STAAR Spanish test materials. Spanish bilingual educators then review all transadapted and original test items in accordance with the educator review process described in chapter 2, "Building a High-Quality Assessment System."

# Spanish–English STAAR Alignment

Alignment of the STAAR English and Spanish tests is reinforced by the following practices.

- The development and review processes for the English and Spanish assessments are parallel, meaning that item reviews for both English and Spanish include judgments related to each item's alignment to the TEKS content standards. Also, field-test data reviews for English and Spanish items include review of item statistics based on actual student performance. These safeguards ensure that only psychometrically sound items are selected for inclusion in the item bank.
- Item writing and review processes for transadapted items ensure that items in each language are linguistically and culturally appropriate and that the interpretations of grade-level performance expectations are the same for English and Spanish.
- The test blueprints for the English and Spanish assessments are the same, including the number of items that assess each reporting category and the number of items on the test as a whole.
- The English and Spanish assessments are constructed in concert, adhering to the same test construction guidelines with regard to the range of item content and cognitive complexity.
- Each year TEA and the STAAR English and STAAR Spanish development staff participate in item review meetings held for newly developed English test items.

Discussions at these meetings focus on the best ways to assess the TEKS, further enhancing the alignment between the English and Spanish assessments. Finally, when the performance standards for STAAR 3–8 were established in 2012, standard setting panels reviewed both the English and the Spanish transadapted tests with the goal of establishing comparable performance standards.



# Training

Test administration procedures must be followed in accordance with the directions provided in the *Test Security Supplement*, the coordinator manual, and the appropriate test administrator manuals so that all individuals eligible for testing have an equal opportunity to demonstrate their academic knowledge and skills. To help achieve this goal, TEA develops instructional materials to support the training of all testing personnel across the state on proper test administration procedures. Preparation for test administration begins every year with a training-of-trainers session for testing coordinators and other personnel from each of the twenty Texas regional education service centers (ESCs), as well as district testing coordinators from the state's 25 largest districts. Then, using materials and information provided in the TEA training session, the ESC regional testing coordinators train the district coordinators, who will be responsible for training any campus personnel participating in the administration of the assessments.

During the 2015–2016 school year, ESC personnel and district coordinators were given a district testing coordinator packet, which contained all the information and materials necessary for overseeing test administrations, and copies of the coordinator and test administrator manuals.



# District and Campus Coordinator Manual and Test Administrator Manuals

The 2016 District and Campus Coordinator Manual guides district and campus testing coordinators through their responsibilities as they oversee the administration of the Texas assessment program. This manual contains preparation and administration procedures for every assessment program for the 2016 calendar year, and was made available in time for the annual training of ESC, district, and campus testing coordinators. Separate test administrator

manuals were provided to districts prior to the spring administrations for STAAR grades 3–5, grades 6–8, and EOC.

# **Test Administrations**

All primary STAAR assessments were administered in spring (March–May) 2016. In addition, STAAR EOC assessments were made available in fall (December) 2015 and summer (July) 2016. STAAR grades 5 and 8 reading and mathematics retests were made available in May 2016. In 2015-2016, the SSI requirement to pass these tests was suspended by the commissioner of education due to reporting issues.

STAAR 3–8 general assessments (including STAAR Spanish) were offered primarily as paper tests. STAAR 3–8 general assessments were also available online as a standardized oral administration (SOA) test, although online SOA was not available in Spanish. In 2015–2016, SOA was offered for grades 3, 4, 6 and 7 mathematics and reading; grades 5 & 8 science; and grade 8 social studies. STAAR EOC assessments were offered in online and paper modes, while STAAR L and STAAR A assessments were administered primarily online. During the 2015–2016 school year, over 9.5 million STAAR assessments, including STAAR, STAAR Spanish, STAAR L, and STAAR A, were administered. The number of students tested for each STAAR assessment in 2015–2016 is shown in Table 4.4. Note that for Grades 5 and 8 reading and mathematics tests, the assessments administered include the sum total of the assessments from March and May 2016 administrations, for EOC tests (except for English III and Algebra II) they include the sum total of the December 2015, Spring 2016, and July 2016 administrations, and for the other tests, they only include the Spring 2016 administration.

STAAR Assessment	Assessments Administered
Grade 3 English mathematics	372,905
Grade 3 English reading	357,320
Grade 3 Spanish mathematics	17,372
Grade 3 Spanish reading	36,453
Grade 3 STAAR L mathematics	4,384
Grade 3 STAAR A mathematics	8,623
Grade 3 STAAR A reading	9,315
Grade 4 English mathematics	367,350
Grade 4 English reading	353,370
Grade 4 English writing	353,401
Grade 4 Spanish mathematics	9,384
Grade 4 Spanish reading	24,267
Grade 4 Spanish writing	25,191
Grade 4 STAAR L mathematics	1,982

## TECHNICAL DIGEST 2015 - 2016

STAAR Assessment	Assessments Administered
Grade 4 STAAR A mathematics	12,597
Grade 4 STAAR A reading	13,502
Grade 4 STAAR A writing	11,918
Grade 5 English mathematics	445,617
Grade 5 English reading	450,117
Grade 5 English science	363,919
Grade 5 Spanish mathematics	7,157
Grade 5 Spanish reading	17,965
Grade 5 Spanish science	7,288
Grade 5 STAAR L mathematics	3,523
Grade 5 STAAR L science	2,289
Grade 5 STAAR A mathematics	24,433
Grade 5 STAAR A reading	26,584
Grade 5 STAAR A science	14,598
Grade 6 mathematics	353,581
Grade 6 reading	365,062
Grade 6 STAAR L mathematics	5,506
Grade 6 STAAR A mathematics	19,064
Grade 6 STAAR A reading	19,502
Grade 7 mathematics	329,106
Grade 7 reading	363,051
Grade 7 writing	364,348
Grade 7 STAAR L mathematics	6,123
Grade 7 STAAR A mathematics	19,317
Grade 7 STAAR A reading	19,804
Grade 7 STAAR A writing	18,178
Grade 8 mathematics	373,054
Grade 8 reading	421,445
Grade 8 science	352,976
Grade 8 social studies	353,045
Grade 8 STAAR L mathematics	10,836



#### TECHNICAL DIGEST 2015 - 2016



STAAR Assessment	Assessments Administered
Grade 8 STAAR L science	6,684
Grade 8 STAAR L social studies	6,726
Grade 8 STAAR A mathematics	31,798
Grade 8 STAAR A reading	32,062
Grade 8 STAAR A science	18,221
Grade 8 STAAR A social studies	18,127
Algebra I	483,019
Algebra II	14,252
STAAR L Algebra I	17,973
STAAR A Algebra I	40,638
English I	617,560
English II	547,717
English III	10,337
STAAR A English I	49,481
STAAR A English II	33,705
Biology	403,651
STAAR L biology	17,164
STAAR A biology	31,304
U.S. history	378,412
STAAR L U.S. history	7,173
STAAR A U.S. history	19,465

## The Online Test Delivery System

STAAR online assessments were administered using the STAAR Assessment Management System, which includes the STAAR Online Testing Platform. 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 test is administered,
- when it is administered,
- the number of testing groups, and
- which students are assigned to each group.

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

Additional information about the Assessment Management System, such as an overview of the system, minimum system requirements, information on delivery and reporting, and a list of frequently asked questions, is available on the Texas Assessment Management System website.

## Make-up Testing

For the STAAR program, make-up testing opportunities for students who are absent are available for all grades/subjects and courses during the testing window. For the 2015–2016 school year, make-up testing opportunities were available for all administrations.

## **Out-of-District Testing**

For STAAR grades 5 and 8 reading and mathematics retest administrations and for all STAAR EOC administrations, students who are unable to test at their home district's designated test site are allowed to test out-of-district (OOD). OOD students are required to complete OOD registration prior to the close of the out-of-district/out-of-school registration period in order for the receiving (testing) district to be aware of a student's intent to test in their district and for the receiving district to be provided precoded materials. OOD students may show up at a registered OOD test site and test as walk-ins on the day of testing at the discretion of the receiving district and the ability of the test site to accommodate them. Students must present photo identification at the test administration site on the day of the test. For example, a student from Houston who spends the summer in Dallas and who wants to test in Dallas could register to test OOD. OOD testing also applies to students who are part of the Texas Tech University or University of Texas high school programs.

A campus or district must accommodate the request of an OOD student to participate in STAAR administrations if that campus or district is testing one or more local students on the applicable test and if the student has registered in advance for OOD testing.

# **Out-of-School Testing**

Beginning in the 2014–2015 school year, out-of-school testing was available for STAAR EOC examinees who were no longer enrolled in school. This allowed examinees who had not passed a STAAR EOC assessment and were no longer enrolled in school, but had otherwise completed requirements for graduation, to take an assessment during a test administration at a participating district.

# **Educational Materials Required for Testing**

#### DICTIONARIES

Various types of English-language dictionaries must be provided to students for the writing assessments at grade 7, the reading assessments at grades 6–8, and the English I, English II, and English III assessments.

Schools need a minimum of one dictionary for every five students testing, but the state's recommendation is one for every three students or, optimally, one for each student. Although thesauruses are not required, they are allowable on all the assessments listed above, either in combination with a dictionary or as a separate resource. If districts make thesauruses available to students during testing, it is recommended that there be one thesaurus for every five students.

An English as a second language (ESL) dictionary, which uses simple English language as well as pictures to define words, or a bilingual dictionary, may be provided for ELLs. ELLs are also allowed monolingual dictionaries in languages other than English, and picture dictionaries as linguistic accommodations recommended by LPACs. Both paper and electronic dictionaries are permitted, though electronic dictionaries must not allow access to the Internet. For electronic dictionaries that are hand-held devices, test administrators must ensure that any features allowing note taking or uploading of files have been cleared of their contents before and after the test administration.

Specific information regarding the dictionary policy for each STAAR assessment can be found on the STAAR Reading Resources page on TEA's Student Assessment Division website.

#### CALCULATORS

Calculators were required for the STAAR grade 8 mathematics, Algebra I, Algebra II, and biology assessments. Students were permitted to use their own calculators instead of those provided by the district. Students were permitted to use more than one calculator during the assessment. At minimum, districts were required to provide the following:

a graphing calculator for each student taking grade 8 mathematics, Algebra I, or Algebra II assessments (including STAAR L and STAAR A). Students must have a graphing calculator to use throughout the entire test (both paper and online versions). Districts may satisfy this calculator requirement by providing students with either a handheld graphing calculator or a graphing calculator application available on a tablet.

 a calculator for every five students taking biology (including STAAR L and STAAR A)

Any calculator could be used to fulfill the minimum requirements listed above except for those that included a computer algebra system (CAS), that allowed access to the Internet, or that had photographic capabilities.

All calculator memory had to be cleared to factory default both before and after testing. Any programs or applications had to be removed or disabled prior to testing. Test administrators were instructed to contact a calculator's manufacturer for specific assistance in effectively preparing a calculator for use during testing.

Calculators were not provided to students taking the STAAR grades 3–7 mathematics assessments or the STAAR grades 5 and 8 science assessments unless a student met the eligibility criteria for such an accommodation. This included the STAAR Spanish, STAAR L, and the STAAR A versions of the assessments.

# **Testing Accommodations**

Accommodations are practices and procedures that provide equitable access to gradelevel or course curriculum during instruction and assessment. Students receiving testing accommodations must meet eligibility requirements and include students with disabilities and ELLs.

Accommodations should not result in reduced learning expectations. Therefore, the use of accommodations should not replace the teaching of content-area knowledge and skills as outlined in the state curriculum for each grade. Certain accommodations might be more useful or appropriate than others, depending on factors such as the content area being assessed, the student's age, and the student's needs. Not all accommodations that are appropriate for instructional use are appropriate for use on a standardized assessment.

Accommodations are provided on an individual basis and take into consideration the needs of each student. It would be neither appropriate nor effective to provide the same accommodation to all students. For example, one student with a visual impairment might benefit from large-print instructional materials, whereas another student with a visual impairment might benefit more from a magnification device. In most cases, accommodations are selected for a specific student based on their appropriateness and effectiveness 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

For a student who receives special education or Section 504 services, the decision to allow the student to use accommodations during STAAR is made by the student's Admission, Review, and Dismissal (ARD) committee or Section 504 placement committee. In those rare instances in which a student does not receive special education or Section 504 services but meets the eligibility criteria, the decision to allow accommodations on STAAR is made by the appropriate team of people at the campus level, such as the Response to Intervention (RTI) team or student assistance team.

After determining the instructional accommodation(s) that are effective for a student with disabilities, the educator must investigate whether each accommodation is allowed on a state assessment. The triangle in Figure 4.2 presents accommodations for students with disabilities by type in accordance with the need for TEA approval. Type 1 accommodations are locally-determined, while Type 2 accommodations require the submission of an Accommodation Request Form to TEA. Note that not all accommodations are applicable to all assessments. Specific information about each accommodation can be found on the Accommodation Resources page on TEA's Student Assessment Division website.



Figure 4.2. Accommodations for Students with Disabilities

## **Students with Visual Impairments**

Test administrators receive specific instructions for testing students using large-print or braille test booklets. Districts are required to indicate on the answer document whether the student used a large-print or braille version of a test. Large-print and braille test booklets are available for all STAAR operational assessments. Large-print test

booklets are also available for all STAAR Spanish, STAAR L, and STAAR A assessments through a special request process.

# **Dyslexia Accommodations for Reading Assessment**

Accommodations are available for students with dyslexia and other related disorders on the STAAR reading assessments in grade 3 through high school. These accommodations include

- having all test questions and answer choices read aloud to a student, and
- extending testing time over the entire school day.

The needs of the student must be carefully considered when determining the most appropriate accommodations for the STAAR assessments.

STAAR A reading assessments are available for students with dyslexia who meet the eligibility requirements. STAAR A offers oral administration as an embedded accommodation through a text-to-speech (TTS) function. The student can independently select various levels of reading support during the test administration. In addition, embedded supports are available and may include such things as simplified text, definitions, and graphic organizers.

# **Oral/Signed Administration**

An oral/signed administration is an accommodation that allows for test questions and answer choices for mathematics, reading, science, and/or social studies tests to be read aloud or signed to eligible students taking the STAAR assessments. Required reference materials (e.g., a dictionary) and allowable accommodations (e.g., supplemental aid) may be read aloud or signed to students, but the test administrator cannot interpret or help apply the information contained within the aids. STAAR may be administered orally or signed to individual students or to a group of students, depending on student needs.

A student is eligible for an oral/signed administration if he or she routinely and effectively uses this accommodation during classroom instruction and testing and meets at least one of the following criteria.

- The student receives special education services and is identified with dyslexia or has evidence of reading difficulties.
- The student receives Section 504 services and is identified with dyslexia or has evidence of reading difficulties.
- The student does not receive special education or Section 504 services but is identified with dyslexia.

The ARD committee or Section 504 committee decides whether a student exhibits evidence of a reading difficulty, which is defined as a problem with reading that may be caused by a learning disability or other conditions such as an attention deficit disorder, an emotional or behavioral disability, or processing or memory issues.

#### STANDARDIZED ORAL ADMINISTRATION

In spring 2013, a small-scale trial of computer-delivered standardized oral administration (SOA) was offered to a sample of students taking STAAR grade 4 mathematics, grade 8 science, or grade 8 social studies. The reasons for introducing a computer-based solution to oral administration was twofold: to reduce district testing costs and teacher burden and to improve the standardization of the oral administration, thereby reducing variance in test scores caused by possible differences in the quality of the oral administration when delivered by a live test administrator. SOA is designed to provide a similar level of reading support as that provided by a teacher during an oral administration. The support includes TTS that uses synchronized text highlighting and student control over the type of audio playback, the audio volume, and the speed of speech.

Cognitive labs, a small-scale trial administration, and post-administration surveys were used to evaluate the quality of SOA and to identify possible difficulties facing students in the SOA computer interface. Feedback from students and educators was positive, and none of the findings suggested that the basic process for providing SOA required substantial change. Based on feedback from these studies, SOA was offered across the state on an on-request basis in spring 2014 for the grades 4 and 7 mathematics and reading and grade 8 science and social studies assessments. In spring 2015, SOA was offered for STAAR grades 4, 6, and 7 mathematics and reading (English only), grades 5 and 8 science (English only), and grade 8 social studies. In spring 2016, SOA was offered to grade 3 reading and math in addition to the grades and subjects that were offered SOA in spring 2015.

## STAAR A Embedded Accommodations and Accessibility Features

STAAR A is intended for students with disabilities receiving special education services and students with dyslexia and related disorders (defined by Texas Education Code §38.003) being served under Section 504 of the Rehabilitation Act of 1973. The ARD committee or Section 504 committee must determine if a student is eligible to take STAAR A based on the accommodations he or she is receiving in the classroom.

In spring 2014, STAAR A accommodations and accessibility features were provided to students in a cognitive lab with the purpose of evaluating the effectiveness of the tools and students' ability to interact with them prior to placement on the 2015 operational test forms. Results of the study indicated that students were able to use the tools and interact with the online accessibility features as intended.

STAAR A includes accommodations and accessibility features in addition to the tools provided in all online STAAR assessments. The accommodations and accessibility

features embedded in STAAR A are available to all students taking STAAR A who need them. They are intended to reduce or eliminate the effects of disability-related barriers to testing and are not intended to reduce learning expectations for students with disabilities. The information in Table 4.5 below specifies the features available to students taking STAAR A.

Online Tools	Accessibility Features	Embedded Accommodations
Answer Eliminator	Text-to-Speech	Pop-ups
Highlighter	Zoom	Rollovers
Eraser	Color and Contrast	Blank Graphic Organizers
Pencil	Place Marker	Writing Checklists
Notepad		
Dot Tool*		
Line Tool*		
Ruler*		
Calculator(s)*		
Reference Materials*		

Table 4.5. Features Available in STAAR A

\*These tools are subject-specific and only appear in subject tests where they are relevant.

Some accessibility features, like zoom, are provided for the entire test. However, popup and rollover accommodations are applied only to particular selections and test questions based on expert judgments about which accommodations are likely to make a question more accessible to students with disabilities. The descriptions below describe embedded accommodations.

- Pop-ups provide definitions, synonyms, pictures, graphic organizers, formulas, and animations for non-content relevant words and concepts.
- Rollovers reword or clarify larger portions of text or provide bulleted steps in a process.
- Read-aloud for certain selections and test questions is generated through TTS. It enables students to select from three modes of audio play—Continuous Read, Click to Hear, and Words Only.

## Linguistic Accommodations

Linguistic accommodations are language supports that make grade-level academic assessments in English more accessible to ELLs. The Texas English Language Proficiency Standards (ELPS) require all teachers to linguistically accommodate the instruction of ELLs in their classes commensurate with the students' English language proficiency levels. Policies for the STAAR linguistic accommodations support these ELPS requirements.

The information in Table 4.6 shows the ways in which the language needs of ELLs are addressed in STAAR.

Table 4.6. Allowable Linguistic Accommodations for ELLs Taking STAAR

		STAAR (English)	STAAR L		STAAR A
Mathematics Science Social Studies Reading Writing		Bilingual dictionary Extra time (same day) Dictionaries of various types* Extra time (same day) Clarification in English of word meaning in writing prompts	Bilingual dictionary Extra time (same day) Clarification in English of word meaning and reading aloud of text are provided in the online interface for all students taking STAAR L**		Bilingual dictionary Extra time (same day) Clarification in English of word meaning Dictionaries of various types* Extra time (same day) Clarification in English of word meaning
English I English II	-	Dictionaries of various types* Extra time (same day) Clarification in English of word meaning in short answer questions and writing prompts	Not Applicable	-	Extra time (same day) Clarification in English of word meaning

\* The STAAR Dictionary Policy for reading and writing in grade 6 and above includes use of standard English, ESL (simplified English), and bilingual dictionaries for all students. If a student in grade 6 and above needs a dictionary that is not listed in the STAAR Dictionary Policy as a linguistic accommodation, the use of other dictionaries (see approved list in Allowable Linguistic Accommodations on TEA website) is permitted as a linguistic accommodation in grades 3 and above. For grades 3–5 reading and grade 4 writing, use of dictionaries is permitted as a linguistic accommodation for eligible ELLs.

\*\* In addition to examining the eligibility criteria for STAAR L, LPACs should consider whether a student routinely needs and uses clarification in English of word meaning and/or reading aloud of text. Students who do not need either accommodation should take STAAR, not STAAR L.

Decisions concerning accommodations must be made and documented by the 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 such accommodations are used routinely in instruction and testing.

In 2012, STAAR L accommodations were provided to students by test administrators with a plan to evaluate computerized linguistic accommodations for use in 2013. A study of the clarification accommodations was conducted during the May 2012 operational STAAR EOC assessment. Results of the study indicated that ELL students

used the accommodations more frequently than non-ELL students and that ELL students reported finding the accommodations more helpful than non-ELL students found them to be. Most students reported no difficulty using the online accommodations. In addition, performance data suggested that the accommodations were not impacting student responses in unexpected ways.

Based on these results, STAAR L assessments transitioned to an online interface in spring 2013. The online interface provides students with access to computer-based linguistic accommodations when they take mathematics, science, and social studies tests in grades 3 and above, including EOC assessments. The linguistic accommodations provided through the computerized assessment include the following:

- Clarification: As students test, they are able to click on pre-identified text to see definitions, synonyms, paraphrases, pictures, and animations, as needed, to improve comprehension of words and language structures likely to be unfamiliar to students at the targeted proficiency levels. Content terms assessed are not eligible for clarification. Two interface design features are used to provide this accommodation.
  - Pop-ups/Word Tool: Using the mouse cursor, students can click on preidentified words and phrases, which open a window showing the clarification (definition, synonym, picture, animation).
  - Rollovers/Sentence Tool: For larger portions of text, students can click on an icon and see a paraphrase that unrolls on top of the original text. Rollovers are used in items in which language is more appropriately clarified through a paraphrase or when the number of individual pop-ups needed to clarify the meaning of the text would impede comprehension or appear too cluttered on the computer screen. Rollovers are used less frequently than pop-ups.
- Read-aloud: Interface functionality enables students to hear words read aloud. This accommodation may be beneficial for ELLs at lower proficiency levels who have difficulty pronouncing English words and decoding them as they read due to phonological differences between their native language and English.

More information about the STAAR linguistic accommodations is available under the *Linguistic Accommodations for ELLs Participating in the STAAR Program* section of the Accommodation Resources page on TEA's Student Assessment Division website.

# **Student Success Initiative**

The Student Success Initiative (SSI) provides a system of academic support to help students achieve success in mathematics and reading. The SSI was adopted by the Texas Legislature in 1999 to ensure that all students receive the instruction and support they need to be academically successful in mathematics and reading.

Under the SSI grade advancement requirements, students are required to pass the STAAR grade 5 mathematics and reading assessments to be promoted to grade 6. Additionally, students are required to pass the STAAR grade 8 mathematics and reading assessments to be promoted to grade 9.

In 2015–2016, students in grades 5 and 8 were provided two opportunities (March and May) to pass the STAAR reading and mathematics assessments. If a student did not pass an assessment, the school was required to give the student additional instruction after each testing opportunity, and the student had to participate in that instruction. Parents were notified if their child did not pass a STAAR assessment that is required for promotion. Due to reporting issues, the commissioner of education canceled the third testing opportunity and suspended the promotion requirements for the 2015–2016 school year.

With the exception of the 2015–2016 testing year, if a student did not pass after the second testing opportunity, a grade placement committee (GPC) was formed as part of the SSI requirements. The GPC, which consists of the principal, teacher, and parent or guardian, was required to create an instructional plan based on the individual needs of the student. If a student did not demonstrate proficiency on the reading assessment on the third testing opportunity, the student could advance to or be placed in the next grade level only if (1) he or she completed all accelerated instruction required by the GPC, and (2) the GPC determined, by unanimous decision, that the student was likely to perform on grade level by the end of the next school year given additional accelerated instruction during the course of the year. In making promotion decisions, the GPC was required to consider the recommendation of the student's teacher, the student's grades, the student's state assessment scores, and any other relevant academic information.

More information about the <u>Student Success Initiative</u> is available on TEA's Student Assessment Division website.

# **Scores and Reports**

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

## **Description of Scores**

Scores for the STAAR 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 assessment is the student's raw score. The raw score can be interpreted only in terms of the specific set of test items on that test form. Because the difficulty of items might vary among test

forms over time, raw scores alone cannot be used to compare performance across tests 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 for direct comparisons of student performance between specific sets of test items from different test administrations.

The scale score is used to determine whether a student attained Level II: Satisfactory Academic Performance or Level III: Advanced Academic Performance. (Performance-level cut scores are discussed in the Performance Standards section of this chapter.) Scale scores for all STAAR assessments are reported following each test administration.

Scale scores are also used to compare the performance of an individual student with the performance of a demographic group, a program group, an entire campus, or a district at a particular grade. For example, the scores for a Hispanic student in a gifted and talented program can be compared with the average scores of other Hispanic students, other gifted and talented students, all students on 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, reporting category-level data can identify areas where a student might be having difficulty. This identification can help campuses plan the most effective instructional intervention. Finally, individual student test scores are also used in conjunction with other performance indicators to assist in making placement decisions. While scores can contribute to decisions regarding placement, educational planning for a student should take into account as much student information as possible.

## **Report Formats**



Two types of reports are provided for the various testing programs: standard and additional. Standard reports are provided automatically to districts. Information contained in standard reports satisfies mandatory reporting requirements. To receive additional reports, the district must submit a request through the Assessment Management System in the *Ancillary Services* screen. Generally, districts are required to pay a nominal fee for each additional report requested.

For more information about scoring and reporting for STAAR, 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 the Level II performance standard and the Level III performance standard can be analyzed by grade and content area across administrations to give insight into whether student performance is improving across years. For example, the average scale score for students who receive special education services and who took the STAAR grade 4 writing test can be compared over time.

Test results can also be used to compare the performance of different demographic or program groups. The STAAR 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, which group had the lowest percentage meeting the Level Il performance standard, which group had the highest percentage achieving the Level III performance standard, etc. Other scores can be used to help evaluate the academic performances of demographic or program groups in core academic areas. For example, reporting category data can help campuses and districts identify areas of potential academic weakness for a group of students. The same methodology can be applied to an entire campus or district. Test results for groups of students can be used when evaluating instruction or programs that require average-score or year-to-year comparisons. Because the tests are designed to measure content areas within the required state curriculum, the consideration of test results by content area and by reporting category might be helpful when evaluating curriculum and instructional programs. In addition, all test scores can be compared with regional and statewide performance within the same content area for any administration.

Generalizations from test results can be made to the specific content area being measured on the test. However, because each test measures a finite set of skills with a limited set of items, any generalizations about student achievement derived solely from a particular test should be made with great caution and with full reference to the fact that the conclusions were based only on that test. Instruction and program evaluations should take into account as much information as possible, rather than relying on test scores alone, to provide a more complete picture of performance.

# **Parent Brochures**

TEA's Student Assessment Division produces a brochure titled "Understanding the Confidential Student Report (CSR)" to help parents understand their child's STAAR 3–8 test results. This brochure provides a brief summary of the STAAR program and explains information contained on a CSR. The brochure, available in both English and Spanish, was provided to districts in spring 2016 for distribution with individual student STAAR performance results. An explanation about the STAAR L and STAAR A assessments was included in the brochure. For the STAAR EOC assessments, an explanation of the test results is printed on the CSR for each individual assessment. A flyer is also available in Spanish for distribution with individual CSRs.

# **Released Tests**

TEA released the primary administration of the following 2016 STAAR assessments:

- grades 3–8 reading and mathematics
- grades 4 and 7 writing
- grades 5 and 8 science
- grade 8 social studies
- Algebra I
- English I and English II
- Biology
- U.S. history

The released tests also included STAAR Spanish versions of the grades 3–5 and all available subjects and grades administered for STAAR L and STAAR A assessments. All the released STAAR assessments listed above can be found on the STAAR Released Test Questions page of TEA's Student Assessment Division website.

## **Item Analysis Reports**

Confidential Student Item Analysis Reports and Item Analysis Summary Reports for STAAR assessments that were released in their entirety were provided to districts. Item Analysis Summary Reports were provided at the campus, district, region, and statewide levels. These reports showed the item number, the reporting category measured by the item, and the percentage of students selecting each possible answer choice for that test item. The summary reports were provided for all students.

These reports were made available in the Assessment Management System for the following test administrations:

- 2016 March STAAR and STAAR A grades 4 and 7 writing; STAAR and STAAR A grades 5 and 8 reading; and STAAR, STAAR L and STAAR A grades 5 and 8 mathematics
- 2016 spring STAAR and STAAR A grades 3, 4, 6, and 7 reading; STAAR, STAAR L and STAAR A grades 3, 4, 6 and 7 mathematics; STAAR, STAAR L and STAAR A grades 5 and 8 science; and STAAR, STAAR L and STAAR A grade 8 social studies
- 2016 spring STAAR (including STAAR, STAAR Spanish, STAAR L, and STAAR A where applicable) Algebra I, English I, English II, biology, and U.S. history

Students and districts may find it helpful to use the Item Analysis Summary Report in conjunction with the 2016 released STAAR, STAAR L and STAAR A tests. For STAAR grades 3–5, English and Spanish results are reported separately. For additional information, refer to the 2015–2016 Interpreting Assessment Reports.

# **Performance Standards**

Performance standards relate levels of test performance directly to what students are expected to learn, as defined in the statewide curriculum. This is done by establishing cut scores that distinguish between performance levels. Standard setting is the process of establishing the cut scores that define the performance levels for an assessment.

# **Performance Levels and Policy Definitions**

For the STAAR assessments (including STAAR Spanish, STAAR L, and STAAR A), the performance levels are

- Level I: Unsatisfactory Academic Performance
- Level II: Satisfactory Academic Performance
- Level III: Advanced Academic Performance

More detailed descriptions, known as policy definitions, of each performance level are as follows:

#### LEVEL I: UNSATISFACTORY ACADEMIC PERFORMANCE

Performance in this category indicates that students are inadequately prepared for the next grade or course. They do not demonstrate a sufficient understanding of the assessed knowledge and skills. Students in this category are unlikely to succeed in the next grade or course without significant ongoing academic intervention.

#### LEVEL II: SATISFACTORY ACADEMIC PERFORMANCE

Performance in this category indicates that students are sufficiently prepared for the next grade or course. They generally demonstrate the ability to think critically and apply the assessed knowledge and skills in familiar contexts. Students in this category have a reasonable likelihood of success in the next grade or course but might need short-term targeted academic intervention.

#### LEVEL III: ADVANCED ACADEMIC PERFORMANCE

Performance in this category indicates that students are well prepared for the next grade or course. They demonstrate the ability to think critically and apply the assessed knowledge and skills in varied contexts, both familiar and unfamiliar. Students in this category have a high likelihood of success in the next grade or course with little or no academic intervention.

# **Standard Setting Process for STAAR**

Standard setting for STAAR took into consideration a variety of factors such as policy, TEKS content standards, educator knowledge about what students should know and be able to do, and information about how student performance on state assessments aligns with performance on other assessments. Standard setting committees made up of diverse groups of stakeholders carefully considered the interaction of these elements for each STAAR assessment.

The goal of the STAAR program is to have a comprehensive assessment system with curriculum standards and performance standards that are vertically aligned within a content area (i.e., the curriculum and performance standards link from the high school courses back to the middle school and elementary school grades and content areas). As a result, the STAAR performance standards were set for the STAAR EOC assessments first, the middle school assessments next, and the elementary school assessments last.

TEA used an evidence-based standard-setting approach (O'Malley, Keng, & Miles, 2012) for the STAAR program. This evidence-based standard-setting approach incorporated elements of a traditional standard setting framework (e.g., performance level descriptors, item-mapping methods) and supported that framework with empirical-based research studies and policy considerations. Using this approach, TEA defined and implemented a nine-step process to establish performance standards for the STAAR program. The nine steps are as follows:

- 1. Conduct validity and linking studies.
- 2. Develop performance labels and policy definitions.
- 3. Develop grade- and course-specific performance level descriptors (PLDs).
- 4. Convene a policy committee and develop performance standard ranges.
- 5. Convene standard setting committees.
- 6. Review performance standards for reasonableness.
- 7. Approve performance standards.
- 8. Implement performance standards.
- 9. Review performance standards.

Tables 4.7 and 4.8 provide high-level descriptions and timelines for these nine steps as implemented in the STAAR EOC and the STAAR 3–8 standard setting processes, respectively. Although HB 5 legislation removed the requirement for the review of performance standards at least once every three years, step nine is included in the process because this step was considered when setting performance standards for STAAR.

Additional details about each step in the STAAR standard setting process is given in the "STAAR Standard Setting Technical Report," available on the STAAR Performance Standards page of TEA's Student Assessment Division website.

#### Table 4.7. Overview of the STAAR EOC Standard-Setting Process

Standard-Setting Step	Description	Timeline
1. Conduct validity and linking studies	External validity evidence was collected to inform standard setting and to support interpretations of the performance standards. Scores on each assessment are linked to performance on other assessments in the same content area.	Studies started in spring 2009 and will continue throughout the program.
2. Develop performance labels and policy definitions	A committee was convened jointly by TEA and the THECB to recommend performance categories, performance category labels, and general policy definitions for each performance category.	September 2010
3. Develop course specific performance level descriptors (PLDs)	Committees comprised primarily of educators developed performance level descriptors (PLDs) as an aligned system, describing a reasonable progression of skills within each content area (English, mathematics, science, and social studies).	November 2011
4. Convene a policy committee and develop reasonable ranges for performance standards	A committee considered the policy implications of performance standards and empirical study results and made recommendations to identify reasonable ranges ("neighborhoods") for the cut scores.	February 1–2, 2012
5. Convene standard- setting committees	Committees comprised of K–12 educators and higher education faculty used the performance labels, policy definitions, PLDs, and neighborhoods set by the policy committee to recommend cut scores for each STAAR EOC assessment.	Mathematics and English: Feb. 22–24, Science and Social Studies: Feb. 29– March 2, 2012
6. Review performance standards for reasonableness	TEA and THECB reviewed the cut-score recommendations across content areas.	March 2012
7. Approve performance standards	The commissioner of education approved the performance standards for satisfactory academic performance and advanced academic performance.*	April 2012
8. Implement performance standards	Performance standards were reported to students for the spring 2012 administration with phase-in standards applied.	May 2012
9. Review performance standards	Performance standards are reviewed at least once every three years.**	If applicable

\* Minimum scores were also established empirically below the satisfactory and advanced academic performance standards and approved by the commissioner of education.

\*\* In June 2013, the 83<sup>rd</sup> Texas Legislature enacted HB 5, which removed the requirement to convene standards review panels. However, TEA and the commissioner of education review statewide performance relative to the standards after each administration to help inform decisions about the appropriate schedule for the phase-in of standards.

Standard-Setting Step	Description	Timeline
1. Conduct validity and linking studies	External validity evidence was collected to inform standard setting and support interpretations of the performance standards. Scores on each assessment are linked across grades to performance on other assessments in the same content area.	Studies started in spring 2011 and will continue throughout the program.
2. Develop performance labels and policy definitions	A committee was convened jointly by TEA and the THECB to recommend performance categories, performance category labels, and general policy definitions for each performance category.	September 2010
3. Develop grade/ subject specific performance level descriptors (PLDs)	Committees comprised primarily of educators developed performance level descriptors as an aligned system, describing a reasonable progression of skills within a subject area (reading, writing, mathematics, science, and social studies).	June 2012
4. Develop reasonable ranges for performance standards	EOC performance standards and empirical study results were used to identify reasonable ranges ("neighborhoods") for the cut scores for Levels II and III.	July 2012
5. Convene standard- setting committees	Committees comprised of K–12 educators used the performance labels, policy definitions, PLDs, and neighborhoods to recommend cut scores for each STAAR assessment.	October 2–12, 2012
6. Review performance standards for reasonableness	TEA reviewed the cut score recommendations across grades and subject areas.	October 2012
7. Approve performance standards	The commissioner of education approved the performance standards.	December 2012
8. Implement performance standards	Performance standards were reported to students for the spring 2012 administration with phase-in standards applied.	January 2013
9. Review performance standards	Performance standards are reviewed at least once every three years.*	If applicable

#### Table 4.8. Overview of the STAAR 3–8 Standard-Setting Process

\* In June 2013, the 83<sup>rd</sup> Texas Legislature enacted HB 5, which removed the requirement to review performance standards (Step 9).

## **Standard Setting Committees**

The task of each standard setting committee was to recommend the two cut scores that would define the three performance levels for each STAAR assessment. The standard setting committees were made up of K–12 and higher education professionals. Each committee included general education teachers who were experts in both the assessed content and the curriculum (i.e., the TEKS). Educators who represented special populations (students with disabilities and ELLs) were also part of the standard setting committees.

Committee members were provided with reasonable ranges within which performance standards should be set. The ranges were determined after a careful consideration of the alignment of performance standards with the assessments in the same content

area, the relevant information from the STAAR policy committee, and the results of various empirical studies. (The studies provided research-based anchors for setting performance standards that were meaningful and rigorous.)

In February 2012, TEA convened standard setting committees that recommended performance standards for Algebra I, geometry, Algebra II, English I reading, English II reading, English I writing, English II writing, English III writing, English III writing, biology, chemistry, physics, world geography, world history, and U.S. history.

In October 2012, TEA convened standard setting committees that recommended performance standards for STAAR grades 3–8 mathematics, grades 3–8 reading, grades 4 and 7 writing, grades 5 and 8 science, and grade 8 social studies. Separate committees were convened, when applicable, for the English version and Spanish version of a STAAR assessment.

To meet the requirements of HB 5, passed by the 83<sup>rd</sup> Texas Legislature in June 2013, the STAAR English assessments were redesigned such that both reading and writing skills would be measured with a single instrument on a single day. Because of this change, TEA convened a standard setting committee in January 2014 that recommended performance standards for English I, English II, and English III.

In July 2015, TEA convened standard setting committees that recommended performance standards for STAAR grades 3–8 mathematics that aligned to the new mathematics TEKS first implemented in 2014–2015.

## **Phase-In of Performance Standards**

A phase-in period was implemented for the STAAR Level II: Satisfactory Academic Performance standards in order to provide school districts with sufficient time to adjust instruction, to provide new professional development, to increase teacher effectiveness, and to close knowledge gaps. The commissioner of education determined the appropriate timeline for phasing in the performance standards.

Phase-in 1 performance standards for Level II were in effect for the 2011–2012, 2012– 2013, 2013–2014, and 2014–2015 school years. In 2015–2016, the commissioner of education decided to replace the phase-in approach with a standard progression approach from 2015–2016 through 2021–2022, the year final standards are scheduled to be in place. Instead of larger jumps to more rigorous performance standards every few years, this progression approach would mean smaller predictable increases every year through the 2021–2022 school year. Additional details about the standard progression approach is available in the documents "STAAR EOC Performance Standards Chart" and "STAAR 3-8 Performance Standards Chart" on the STAAR Performance Standards page of TEA's Student Assessment Division website.

The STAAR phase-in performance standard students are assigned for all EOC assessments is based on the standard in place when they took an EOC assessment for the first time. For example, the 2012–2015 standard for Level II: Satisfactory Academic Performance was in effect in spring 2014. Therefore, students who first took

Algebra I in spring 2014 are held to the 2012–2015 standard for Algebra I, Algebra II, English I, English II, English III, biology, and U.S. history.

# **Outcome of Standard Setting**

The standard setting process elicited recommended cut scores that reflect the level of performance a student must achieve for each performance category of the STAAR assessments. Initial performance standards for all STAAR assessments were recommended by standard setting committees and approved by the commissioner of education in April and December 2012. Tables 4.9 and 4.10 show the 2015-2016 Level II phase-in performance standard as well as the final Level II and Level III performance standards for the STAAR 3-8 and EOC assessments (including STAAR Spanish, STAAR L, and STAAR A).

Assessment	2015–2016 Level II	Final Recommended Level II	Level III
Grade 3 English Reading	1,345	1,468	1,555
Grade 4 English Reading	1,434	1,550	1,633
Grade 5 English Reading	1,470	1,582	1,667
Grade 6 Reading	1,517	1,629	1,718
Grade 7 Reading	1,567	1,674	1,753
Grade 8 Reading	1,587	1,700	1,783
Grade 3 English Mathematics	1,360	1,486	1,596
Grade 4 English Mathematics	1,467	1,589	1,670
Grade 5 English Mathematics	1,500	1,625	1,724
Grade 6 Mathematics	1,536	1,653	1,772
Grade 7 Mathematics	1,575	1,688	1,798
Grade 8 Mathematics	1,595	1,700	1,854
Grade 4 English Writing	3,550	4,000	4,612
Grade 7 Writing	3,550	4,000	4,602
Grade 5 English Science	3,550	4,000	4,402
Grade 8 Science	3,550	4,000	4,406
Grade 8 Social Studies	3,550	4,000	4,268
Grade 3 Spanish Reading	1,318	1,444	1,532
Grade 4 Spanish Reading	1,413	1,539	1,636
Grade 5 Spanish Reading	1,461	1,582	1,701
Grade 3 Spanish Mathematics	1,360	1,486	1,596
Grade 4 Spanish Mathematics	1,467	1,589	1,670
Grade 5 Spanish Mathematics	1,500	1,625	1,724

Table 4.9. STAAR 3–8 Performance Standards Applied in 2015–2016

#### TECHNICAL DIGEST 2015 - 2016

Assessment	2015–2016 Level II	Final Recommended Level II	Level III
Grade 4 Spanish Writing	3,550	4,000	4,543
Grade 5 Spanish Science	3,550	4,000	4,402

Assessment	2012–2015 Level II	2015–2016 Level II	Final Recommended Level II	Level III
Algebra I	3,500	3,550	4,000	4,333
Algebra II	3,500	3,550	4,000	4,411
English I	3,750	3,775	4,000	4,691
English II	3,750	3,775	4,000	4,831
English III	3,750	3,775	4,000	4,546
Biology	3,500	3,550	4,000	4,576
U.S. History	3,500	3,550	4,000	4,440

# Scaling

Scaling is a statistical procedure that places raw scores on a common scoring metric in order to make test scores comparable across test administrations. As with previous Texas assessment programs, the STAAR program uses the Rasch Partial-Credit Model (RPCM) to place test items on the same scale across administrations for a given STAAR assessment. Once performance standards have been set for an assessment, the Rasch scale is then transformed to a more user-friendly metric to facilitate interpretation of the test scores. Details of the RPCM scaling method used in Texas are provided in chapter 3, "Standard Technical Processes."

# **Reporting Scales**

Scale scores for STAAR assessments are reported on either a horizontal scale or a vertical scale. Horizontal scale scores allow for direct comparisons of student performance between specific sets of test items from different test administrations. Vertical scale scores allow for direct comparisons of student scores across grades within a content area. Student increases in vertical scale scores provide information on the year-to-year growth of students. Refer to chapter 3, "Standard Technical Processes," for detailed information about the scaling process for the different types of reporting scales.

#### HORIZONTAL REPORTING SCALES

The following STAAR assessments are reported on horizontal scales:

- STAAR English grades 4 and 7 writing
- STAAR English grades 5 and 8 science
- STAAR English grade 8 social studies
- STAAR Spanish grade 4 writing
- STAAR Spanish grade 5 science
- All STAAR EOC assessments

For all STAAR assessments reported on a horizontal scale, a scale score of 4000 represents the final recommended Level II performance standard. In addition, the standard deviation for those scales was set to 500.

It is important to note that although Level II scale score values are fixed across horizontally scaled assessments, Level III scale score values vary across STAAR assessments. For a given assessment, the Level III scale score value remains constant over time.

The STAAR scale scores represent linear transformations of Rasch proficiency level estimate ( $\theta$ ). Specifically, the transformation is made by first multiplying  $\theta$  by a slope constant (A) and then adding an intercept constant (B). This operation is described by the equation below:

$$SS_{\theta} = A \times \theta + B \tag{1}$$

where  $SS_{\theta}$  is the scale score for a Rasch proficiency level estimate ( $\theta$ ). *A* and *B* in Equation (1) are referred to as the horizontal scaling constants. These same transformations will be applied each year to the Rasch proficiency level estimates ( $\theta$ ) for that year's set of test items. Values for the horizontal scaling constants are provided in Tables 4.11 and 4.12 for the horizontally scaled STAAR 3–8 and STAAR EOC assessments, respectively.

	STAAR Assessment		Δ	В	
Grade	Language	Content Area	A	Ъ	
4	English	Writing	522.0322	3300.4769	
7	English	Writing	505.0725	3227.2391	
5	English	Science	439.1622	2673.7302	
8	English	Science	516.7927	3051.6854	
8	English	Social Studies	468.3839	2849.6491	

STAAR Assessment		4	В		
Grade	Language	Content Area	A	В	
4	Spanish	Writing	574.7681	3230.9603	
5	Spanish	Science	439.1622	2673.7302	

Table 4.12. Horizontal Scaling Constants for STAAR EOC

STAAR Assessment	А	В
Algebra I	441.1057	3448.1767
Algebra II	491.1456	3898.8240
English I	453.3627	3550.2642
English II	472.9035	3482.6436
English III	526.3158	3743.1579
Biology	452.5972	3558.7180
U.S. history	494.3999	3577.7820

#### VERTICAL REPORTING SCALES

As required by TEC §39.036, TEA developed vertical scales for assessing student performance in grades 3–8 for mathematics and reading. Vertical scales were developed for the following grades and content areas in STAAR:

- STAAR English grades 3–8 mathematics
- STAAR English grades 3–8 reading
- STAAR Spanish grades 3–5 reading

The vertical scale established for the English versions of grades 3–5 mathematics was also applied to the Spanish versions of grades 3–5 mathematics, because the Spanish versions of the mathematics tests are transadapted from the English test forms. A vertical scale is not required for science, social studies, or writing at the elementary and middle school levels.

For grade 8 mathematics and English reading vertical scales, a scale score of 1700 represents the final recommended Level II performance standard. The standard deviation for the grades 3-8 vertical scales was set to 150.

For the STAAR Spanish grade 5 reading assessment, a scale score of 1582 represents the final recommended Level II performance standard. This scale score is set to the same value as the final recommended Level II performance standard for the STAAR English grade 5 reading assessment. The standard deviation for the Spanish reading vertical scale was set to 150.

It is important to note that although Level II scale score values are fixed for the highest grade in the vertical scale, the Level II scale score values for the other assessments in the vertical scale are different. However, these Level II scale score values, as well as the Level III scale score values, remain constant over time.

The linear transformation of the underlying Rasch proficiency level estimate ( $\theta$ ) for vertical scale scores is described by the equation below:

$$SS_{\theta} = A \times (\theta + V_q) + B \tag{2}$$

where  $SS_{\theta}$  is the scale score for a Rasch proficiency level estimate ( $\theta$ ). *A* and *B* are vertical scale score transformation constants, and  $V_g$  is the vertical scaling constant for each grade for Equation (2). The values of *A*, *B*, and  $V_g$  for the vertically scaled STAAR assessments are provided in Table 4.13. Once established, these same transformations are applied each year to the proficiency level estimates for that year's set of test questions.

STAAR Assessment			-		
Grade	Language	Content Area	А	В	Vg
3	English	Reading	113.7657	1523.3219	-2.0057
4	English	Reading	113.7657	1523.3219	-1.3854
5	English	Reading	113.7657	1523.3219	-1.0586
6	English	Reading	113.7657	1523.3219	-0.6679
7	English	Reading	113.7657	1523.3219	-0.2101
8	English	Reading	113.7657	1523.3219	0.0000
3	Spanish	Reading	135.2141	1393.7820	-0.8513
4	Spanish	Reading	135.2141	1393.7820	-0.2700
5	Spanish	Reading	135.2141	1393.7820	0.0000
3	English/Spanish	Mathematics	107.9372	1619.0471	-2.4791
4	English/Spanish	Mathematics	107.9372	1619.0471	-1.4486
5	English/Spanish	Mathematics	107.9372	1619.0471	-0.9990
6	English	Mathematics	107.9372	1619.0471	-0.1322
7	English	Mathematics	107.9372	1619.0471	0.0870
8	English	Mathematics	107.9372	1619.0471	0.0000

Table 4.13. Vertical Scale Score Transformation and Scaling Constants for
STAAR 3–8 Reading and Mathematics

## **Cumulative Score for Graduation**

Although HB 5 removed the cumulative score requirement for graduation, TEA used the minimum—and cumulative—score concepts during the transition from separate STAAR English I and English II reading and writing assessments to combined assessments. Students who took separate English I or English II reading and writing assessments in the 2011–2012 or 2012–2013 school years who passed one of the assessments, met at least the minimum score on the other, and achieved a combined scale score of 3750, met the graduation requirement for the combined assessment under HB 5.

# Equating

## **Overview**

Used in conjunction with the scaling process, equating is the statistical process that takes into account the slight differences in difficulty across test forms and administrations and allows for the scores to be placed onto a common scale. By using statistical methods, TEA equates the results of different tests so that scale scores across test forms and testing administrations can be compared. In the 2015–2016 school year, TEA conducted equating activities on the STAAR assessments that included pre-equating, post-equating, field-test equating, and comparability analysis. Refer to chapter 3, "Standard Technical Processes," for detailed information about equating.

## **Pre-Equating**

The pre-equating process takes place prior to test administration. It links a newly developed test form onto the scale of the item bank through the use of a set of items that appeared previously on one or more test forms. This permits the difficulty level of the newly developed form to be closely determined even prior to its administration. Thus, the anticipated raw scores that correspond to scale scores at performance standards can be identified. Pre-equating is conducted for all tests for which scale scores are reported as part of the test construction process. For some tests, post-equating is conducted as well. However, a pre-equating only model is used when a small or non-representative sample of students takes the assessment or when faster reporting of scores is a priority.

In STAAR, the pre-equating model applies to Algebra I, Algebra II, biology, and U.S. history assessments. In addition, braille, STAAR L, and STAAR A versions, as well as all STAAR forms administered in the summer or fall, are only pre-equated either because the testing population is too small (for example, for the STAAR L assessments and braille tests) or because the sample of students taking the test is not representative of the general population (for example, STAAR assessments that are administered in the summer or fall).
# **Post-Equating**

The post-equating process uses data from the operational test administration to reestimate item difficulties and place them onto the scale of the item bank. For the STAAR assessments, post-equating uses a conventional common-item non-equivalent groups equating design that is described in greater detail in chapter 3, "Standard Technical Processes." Post-equating is generally conducted for all primary administrations of the general STAAR 3–8 assessments and the English I and II general assessments administered in the spring. In addition for spring 2016, a calibration instead of post-equating was conducted for the English III assessment to set a new scale because it was the first administration.

STAAR post-equating is conducted on a sample of students. The requirements for the sample include a minimum sample size of 100,000 students, regional representation similar to the student population, ethnic distribution similar to the student population, and a stable raw score distribution. The STAAR Spanish reading and Spanish grade 4 writing assessments, on the other hand, will include nearly the entire population of test takers because the population is relatively small.

Only the test forms with the equating item sets are used in determining the equating constant that will place the base-test Rasch item difficulties on the Rasch scale common across administrations for an assessment. However, student data from all test forms are used in estimating the Rasch item difficulties for the base-test items.

# **Field-Test Equating**

To replenish the item bank as new tests are created each year, newly developed items must be field-tested and equated to the item bank scale, as described in the technical details and procedures in chapter 3, "Standard Technical Processes." Whenever possible, embedded designs are used to field test new items so that test takers are unable to distinguish between the field-test items and operational items on each test form. This results in student performance data that are more stable.

In the 2015–2016 school year, field-test equating was conducted only for the STAAR EOC assessments through an embedded field-test design. In general, a number of multiple-choice field-test items were embedded in each STAAR assessment. Additionally, for English I, English II, and English III assessments, there was an embedded short answer question.

### **Comparability Analyses**

When tests are administered both online and on paper (as is the case for STAAR EOC assessments), the Standards for Educational and Psychological Testing (AERA, APA, NCME, 2014) require that comparability information regarding test scores that result from online and paper modes be collected and evaluated.

As part of the equating process for STAAR EOC during the spring administrations in 2009, 2010, and 2011, comparability analyses were conducted for all EOC



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assessments. The results of these analyses showed no effect of testing mode for the mathematics, science, and social studies EOC assessments. However, some differences in student performance between online and paper modes were observed for the STAAR English assessments. As a result, additional studies to evaluate the comparability between online and paper testing modes were planned for the English assessments. This started with the spring 2012 administration for the English I reading and writing assessments and continued with the English II reading and writing assessments in spring 2013. Information about past English I and English II comparability analyses can be found in the past Technical Digests.

Comparability analyses were conducted for the redesigned English I and English II assessments in spring 2014 and for English III in spring 2016 to determine whether the use of the same raw score to scale score (RSSS) conversion table for both testing modes (online and paper) was warranted. The matched sample comparability analyses method (MSCA) (Way, Davis, & Fitzpatrick, 2006) was used to evaluate comparability at the test level. Both analyses suggested an effect of testing mode. Consequently, comparability adjustments were made to generate separate RSSS tables for online and paper tests for the spring, summer, and fall 2014 administrations of English I and English II and for the spring 2016 administration of English III. These adjustments involved using a raw score equivalency table, which maps each raw score on the online test to an equivalent raw score on the paper test in order to produce equivalent scale scores for the online assessment.

# Reliability

Reliability refers to the expectation that repeated administrations of the same test should generate consistent results. Reliability is a critical technical characteristic of any measurement instrument because unreliable scores cannot be interpreted as valid indicators of students' knowledge and skills.

During the 2015–2016 school year, reliability for the STAAR test score 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**

Internal consistency is a measure of the consistency with which students respond to the items within a test. For tests involving dichotomously scored (i.e., multiple-choice and gridded-response) items, the Kuder-Richardson 20 (KR20) statistic was used to estimate reliability. For tests involving a combination of dichotomous and polytomous constructed-response items, stratified coefficient alpha was used to estimate reliability.

As a general rule, reliability coefficients ranging from 0.70 to 0.79 are considered adequate, those from 0.80 to 0.89 are considered good, and those at 0.90 or above are

considered excellent. However, what is considered appropriate can vary in accordance with how assessment results are used.

For the primary STAAR English and STAAR Spanish assessments administered in spring 2016, the internal consistency estimates for the total group ranged from 0.80 to 0.93. Internal consistency estimates across grades and content areas were found to be of a similarly high level, with no noticeable increases or decreases across grades or content areas. For the different student groups, estimates were found to be similar. For grade 8 mathematics, for example, the reliability for the total group was 0.91, for females only 0.91, for males only 0.91, for African Americans only 0.89, for Hispanics only 0.90, and for whites only 0.91.

Because internal consistency estimates typically decrease as the number of test items decrease, internal consistency estimates for individual reporting categories can be noticeably lower than those for the full assessment. In spring 2016, the internal consistency estimates at the reporting category level were generally lower than at the total score level. Lower internal consistency estimates indicate that reporting category scores were not as reliable as those based on the full assessment. For example, the STAAR English grade 5 mathematics reporting category "Data Analysis and Personal Financial Literacy" contains only six items. The estimated reliability for the scores in this reporting category was 0.58. Therefore, the lower reliability at the reporting category level should be taken into account when making interpretations of the scores at this level.

Estimates of internal consistency at the overall level, as well as at the level of reporting categories for student groups for primary spring 2016 STAAR assessments (including STAAR Spanish, STAAR L, and STAAR A), are provided in Appendix B.

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

Classical standard error of measurement (SEM) represents the amount of variance in a score that results from random factors other than what the assessment is intended to measure. The SEM is helpful for quantifying the margin of uncertainty that occurs on every test. For the primary STAAR English and STAAR Spanish assessments in spring 2016, SEM values are generally between 2 to 5 raw score points. The SEM values for the primary STAAR assessments (including STAAR Spanish, STAAR L, and STAAR A) administered in spring 2016 are provided in Appendix B.

# **Conditional Standard Error of Measurement**

It is important to note that the SEM index provides only an estimate of the average test score error for all students regardless of their individual levels of proficiency. By comparison, the conditional standard error of measurement (CSEM) provides a reliability estimate at each score point on a test. More specifically, CSEM is an estimate of the average test score measurement error that is conditional on the proficiency or scale score estimate. For the 2015–2016 school year, CSEM values for vertically scaled assessments were approximately 30 to 50 scale score points in the middle of the scale score ranges. For the remaining STAAR horizontally scaled tests,



the CSEM values were approximately 110 to 260 scale score points in the middle of the scale score ranges. CSEM values for all spring 2016 STAAR administrations (including STAAR Spanish, STAAR L, and STAAR A) are provided in Appendix B.

# **Classification Accuracy**

Classification accuracy provides an estimate of the accuracy of student classifications into performance categories based on current test results. Classification accuracy rates for primary STAAR assessments during the 2015–2016 school year range from 79.1 to 95.4 percent. Classification accuracy rates for all primary spring 2016 STAAR administrations (including STAAR Spanish, STAAR L, and STAAR A) are provided in Appendix B.

# Validity

Validity refers to the extent to which a test measures what it is intended to measure. When test scores are used to make inferences about student achievement, it is important that the assessment supports those inferences. In other words, the assessment should measure what it was intended to measure in order for any uses and interpretations about test results to be valid.

Texas follows national standards of best practice and collects validity evidence annually to support the interpretations and uses of the STAAR test scores. The Texas Technical Advisory Committee (TTAC), a panel of national testing experts created specifically for the Texas assessment program, provides ongoing input to TEA about STAAR validity evidence. Validity evidence for an assessment can come from a variety of sources, including test content, response processes, internal structure, relationships with other variables, and analysis of the consequences of testing. The sections that follow describe how different types of validity evidence were collected for the STAAR assessments. Refer to chapter 3, "Standard Technical Processes," for additional information about validity.

# **Evidence Based on Test Content**

Validity evidence based on test content refers to evidence of the relationship between tested content and the construct that the assessment is intended to measure. The STAAR assessments have been developed to align with content as defined by the TEKS. Content validity evidence is collected at all stages of the test development process. Nationally established test development processes for the Texas assessment program are followed while developing the STAAR assessments in order to support the use of the STAAR scores in making inferences about students' knowledge and understanding of the TEKS.

#### **RELATIONSHIP TO THE STATEWIDE CURRICULUM**

The TEKS are designed to ensure that Texas students receive a solid education that will enable them to be successful in life, whether they choose to pursue higher education or enter the workforce directly after graduation. Specifically, the TEKS are

aligned to the Texas College and Career Readiness Standards (CCRS). The CCRS specify the knowledge and skills necessary to succeed in entry-level community college and university courses. The CCRS have been incorporated into the secondary TEKS to form a vertically articulated set of curriculum standards. STAAR focuses on fewer skills and addresses those skills in a deeper manner. This is accomplished through the identification of readiness and supporting standards in the TEKS and includes a larger number of items that assess readiness standards in the test blueprint. The STAAR assessments, therefore, focus on the TEKS that are most critical to success in the next grade or course.

#### **EDUCATOR INPUT**

As part of the development of STAAR, teachers, curriculum specialists, test development specialists, college educators, and TEA staff worked together in advisory committees to identify appropriate assessment reporting categories for the STAAR assessments. The input of the advisory committees is reflected in the assessed curricula and test blueprints. In addition, prototype items were developed for the STAAR assessments early in the development process. The educator advisory committees reviewed these prototypes to identify how well the items would measure the student expectations to which the items were aligned. These early reviews provided valuable suggestions for item development guidelines and item types. Item development guidelines continue to be refined through the test development process, as various STAAR item review educator committees share their feedback about how the student expectations could be effectively assessed.

As part of the annual process of item development, committees of Texas educators meet to review the STAAR items, including STAAR Spanish, and confirm that each item appropriately measures the TEKS to which it is aligned. These committees also review items for content and bias. Two distinct types of educator committee meetings are regularly held to support the validity of test content: item review committees and content validation committees. Item review committees are made up of Texas K–12 educators, and these committees revise and edit items, as appropriate, prior to test administrations. Item review committees are convened for all STAAR assessments. Content validation committees, by comparison, are made up of university faculty who are experts in the relevant subject matter. Though these committees do not edit or revise items, they can recommend that certain items be replaced on operational assessments. Content validation committee meetings are held for all STAAR EOC assessments.

#### **TEST DEVELOPER INPUT**

Item writers and reviewers follow test development guidelines that explain how content aligned to given TEKS should be measured. At each stage of development, writers and reviewers verify the alignment of the items with the assessed student expectations.

### **Evidence Based on Response Processes**

Response processes refer to the cognitive behaviors that are required to respond to a test item. Texas collects evidence to show that the way students respond to items on the STAAR assessments reflects accurate measurement of the construct.

#### **ITEM TYPES**

Student response processes on the STAAR assessments vary according to item type and administration mode. Across STAAR, four types of responses are required of students: multiple-choice items on all assessments, gridded-response items on mathematics and science assessments, written compositions on grade 4 and 7 writing and English I, English II, and English III assessments, and short answer responses on English I, English II, and English III assessments.

Multiple-choice items are developed so that students must apply what they have learned about the content thereby supporting an accurate measurement of the construct being assessed.

Gridded-response items require students to determine a numerical answer and then record their answer using a griddable-item response box. This item type facilitates the assessment of the students' knowledge and skills at an even deeper level by requiring students to generate answers independently without being influenced by given answer options. This item type is helpful in assessing the constructs of mathematics and science.

Written compositions require students to construct (i.e., write) an original response to a given prompt. This provides an authentic way to evaluate how well students can compose a written response within various genres of writing.

In addition, passage-based multiple-choice and short answer responses are used for the STAAR reading and writing assessments. Passage-based items can be an individual item or a group of items associated with a common stimulus, such as a literary selection or an informational passage. The use of passage-based items requires students to apply their knowledge and skills within the context introduced by the stimulus in order to respond correctly to the items. This skill is important in assessing the language arts constructs of reading and writing.

To support these mixed-format assessments, Texas gathers theoretical and empirical evidence that supports the expectation that the way students respond to test items does not add construct-irrelevant variance. Texas also gathers evidence to show that response processes do not advantage or disadvantage one or more student groups. This evidence comes from several sources. When new item types or changes to the format of existing item types are considered for STAAR assessments, cognitive labs are used to study the way students engage with the various item presentations. After item types are determined to be appropriate for STAAR, evidence about student responses is gathered annually through educator and expert reviews and analyses of individual student responses to these items. Every year, during item reviews, educators

evaluate whether the content for a given item type is being appropriately assessed and whether students will be able to accurately demonstrate their knowledge of the construct given the items' planned format. When items are field-tested, additional data are gathered about students' responses. Data such as item difficulty, item point-biserial correlations, and differential item functioning are all evaluated with regard to the item type. For additional information, see the Item Analyses section of chapter 3, "Standard Technical Processes."



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, statistical key checks are conducted for all STAAR assessments (including STAAR Spanish, STAAR L, and STAAR A) during the equating process. A statistical key check is a procedure in which the statistical properties of all items on every test form are computed. Items whose statistics do not meet predetermined criteria (see the Item Analyses section in 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 items and written compositions, rubrics are used by human readers to score student responses. All score rubrics for the STAAR assessments have been validated by educator committees and content experts. In addition, TEA has implemented a rigorous scoring process for the constructed-response items that includes training and qualification requirements for readers; ongoing monitoring during scoring; adjudication and resolution processes for student responses that do not meet the exact/adjacent scoring requirements; and rescoring of responses for which concerns have been raised regarding the assigned score by districts, campuses, or teachers. A more comprehensive description of the scoring process for constructed-response items is available in chapter 2, "Building a High-Quality Assessment System."

Score reliability for every STAAR assessment is generated and evaluated in terms of reader agreement rates. Three agreement rates are generated for short answer items (see Table 4.14a), which are scored with the exact agreement model:

- the exact agreement rate between the first reader's score and the second reader's score,
- the exact agreement rate of the resolution (3<sup>rd</sup>) reader's score with either the first reader's score or the second reader's score, and
- the total agreement rate among the three reader scores.

When there is no exact agreement among the first reader's score, the second reader's score, and the resolution reader's score, the short answer student response is adjudicated by a scoring director.

	Number of	Agreemer	Total	
STAAR Assessment Short Answers	Responses Read	After 2 readings	After 3 readings	Agreement Rate (%)
	822,142 (paper)	67%	30%	97%
STAAR English I	37,066 (online)	66%	31%	97%
STAAR A English I	54,994	72%	25%	97%
	761,726 (paper)	58%	36%	94%
STAAR English II	34,112 (online)	56%	37%	93%
STAAR A English II	41,378	68%	28%	96%
	18,452 (paper)	64%	32%	96%
STAAR English III	2,132 (online)	64%	31%	95%

Table 4.14a. Summary of Reader Agreement (Reliability)for 2016 STAAR Short Answers

The written compositions are scored with the adjacent agreement model, the exact agreement rate, the adjacent agreement rate, and the total agreement rate (exact and adjacent) between the first reader's score and the second reader's score are generated (see Table 4.14b). When the first reader's score and the second reader's score are not in exact or adjacent agreement, the written composition student response is adjudicated by a scoring director.

Table 4.14b. Summary of Reader Agreement (Reliability) for 2016 STAAR Written Composition

STAAR Assessment Written Composition	Number of Responses Read	Agreement Rate (%) After 2 Readings		Total Agreement	
Composition	Responses Read	Exact	Adjacent	Rate (%)	
STAAR grade 4 writing (English)	352,398	56%	40%	96%	
STAAR grade 4 writing (Spanish)	25,064	59%	38%	97%	
STAAR A grade 4 writing	11,887	73%	23%	96%	
STAAR grade 7 writing	362,885	54%	42%	96%	
STAAR A grade 7 writing	18,131	69%	27%	96%	
STAAR English I	411,071 (paper) 18,603 (online)	57% 59%	39% 37%	96% 96%	
STAAR A English I	27,540	73%	25%	98%	
STAAR English II	380,863 (paper) 17,079 (online)	54% 56%	42% 39%	96% 95%	
STAAR A English II	20,715	70%	27%	97%	
STAAR English III	9,226 (paper)	56%	39%	95%	

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STAAR Assessment Written Number of Composition Responses Read		Agreement Rate (%) After 2 Readings		Total Agreement
composition	Responses Redu	Exact	Adjacent	Rate (%)
	1,066 (online)	59%	36%	95%

Validity is evaluated through the use of validity papers, which are student responses from the field test and 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 throughout the scoring project. An important feature of validity papers is that they 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. Validity agreement rate in Table 4.15 is expressed in terms of exact agreement between the score assigned by a given reader and the "true" score approved by TEA.

STAAR Assessment	Agreement Rate (%)
STAAR grade 4 writing (English)	69%
STAAR grade 4 writing (Spanish)	67%
STAAR A grade 4 writing	74%
STAAR grade 7 writing	67%
STAAR A grade 7 writing	66%
STAAR English I short answer	75% (paper and online)
STAAR A English I short answer	72%
STAAR English I written composition	67% (paper and online)
STAAR A English I written composition	64%
STAAR English II short answer	74% (paper and online)
STAAR A English II short answer	76%
STAAR English II written composition	70% (paper and online)
STAAR A English II written composition	74%

#### Table 4.15. Summary of Validity Results for 2016 STAAR

#### ADMINISTRATION MODE

All STAAR EOC assessments are administered in both paper and online testing modes. Texas has conducted comparability studies comparing student responses in online and paper versions for all STAAR EOC assessments. In these studies, the

comparability of scores was evaluated to determine whether an effect due to testing mode exists.

As described in the Comparability Analyses section, for all STAAR mathematics, science, and social studies EOC assessments, no significant effects due to testing mode were observed. The exceptions are STAAR English I, English II, and English III, for which different online score conversion tables were produced to adjust for the effect of testing mode.

### **Evidence Based on Internal Structure**

Texas collects evidence that shows the relationship of students' responses between items, within reporting categories of items, and within the full tests in order to verify that the elements of an assessment conform to the intended test construct. Texas conducts annual internal consistency studies to gather evidence based on internal structure. The internal consistency of the STAAR assessments is evaluated every year using KR20 for assessments that have only dichotomously scored items (i.e., multiple-choice and gridded-response items). For the STAAR assessments that have a combination of multiple-choice items and short answer items or written compositions (i.e., the writing and the English assessments), internal consistency is evaluated using stratified coefficient alpha. These internal consistency evaluations are made for all students and for student groups such as female, male, African American, Hispanic, and white students. Estimates of internal consistency are made for the full test as well as for each reporting category within a content area and can be found in Appendix B. The Reliability section of this chapter provides a summary of these estimates.

### **Evidence Based on Relationships to Other Variables**

Another method Texas uses to provide validity evidence for the STAAR assessments is analyzing the relationship between performance on STAAR and performance on other assessments, a process that supports what is referred to as criterion-related validity. Evidence can be collected to show that the empirical relationships are consistent with the expected relationships. Numerous research studies were conducted as part of the development of STAAR to evaluate the relationships between scores on the STAAR assessments and other related variables. These studies were used to inform the establishment of performance standards across the STAAR assessments and can be grouped into the following six categories:

- STAAR-to-TAKS comparison studies, which link performance on the STAAR assessments to performance on TAKS assessments (for example, STAAR grade 7 mathematics and TAKS grade 7 mathematics);
- STAAR linking studies, which link performance on the STAAR assessments across grade levels or courses in the same content areas (for example, grade 4 reading and grade 5 reading or grade 8 mathematics and Algebra I);
- STAAR correlation estimates, which evaluate the strength of the relationship (or the lack of one) between scores on the STAAR assessments across different

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content areas (for example, grade 4 mathematics and grade 4 reading, or biology and U.S. history);

- grade correlation studies, which link performance on the STAAR EOC assessments to course grades;
- external validity studies, which link performance on the STAAR assessments to external measures (specifically: SAT, ACT, THEA, ACCUPLACER, Explore, and Readistep); and
- college students taking STAAR studies, which link performance on the STAAR EOC assessments to college course grades.

Results from all of these categories of studies are not given in this chapter, but detailed information can be found by referring to the following resources.

- STAAR correlation estimates based on student performance on the primary 2015–2016 STAAR administrations are provided in Appendix B.
- For a detailed discussion of the process by which research studies were planned and implemented to support the STAAR standard setting process, refer to chapter 3 of the "State of Texas Assessments of Academic Readiness (STAAR) Standard Setting Technical Report," available on the STAAR Performance Standards page of TEA's Student Assessment Division website.
- Results for most of the EOC research studies are available in individual study profiles and in an overall study quality summary on the STAAR EOC External Validity Studies page of TEA's Student Assessment Division website.

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

Another method to provide validity evidence is by documenting the intended and unintended consequences of administering an assessment. The collection of consequential validity evidence typically occurs after a program has been in place for some time and on a regular basis. Surveys should be developed and administered to educators and stakeholders in the state to evaluate the impact of STAAR test results on classroom instruction, resource allocation, teacher development, and student academic choices and postsecondary endeavors.

### Intended Interpretations and Uses of STAAR Test Scores

Given the important stakes associated with the STAAR assessment program, valid STAAR test scores are critical in supporting their intended interpretations and uses. For the STAAR assessments, the intended interpretations of test results are stated in the policy definitions of the performance levels. Student test results for STAAR are classified into one of three performance levels:

- Level I: Unsatisfactory Academic Performance
- Level II: Satisfactory Academic Performance
- Level III: Advanced Academic Performance

Refer to the Performance Standards section in this chapter for the policy definitions of the STAAR performance levels. Each performance level describes a student's knowledge and skills in a content area and a student's level of preparation for the next grade or course. Below are intended uses of STAAR test scores based on the policy definitions for the performance levels.

#### STUDENT-LEVEL

- Performance on STAAR is one indicator of a student's level of proficiency in a content area or specific course.
- Performance on STAAR is one indicator of a student's readiness for the next course or grade level in the same content area.
- Performance on STAAR is one indicator of a student's possible need for academic intervention.
- Performance on STAAR across years provides one indicator of a student's academic progress within a content area.
- Performance on STAAR may provide information about expected student performance on external assessments, such as the ACT or SAT, that measure similar knowledge and skills.

#### **CAMPUS- OR DISTRICT-LEVEL**

- STAAR performance results can be aggregated to provide one indicator of overall student proficiency at a campus or district.
- STAAR performance results can be aggregated to provide one indicator of overall student readiness (for the next course or grade level in the same content area) at a campus or district.
- STAAR performance results can be aggregated across years to provide one indicator of overall student academic progress at a campus or district.

# **Measures of Student Progress**

Student progress measures provide information beyond performance levels by providing a comparison of performance over time. Whereas performance level information describes students' current achievement, progress measures describe students' achievement across multiple years.

Progress measures are legislatively mandated as an essential aspect of the Texas assessment program. Specifically, the STAAR progress measures must reflect annual improvement and indicate the progress required for students to perform satisfactorily in grades 5 and 8 and on the EOC assessments required for graduation (TEC §39.034).

In 2012–2013, STAAR progress measures were reported for the first time. In 2015–2016, progress measures were calculated and reported for English reading and mathematics for grades 4–8, Spanish reading and math for grades 4 and 5, and Algebra I and English II assessments.

For STAAR, progress is measured as a student's gain score, meaning the difference between the score a student achieved in the prior year and the score a student achieved in the current year. These gain scores are then classified as *Did Not Meet*, *Met*, or *Exceeded* in relation to progress targets.

# 2013–2014 Progress Measure Updates

Updates to the implementation of progress measures both to include more students in the calculation of progress measures and to respond to legislative changes were made in 2013.

#### CHANGES MADE TO INCLUDE MORE STUDENTS IN PROGRESS MEASURE CALCULATIONS

Accelerated students/skipped grade(s)

In 2013, students had to follow the typical grade/course sequence and test in consecutive grades/courses in order to receive a progress measure, with the exception of students who went from grade 7 mathematics to Algebra I. Beginning in 2014, progress measures were provided for all students who received accelerated instruction and skipped grades or courses. For example, a progress measure was reported if a student tested in grade 5 reading in 2013 and in grade 7 reading in 2014.

Changes related to different language-version tests

The requirement that students test in the same language in subsequent years has changed for mathematics. Beginning in 2014, progress measures were reported for students who test in a different language for mathematics. Because Spanish and English mathematics tests consist of the same items (i.e., the Spanish items are transadapted versions of the English items) and because the Spanish and English mathematics scores are reported on the same scale, progress measures are generated despite the change from one languageversion test to the other. Specifically, progress measures are reported for students who test in Spanish and then in English, as well as those who test in English and then in Spanish.

The same change was not made for reading because the Spanish and English tests contain different items, and scores are reported on separate scales. Therefore, progress measures for reading are provided only for students who test in the same language in the prior year and the current year.

Progress for EOC

In 2013, only the spring administrations of EOC assessments were used to compute progress measures. Beginning in 2014, all EOC administrations were considered for use within these calculations. However, progress is computed only on a student's first attempt of an EOC test.

Previous year retests

Beginning in 2014, if a student retested in the previous year in grades 5 or 8 (e.g., a current grade 6 student who retested in grade 5 or a current Algebra I student who retested in grade 8 mathematics), the higher valid score between the primary administration and May administration is used for progress measure calculation. Previous year June administration retest scores for grades 5 and 8 are not used for progress measure calculations. If a student took the same EOC test multiple times during the previous year, the score from the first administration of the previous year test is used to calculate progress.

#### ELL parent denials

ELLs whose parents have denied bilingual or ESL services are not eligible to receive an ELL progress measure regardless of any other factor. However, progress for these students is measured by the general STAAR progress measure.

#### **PROGRESS MEASURES UPDATES MADE IN RESPONSE TO LEGISLATIVE CHANGES IN 2013**

English tests

Beginning in 2014, redesigned EOC English tests were administered. Rather than having separate English reading and writing tests, these assessments were combined into one English test per course (English I and English II). This change to the assessments impacted STAAR progress measures. In order to measure progress across two assessments, the tests must measure the same construct or content area. For example, in 2013 progress was measured from grade 8 reading to English I reading. Beginning in 2014, however, the English I test included both reading and writing content; therefore, progress could not be measured from either grade 8 reading or grade 7 writing to the new combined English I test.

Additionally, students took separate English I reading and English I writing tests in 2013, and progress could not be measured from those separate English I tests to the new combined English II test administered in 2014. For most students, progress for English II was measured for the first time in spring 2015, after the new combined English tests had been administered for two years.

### 2014–2015 Progress Measure Updates

Changes to various aspects of the STAAR program affected TEA's ability to report student progress on the assessments. The list below outlines adjustments to the STAAR progress measures reported for the 2014–2015 school year:

- Students did not receive a STAAR progress measure for mathematics in grades 4–8 (Algebra I students still received a STAAR progress measure).
- A STAAR progress measure was reported for the first time for grade 7 writing.
- A STAAR progress measure was reported for eligible STAAR A students who took STAAR or STAAR L in 2013–2014.
- Students did not receive a STAAR Alternate 2 progress measure.

### 2015–2016 Progress Measure Updates

There were some adjustments to the STAAR progress measures reported for the 2015–2016 school year:

- Students did not receive a STAAR progress measure for grade 7 writing because grade 4 and 7 writing tests were shortened in the 2015–2016 school year.
- Progress measure was available for STAAR Alternate 2 in 2016.

### **Progress Classifications**

In order to interpret the gain scores, the scores are compared to progress targets to determine if a student *Did Not Meet, Met,* or *Exceeded* the progress expectation. The progress targets define the expectation of annual progress for each grade and content area. These progress targets are grounded in the STAAR performance standards and the goal of having all students achieve at or above Level II: Satisfactory Academic Performance.

Specifically, the *Met* progress target is defined as the distance between the final recommended performance standards from the prior year grade and the current year grade in the same content area. For students who achieved Level I or Level II performance in the prior year, the *Met* progress target is based on the distance between the final recommended Level II standards in the prior year and current year

grades in the same content area. This definition is based on the goal that students in Level II will at least maintain Level II performance. For students who achieved Level III performance in the prior year, the progress target is based on the distance between the Level III standards in the prior year and current year grades in the same content area.

The *Exceeded* progress classification is a designation reserved for those students who have demonstrated significant growth over the course of the year, beyond that of the *Met* progress target. The *Exceeded* progress target is defined as the distance between the final recommended Level II standard in the prior year and the Level III standard in the current year.

Students with gain scores less than the *Met* progress target are classified as *Did Not Meet* progress. Student with gain scores greater than or equal to the *Met* progress target and less than or equal to the *Exceeded* progress target are classified as having *Met* the progress target. Students with gain scores greater than the *Exceeded* progress target are classified as having *Exceeded* the progress target.

Because the Level II and Level III performance standards are not the same across grades and content areas (i.e., they do not have the same numerical value), the *Met* and *Exceeded* progress targets differ from grade to grade and across content areas. Table 4.16 lists the STAAR progress measure targets.

Current Year Test	Prior Year Test	<i>Met</i> Level I/II <sup>1</sup> Target	<i>Met</i> Level III <sup>2</sup> Target	Exceeded <sup>3</sup> Target	Top Score Range⁴	Chance Score Range⁵
Grade 4 mathematics <sup>6</sup>	Grade 3 mathematics	103	74	184	46-48	0-11
Grade 5 mathematics <sup>6</sup>	Grade 4 mathematics	36	54	135	48-50	0-11
Grade 6 mathematics	Grade 5 mathematics	28	48	147	50-52	0-12
Grade 7 mathematics	Grade 6 mathematics	35	26	145	52-54	0-12
Grade 8 mathematics	Grade 7 mathematics	12	56	166	54-56	0-13
Algebra I	Grade 7 mathematics	2312	2535	2645	52-54	0-12
Algebra I	Grade 8 mathematics	2300	2479	2633	52-54	0-12
Grade 4 English reading	Grade 3 English reading	82	78	165	42–44	0–11
Grade 4 Spanish reading	Grade 3 Spanish reading	95	104	192	42–44	0–11

#### Table 4.16. 2016 STAAR Progress Measure Targets

#### TECHNICAL DIGEST 2015 - 2016

Current Year Test	Prior Year Test	<i>Met</i> Level I/II <sup>1</sup> Target	<i>Met</i> Level III <sup>2</sup> Target	<i>Exceeded</i> <sup>3</sup> Target	Top Score Range <sup>4</sup>	Chance Score Range <sup>5</sup>
Grade 5 English reading	Grade 4 English reading	32	34	117	44–46	0–11
Grade 5 Spanish reading	Grade 4 Spanish reading	43	65	162	44–46	0–11
Grade 6 reading	Grade 5 English reading	47	51	136	46–48	0–12
Grade 7 reading	Grade 6 reading	45	35	124	48–50	0–12
Grade 8 reading	Grade 7 reading	26	30	109	50–52	0–13
English II	English I	0	140	831	90–92	0–18

#### NOTE:

<sup>1</sup> Met Level I/II is the distance or difference between the final recommended Level II standards on the current-year and prior-year tests.

<sup>2</sup> Met Level III is the distance or difference between the Level III standards on the current-year and prior-year tests.
<sup>3</sup> Exceeded is the distance or difference between the current-year test Level III standard and the prior-year test final recommended Level II standard.

<sup>4</sup> Top Score Range is the range of the top three possible raw scores on the current-year test.

<sup>5</sup> Chance Score Range is the range of raw scores that could be reasonably attained through guessing alone. For reading and Algebra I, chance is defined as ¼ of the multiple-choice questions (i.e., not including griddable questions). Chance on English II is defined as ¼ of the possible multiple-choice raw-score points, plus the weighted (x3) value associated with summed scores of 2 on the essays, and scores of zero on the short answer questions.
<sup>6</sup> Applies for both English and Spanish mathematics.

Steps for calculating progress measures and progress targets for each STAAR grade and content area, including when students skip grade levels, can be found in the "Calculating Progress Measures" document on the Progress Measures page of TEA's Student Assessment Division website.

### **Classification Exceptions**

There are some places on the STAAR scale, specifically at the extreme high and low ends of the scale, where the application of the *Did Not Meet*, *Met*, and *Exceeded* definitions would not be appropriate. At the extreme ends of the scale, unlike the rest of the scale, answering one more question correctly results in large differences in scale scores. For this reason, several places on the scale have been identified as exceptions to the *Did Not Meet*, *Met*, and *Exceeded* definitions.

- All students scoring at the three highest raw scores in the current year will be classified as having *Exceeded* the progress target.
- Students who maintained Level III performance from the prior year to the current year will be classified as having *Met* or *Exceeded* the progress target. (*Did Not Meet* classification will not be applied to these students.)
- Students scoring at or below chance in the current year will be classified as *Did Not Meet* progress.

Chance represents the score that could be reasonably obtained by guessing alone. For the mathematics and reading assessments, chance is defined as 25 percent of the



possible multiple-choice raw-score points, as these questions have four answer options. The English I and English II assessments include multiple-choice questions, short answer questions, and essays that are then weighted and combined to compute the total test score. Chance on these assessments is defined as 25 percent of the possible multiple-choice raw-score points, scores of zero on the short answer questions, plus the weighted value associated with summed scores of 2 on the essays (representing a rubric score of 1 from both readers).

The score values associated with these exceptions for each STAAR grade and content can be found in Table 4.16 and in the "Calculating Progress Measures" document on the Progress Measures page of TEA's Student Assessment Division website.

# Results

STAAR progress measure results from 2015–2016 are provided, by performance level, in Appendix B. For each grade and content area or course, the largest numbers of students were classified as either *Did Not Meet* or *Met*. In contrast, the *Exceeded* classification applied to a smaller number of students. This pattern was expected because, by definition, it requires significantly more progress to receive an *Exceeded* progress classification than to receive the *Met* progress classification.

# **STAAR On-Track Measure**

While the STAAR progress measure accounts for performance from the prior year and the current year, it does not include any information about how the student is likely to perform in the future. Because this additional information may be helpful to students, teachers, and other stakeholders, TEA developed the STAAR on-track measure, which was reported for the first time in 2013–2014. Specifically, the on-track measure used the STAAR progress measure and extrapolated performance into future years to determine if a student is on track to achieve Level II performance in a later grade or course.

The STAAR on-track measure is reported for students in grades 4 through 8 in mathematics and reading. The STAAR on-track measure is not available for EOC tests. In 2016, on-track measures were available for English reading in grades 4–7, Spanish reading in grade 4, and mathematics in grades 4–8. The STAAR on-track measure is calculated and reported for the recommended Level II standard.

On-track is measured only for students who take STAAR assessments (including STAAR Spanish, STAAR L, and STAAR A). There is no on-track measure for STAAR Alternate 2 or ELLs who are eligible for the ELL progress measure.

In order to calculate the STAAR on-track measure, three assessments covering the same content area must be available (previous year, current year, and target year). For example, on track can be calculated for grade 7 reading (current year assessment) because the previous year assessment was grade 6 reading and the target year assessment will be grade 8 reading; all three of these assessments measure reading. However, on track cannot be calculated for grade 8 reading because the next

assessment in a traditional course-taking sequence will be English I, which includes both reading and writing content. Therefore, although the previous year assessment (grade 7 reading) and the current year assessment (grade 8 reading) cover the same content area, the target year assessment (English I) covers additional content and an on-track measure cannot be calculated. In addition, the STAAR on-track measure cannot be calculated for English I because the previous year assessment (grade 8 reading) covers different content.

Additional information about the STAAR on-track measure and the steps taken to calculate these measures can be found on the Progress Measures page of TEA's Student Assessment Division website.

# English Language Learner Progress Measure

The Texas English Language Learner (ELL) Progress Measure provides performance expectations on the STAAR content-area assessments for Texas ELL students. The STAAR expectations take into account the level of English language proficiency ELL students possess, thus providing a more meaningful gauge of annual progress for these students than would the STAAR progress measure.

The ELL progress measure was created specifically for Texas ELL students. It takes into account the time needed to acquire the English language and to fully demonstrate grade-level academic skills in English. The measure provides information to parents and teachers about the progress students have made even if they have yet to achieve Level II performance standards and pass the STAAR tests.

To be eligible for the ELL Progress Measure, a student must:

- be classified as limited English proficient (LEP),
- take the English language versions of STAAR,
- have a Texas English Language Proficiency System (TELPAS) composite score, and
- not have a parent denial for ELL services.

The ELL Progress measure places eligible ELLs into a plan that specifies the expected number of years it should take for the student to meet the Level II: Satisfactory Academic Performance standards on STAAR content-area assessments. Plans range from one to four years, with some exceptions. All students that qualify for the ELL progress measure are placed into a plan based on the following information obtained from their TELPAS administration:

- number of years in U.S. schools,
- TELPAS composite proficiency level, and
- whether or not they were classified as having extenuating circumstances.



The data used to determine a student's plan must be from the same year and from 2014 or later. Students with interrupted formal education (SIFE) or those who are classified as unschooled asylees and refugees are given one additional year (up to a maximum of five years) in their progress measure plan. All students are given an extra year in their plan for English I and II assessments because of the level of English language proficiency needed to engage with STAAR EOC reading passages and to construct essays for the writing portion of the assessments. Note, however, that students with extenuating circumstances, who already receive an extra year in their plans, are not given another year in their plans for the English assessments. Table 4.17 shows how a student's plan for the ELL progress measure is determined based on these three pieces of information.

Number of Years in U.S. Schools	TELPAS Composite Proficiency Level	Extenuating Circumstances	ELL Progress Measure Plan for All Tests except English I/English II	ELL Progress Measure Plan for English I/English II
1	Decipping	Yes	5-Year Plan	5-Year Plan
1	Beginning	No	4-Year Plan	5-Year Plan
1	Intermediate	Yes	4-Year Plan	4-Year Plan
1	Internediate	No	3-Year Plan	4-Year Plan
1	Advanced	Yes	3-Year Plan	3-Year Plan
1	Auvanceu	No	2-Year Plan	3-Year Plan
1	Advonced High	Yes	2-Year Plan	2-Year Plan
1	Advanced High	No	1-Year Plan	2-Year Plan
	Intermediate or	Yes	5-Year Plan	5-Year Plan
2	Below	No	4-Year Plan	5-Year Plan
2	Advanced	Yes	4-Year Plan	4-Year Plan
2	2 Advanced	No	3-Year Plan	4-Year Plan
2	Advanced High	Yes	3-Year Plan	3-Year Plan
2	Advanced High	No	2-Year Plan	3-Year Plan
	Advanced or	Yes	5-Year Plan	5-Year Plan
3	Below	No	4-Year Plan	5-Year Plan
3	Advanced High	Yes	4-Year Plan	4-Year Plan
5	Auvanceu nigh	No	3-Year Plan	4-Year Plan
4	Any Composite	Yes	5-Year Plan	5-Year Plan
4	Proficiency Level	No	4-Year Plan	5-Year Plan
	Any Composite	Yes	5-Year Plan	5-Year Plan
5	Proficiency Level	No	N/A	5-Year Plan
<u> </u>	Any Composite	Yes	N/A	N/A
6+	Proficiency Level	No	N/A	N/A

#### Table 4.17. ELL Progress Measure Plans

When the current number of years in U.S. schools is greater than the number of years in the ELL progress measure plan, the student no longer qualifies for the ELL progress measure. He or she will be considered for inclusion in the STAAR progress measure.

This includes students with six or more years in U.S. schools who have exceeded the length of all plans.

Once the student's location in the ELL progress measure plan is determined, his or her scale score can be compared to scale score expectations for the appropriate grade and subject. Scale score *Met* and *Exceeded* expectations have been established by TEA on each STAAR content-area assessment. Students receive credit on the ELL progress measure for making progress on the STAAR assessment if their scale score is greater than or equal to the *Met* or *Exceeded* expectations, which are based on the plan in which they are placed and their current number of years in U.S. schools. In the final year of the plan, students are expected to meet the Level II: Satisfactory Academic Performance phase-in standard that is currently in place. After the final year of the plan, students still classified as LEP will stop receiving the ELL progress measure. The ELL Progress Measure expectations can be found on the Progress Measures page of TEA's Student Assessment Division website.

For step-by-step instructions for calculating ELL progress, refer to the "Calculating the Texas English Language Learner (ELL) Progress Measure" document on the Progress Measures page of TEA's Student Assessment Division website.

# Sampling

Sampling plays a critical role in the research and annual development activities that are necessary in supporting the Texas assessment program. A sample is a group of students smaller than the population that can be used to represent the overall population. Through the careful selection of student samples, TEA is able to gather reliable information about student performance on its assessments while minimizing the burden placed on campuses and districts.

During the 2015–2016 school year, sampling was not required within the STAAR program.

# **Test Results**

Appendix B provides scale score distributions and summary statistics, raw score to scale score conversion tables, as well as mean p-values and reliability estimates for all primary STAAR assessments, including STAAR Spanish, STAAR L, and STAAR A, administered in spring 2016. Table 4.18 shows the spring 2016 pass rates for the general STAAR assessments. For STAAR EOC assessments, pass rates are given for first-time testers.





### Table 4.18. STAAR Spring 2016 Pass Rates

Content Area	Grade/Course	Pass Rate
	Grade 3	76%
	Grade 4	74%
Mathematics	Grade 5	79%
Mathematics	Grade 6	74%
	Grade 7	71%
	Grade 8	73%
	Grade 3	63%
Mathematics (Spanish)	Grade 4	56%
	Grade 5	47%
Mathematics	Algebra I	85%
Mathematics	Algebra II	79%
	Grade 3	74%
	Grade 4	77%
Reading	Grade 5	75%
literating	Grade 6	71%
	Grade 7	72%
	Grade 8	82%
	Grade 3	64%
Reading (Spanish)	Grade 4	57%
	Grade 5	63%
Writing	Grade 4	69%
	Grade 7	70%
Writing (Spanish)	Grade 4	66%
	Grade 5	75%
Science	Grade 8	76%
	Biology	92%
Science (Spanish)	Grade 5	50%
Social Studies	Grade 8	65%
	US History	95%
	English I	71%
English	English II	74%
	English III	70%