State of Texas Assessments of Academic Readiness (STAAR®) Comparison of Assessment Characteristics: STAAR vs. TSI

Assessment Characteristic	STAAR	TSI
Purpose	The purpose of the STAAR assessments is to determine mastery of the Texas Essential Knowledge and Skills (TEKS), the state-mandated curriculum. STAAR has been developed as a postsecondary readiness instrument to measure a student's performance under the college readiness standards in the TEKS.	Since August 26, 2013, the Texas Higher Education Coordinating Board (THECB) has required all Texas public colleges and universities to administer the new Texas Success Initiative (TSI) Assessment to assess the academic skill level of their incoming students.
Legislation	Texas Education Code, §39.0238	Texas Education Code, §51.3062
Assessment Type	A criterion-referenced assessment	A criterion-referenced computer adaptive assessment. The specific questions that appear on any given test administration varies based on each individual student's performance on each item. It includes a placement test and a diagnostic test, which may be administered at the discretion of the institution.
Subjects Assessed	Algebra I, English I, English II, biology, and U.S. history (currently) Algebra II and English III (scheduled for spring 2016)	Mathematics, reading, and writing
Administration	 Administered starting in spring 2012 STAAR Algebra II and English III were not administered after spring 2013 but are scheduled to be offered again beginning in spring 2016 at the school district's option. Cost to the state to administer STAAR assessments is approximately \$7 per test and a total of \$25 per student each year. STAAR EOC assessments are administered three times a year: in spring (April/May), summer (July), and fall (December). Offered online and on paper with a 5-hour time limit for the STAAR English assessments and 4-hour time limit for all other STAAR assessments 	 Administered starting in fall 2013 Cost to the institution to administer TSI assessments is \$11-\$12 for all three subjects. Each institution of higher education in Texas determines the cost for its student to take the TSI assessments. Testing fees range from \$29-\$50 per student for the entire TSI assessment. Administered throughout the year at colleges and universities across the state of Texas. Most students, however, likely take the TSI in the fall of their college freshmen year (for freshmen readiness), or spring of their high school sophomore or junior year (for dual credit eligibility). Offered as a computer adaptive test only and is not timed
Performance Standards	Performance standards were established and implemented in spring 2012. Includes three performance levels: Level I: Unsatisfactory Academic Performance, Level II: Satisfactory Academic Performance, and Level III: Advanced Academic Performance. Standard progression (7 steps) to the recommended standards for Level II.	Performance standards on the placement test were established and implemented in 2013. Includes three performance levels: Adult Basic Education, Developmental Education, and College Ready. Phase-in (2 steps) to the final standards for College Ready is currently being implemented. Scheduled to implement final standards in fall 2019.
More Information	http://www.tea.state.tx.us/student.assessment/staar/	http://www.thecb.state.tx.us/DE/TSI

STAAR Algebra II vs. TSI Mathematics

Assessment Characteristic	STAAR Algebra II	TSI Mathematics
Purpose	The purpose of the STAAR Algebra II assessment is to determine mastery of the Algebra II Texas Essential Knowledge and Skills (TEKS), the state-mandated curriculum.	Since August 26, 2013, the Texas Higher Education Coordinating Board (THECB) has required all Texas public colleges and universities to administer the new Texas Success Initiative (TSI) Assessment to assess the academic skill level of their incoming students.
Assessment Type	A criterion-referenced assessment	A multiple choice computer-adaptive test, consisting of a large pool of items from which a test-generation algorithm selects items for a student
Content	Measures properties and attributes of functions; representational tools; properties and representations of quadratic functions; and properties of square root, rational, exponential, and logarithmic functions.	Measures proficiency in four areas:
Item Format	50 items total: 45 multiple-choice items, 5 gridded-response items	20 multiple choice items total
Administration	 Administered in the 2012–2013 school year Will be administered in May (starting in 2016) Will be administered online and on paper with a 4-hour time limit 	 Administered throughout the year at colleges and universities across Texas Administered online only with no time limit
Performance Standards	Performance standards were established and implemented in spring 2012. Includes three performance levels: Level I: Unsatisfactory Academic Performance, Level II: Satisfactory Academic Performance, and Level III: Advanced Academic Performance. Current performance standards will be reviewed in summer 2015.	Performance standards on the placement test were established and implemented in 2013. Includes three performance levels: Adult Basic Education, Developmental Education, and College Ready. Phase-in (2 steps) to the final standards for College Ready is currently being implemented. Scheduled to implement final standards in fall 2019.

Content Comparisons

Although the new TSI assessment measures some of the same skills assessed on the STAAR Algebra II test, a true comparison is difficult. The TSI assessment covers broad math strands such as elementary algebra and functions and intermediate algebra and functions. Given the terms "elementary" and "intermediate", might lead one to correlate these math strands with Algebra I and Algebra II, respectively. However, most of the CCRS covered in these two algebra strands are listed in both the elementary and the intermediate strand. Additionally, the CCRS measured by the TSI assessment are written as general statements. For example, a CCRS covered on the TSI assessment is "apply known function models". Determining whether the question addressing this skill maps to Algebra I or Algebra II is dependent on which type of algebraic function the specific question addresses (i.e., linear, cubic, absolute value, etc.).

Based on a limited review of specific sets of test questions, the mathematics portion of the TSI appears to appropriately measure the CCRS as intended. The TSI mathematics assessment reviewed covered the range of topics indicated in the TSI test blueprint. The level of rigor of the set of questions viewed is difficult to capture since the TSI assessment is a computer adaptive test. However, the test questions ranged from basic to challenging and seemed to be generally appropriate for the TSI assessment. In the two different sets of TSI test questions reviewed, it is estimated that 20% (4/20) of the questions aligned to the Algebra II TEKS.

The following information is intended to provide some additional comparisons of the new TSI mathematics assessment to STAAR Algebra II.

- The TSI mathematics assessment aligns to the CCRS. Specifically, 56% (39/70) of the standards in the mathematics CCRS are eligible for the TSI assessment.
- The STAAR Algebra II assessment aligns to the Algebra II TEKS. Specifically, 100% (44/44) of the student expectations in the Algebra II TEKS are eligible for STAAR Algebra II.
- In looking at how the CCRS were incorporated into the TEKS, the gap analysis performed by the vertical teams indicates:
 - o 41% (29/70) of the standards in the mathematics CCRS have strong alignment to the Algebra II TEKS.
 - Out of the 29 standards in the mathematics CCRS that have strong alignment to the Algebra II TEKS, 18 standards are eligible for the TSI assessment. That is 26% (18/70) of the CCRS or 46% (18/39) of the CCRS on the TSI.

STAAR English III vs. TSI Reading and Writing

Assessment Characteristic	STAAR English III	TSI Reading and Writing
Purpose	The purpose of the STAAR English III assessments is to determine mastery of the English II Texas Essential Knowledge and Skills (TEKS), the state-mandated curriculum.	Since August 26, 2013, the Texas Higher Education Coordinating Board (THECB) has required all Texas public colleges and universities to administer the new Texas Success Initiative (TSI) Assessment to assess the academic skill level of their incoming students. Institutions have the flexibility to determine the appropriate path for individual students to take so as to be considered college ready and thus ready for college-level courses.
Assessment Type	A criterion-referenced assessment	A multiple choice computer-adaptive test, consisting of a large pool of items from which a test-generation algorithm selects items for a student.
Content	 Reading Measures understanding and analysis of literary, informational, and cross-genre texts. Includes fiction, poetry, drama, literary nonfiction, expository, persuasive, media literacy, and procedural texts. Essential skills include using vocabulary in context, making complex inferences and conclusions, analyzing author's craft, and understanding purpose. Writing Measures skill level in analytical writing, revision, and editing. Includes literary nonfiction, expository, and persuasive texts to test revision and editing skills. Composition assesses students' understanding of purpose, organization/progression, development of ideas, and language/conventions. 	 There is some (approximately 44%) content overlap between STAAR English III and the TSI Reading and Writing tests. Reading Measures extended reasoning, main idea/detail, inference/conclusion, analyzing author's craft, understanding tone/audience, and vocabulary in context. Texts are taken from different fields including natural sciences, humanities, social sciences, and literary fiction (includes cross-text analysis). Writing Measures skill in essay revision, agreement, sentence structure, and sentence logic. Composition assesses students' ability to write persuasively and to develop point of view, maintain focus/coherence, progress/organize ideas, and use language.
Item Format	Reading: 28 multiple-choice items total (30% of score), 2 short-answer items (20% of score) Writing: 22 multiple-choice items total (24% of score), I composition (analytical – 26% of score)	Reading Test: 24 multiple-choice items Writing Test: 20 multiple choice items, I composition (persuasive)

	Will be administered in May (starting in 2016)	Administered throughout the year at colleges and universities
Administration	 Will be administered online and on paper with a five-hour time limit There is a 26-line limit (or one page) for the written composition and 10-line limit for the short answer response. Written compositions and short answer responses are scored by at least two human raters. 	 throughout the state of Texas Administered online only with no time limit The length for the written compositions is 300-500 words. Written compositions are electronically scored using automated essay scoring technology.
Performance Standards	Standards will be revisited prior to 2016 administration.	 College Readiness Cut: Reading: a score ranging from 351 to 390. Writing: a score ranging from 363 to 390 in the multiple choice section and a score of 4 (scale 1-8) on the essay. A score of 5 or better on the essay indicates college readiness regardless of the scaled score on the multiple-choice.

Content Comparisons

As on STAAR, the TSI writing and reading assessments are passage based. While the writing assessment requires students to write an essay, the reading assessment does not include a short answer component. As in mathematics, the overall level of rigor is difficult to determine, since both the writing and reading assessments are computer adaptive. Generally, however, a range of difficulty was more evident in the questions than in the passages themselves.

TSI Writing Assessment

Based on the writing questions and prompts that were viewed, the writing section of the new TSI appears to appropriately measure the writing strand of the Texas College and Career Readiness Standards (CCRS). The writing assessment covered the range of topics indicated in the TSI test blueprint: essay revision (coherence, organization, word choice, rhetorical effectiveness, and use of evidence), subject-verb and pronoun-antecedent agreement and verb tense, sentence structure (appropriate sentence boundaries, punctuation, parallelism, coordination and subordination), and sentence logic (modifying phrases and clauses as well as logical transitions). Overall, these revision and editing skills align well with those assessed on STAAR, though the format used to assess writing skills on the TSI assessment was slightly different from that used on STAAR. However, there are several editing skills—spelling and capitalization, for example—that are assessed on STAAR but not on the TSI assessment. In addition, a misalignment exists between TSI and STAAR on the essay portion of the assessments in that persuasive writing is assessed on TSI and analytical writing is assessed on STAAR. Nevertheless, similar criteria are used to evaluate the quality of student essays.

TSI Reading Assessment

Based on the reading passages and questions that were viewed, the reading section of the new TSI appears to be less well aligned to the Texas CCRS and STAAR. Most of the informational passages were of the same length, consisting of one-to-two short paragraphs (approximately 100 words), which were neither extended nor in-depth enough to allow students to make subtle or complex inferences or to synthesize ideas by making connections within or across texts. In addition, almost all passages viewed were single passages rather than paired passages. While literary passages were longer (approximately 400 words), few literary passages were included on the placement, diagnostic, and ABE sections viewed. Overall, when compared with TSI, the STAAR reading assessment demands more sustained in-depth reading, and includes a greater breadth of questions at a higher level of cognitive complexity.