

# **Calculating the Texas STAAR Progress Measure**

In 2017, the State of Texas Assessments of Academic Readiness (STAAR<sup>®</sup>) progress measure is available for reading in grades 4-8, mathematics in grades 4-8, Algebra I, and English II. There are three steps used to calculate the STAAR progress measure:

- Step 1: Determine if the student should receive a STAAR progress measure
- Step 2: Compile the needed information to compute a STAAR progress measure
- Step 3: Compute STAAR progress measure

### Step 1: Determine if the student should receive a STAAR progress measure.

In order to receive a STAAR progress measure in 2017, a student must meet <u>ALL</u> of the following criteria within the same content area (mathematics, reading, or English):

- Has a valid score from the previous year and the current year
- Has tested in successive grade levels or end of course (EOC) tests in the previous year and the current year. Students who took the same grade-level or EOC test in the previous year and the current year will not receive a progress measure. Students who take STAAR assessments and have skipped a grade level between the previous year and the current year will receive a progress measure.
- Has taken a STAAR, STAAR L, or STAAR A test in the previous year and a STAAR test in the current year.
- For STAAR reading assessments, has taken tests in the same language in the previous year and the current year (i.e., English or Spanish).
- For STAAR Algebra I and English II, has taken the test for the first time.

Note that students identified as limited English proficient (LEP) and tested in Spanish language test versions must also meet the criteria above. LEP students tested in English language test versions will only receive a STAAR progress measure if they are not eligible for the ELL progress measure.

If a student does not meet one or more of these criteria, the student will not receive a STAAR progress measure. Some students may meet the criteria and receive a STAAR progress measure for one content area but not another.

The following steps apply for students who took STAAR tests.

### Step 2: Compile the needed information to compute a STAAR progress measure.

In order to calculate the progress measure, the following student information is needed:

- Test information from the current year, including
  - o Grade level
  - o Content area (i.e., subject)
  - Test language (English or Spanish)
  - o Scale score
  - o Raw score
  - Performance level based on the performance standards in place in the previous year
- Test information from the previous year, including
  - o Grade level
  - Content area (i.e., subject)
  - Test language (English or Spanish)
  - Scale score
  - $\circ$   $\;$  Performance level based on the performance standards in place in the current year
- Gain score = Current-year scale score Previous-year scale score

### Step 3: Compute STAAR progress measure.

Use the "Guide to Computing STAAR Progress Measures" on the following pages to calculate a student's STAAR progress measure.



### **Guide to Computing STAAR Progress Measures**

Note: A, X and B are defined in Table 1

Current Year Test	Previous Year Test	<b>A</b> <sup>1</sup>	<b>X</b> <sup>2</sup>	B <sup>3</sup>	Top Score Range⁴	Chance Score Range⁵
Grade 4 Mathematics <sup>6</sup>	Grade 3 Mathematics	103	74	184	32-34	0-7
Grade 5 Mathematics <sup>6</sup>	Grade 4 Mathematics	36	54	135	34-36	0-8
Grade 6 Mathematics	Grade 5 Mathematics	28	48	147	36-38	0-8
Grade 7 Mathematics	Grade 6 Mathematics	35	26	145	38-40	0-9
Grade 8 Mathematics	Grade 7 Mathematics	12	56	166	40-42	0-9
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	34-36	0-9
Grade 5 English Reading	Grade 4 English Reading	32	34	117	36-38	0-9
Grade 6 Reading	Grade 5 English Reading	47	51	136	38-40	0-10
Grade 7 Reading	Grade 6 Reading	45	35	124	40-42	0-10
Grade 8 Reading	Grade 7 Reading	26	30	109	42-44	0-11
Grade 4 Spanish Reading	Grade 3 Spanish Reading	95	104	192	34-36	0-9
Grade 5 Spanish Reading	Grade 4 Spanish Reading	43	65	162	36-38	0-9
English II	English I	0	140	831	66-68	0-17

## Table 1: Values for Computing STAAR Progress Measures

Note: To calculate the STAAR progress measure targets for skipped grades, use the following rules:

- A is the sum of all the A values from the previous year grade level assessment to the current year grade level assessment (e.g. A value for a student going from grade 3 English reading to grade 6 reading is 161 = 82 + 32 + 47).
- X is the sum of all the X values from the previous year grade level assessment to the current year grade level assessment (e.g. The X value for a student going from grade 3 English reading to grade 6 reading is 163 = 78 + 34 + 51).
- B is the sum of all the A values from the previous year grade level assessment to one year less than the current year grade level assessment plus the B value from one year less than the current year grade level assessment to the current year grade level assessment (e.g. The B value for a student going from grade 3 English reading to grade 6 reading is 250 = 82 + 32 + 136)
- <sup>1</sup> A is the distance or difference between the *Meets* standards on the current-year and previous-year tests.
- <sup>2</sup> X is the distance or difference between the *Masters* standards on the current-year and previous-year tests.
- <sup>3</sup> B is the distance or difference between the current-year test *Masters* standard and the previous-year test *Meets* 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 mathematics tests (including 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 value of 2 associated with summed scores of 2 on the essays.
- <sup>6</sup> Applies for both English and Spanish mathematics.

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# **Example: STAAR Grade 4 Reading**

### Step 1: Determine if the student should receive a STAAR progress measure.

The student meets <u>ALL</u> of the criteria for reading.

- The student had a valid score for reading in 2016 and a valid score for reading in 2017
- The student did not test in the same grade levels (grade 3 in 2016 and grade 4 in 2017) in English reading
- Both reading tests were STAAR tests
- Both reading tests were in the same language (English)

Since the student meets all the criteria, the student will receive a progress measure in reading.

### Step 2: Compile the needed information to compute a STAAR progress measure.

To calculate the progress measure, the following student information is needed:

- Test information from the current year, including
  - Grade level 4
  - Content area reading
  - $\circ$  Scale score 1486<sup>7</sup>
  - Raw score 29
  - Performance level Approaches
- Test information from the previous year, including
  - o Grade level 3
  - Content area reading
  - $\circ$  Scale Score 1331<sup>7</sup>
  - Performance Level Satisfactory (Level II)
- Gain score = 1486 1331 = 155

#### Step 3: Compute the STAAR progress measure.

The following page illustrates how the student information from Step 2 and the values in Table 1 are used to determine the value of the STAAR progress measure.

<sup>&</sup>lt;sup>7</sup> These numbers are used for illustration purpose only and they might not correspond to any scale score points from the 2017 STAAR grade 4 English reading and 2016 STAAR grade 3 English reading raw score to scale score conversion tables.

#### Example: STAAR Grade 4 Reading (continued)



Student has Expected growth for grade 4 English Reading

Note: A, X and B are defined in Table 1