

**Predicting Proficiency on the State of Texas
Assessments of Academic Readiness (STAAR)
End-of-Course (EOC) Assessments Based on NWEA
MAP Growth Scores**

August 2024

NWEA Psychometrics and Analytics

Linking Study Updates

Date	Description
2020-07-24	Initial study was conducted for Texas End-of-Course (EOC) for Algebra I using Spring 2019 data incorporating the 2020 MAP Growth norms.
2022-11-30	Incorporated EOC English I, English II, and Biology. NWEA norms are not yet available for Biology.
2024-07-31	Updated the linking study for EOC assessments using Spring 2023 data due to the state assessment redesign.

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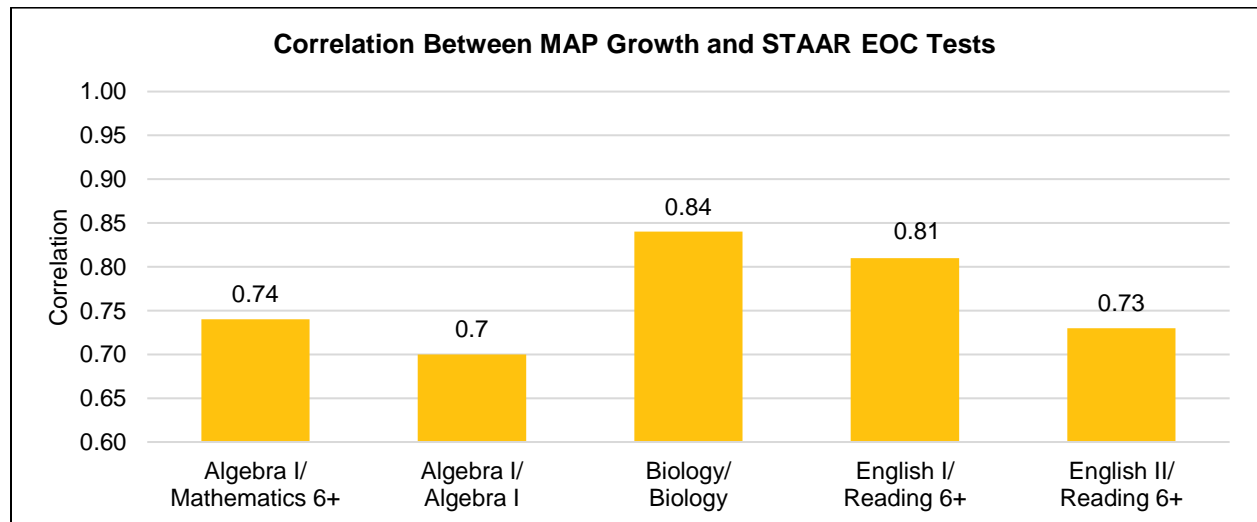
Executive Summary

Linking studies allow partners to use MAP® Growth™ Rasch Unit (RIT) scores throughout the year to predict their students' performance levels on state summative assessments. This is accomplished through statistical analyses that produce RIT cut scores that correspond to state summative performance levels. A “cut score” is the minimum score a student must get on a test to be placed at a certain performance level. The linking study for the State of Texas Assessments of Academic Readiness (STAAR) End-of-Course (EOC) described in this report provides RIT cut scores for the fall, winter, and spring MAP Growth administrations that correspond to the STAAR performance levels for each subject and grade. Educators can use the RIT cut scores to identify students at risk of not meeting state proficiency standards and provide targeted instruction to improve academic outcomes.

The linking study is based on test scores from students who took the MAP Growth Mathematics 6+, Algebra I, Biology, and Reading 6+ tests as well as the corresponding STAAR EOC Algebra I, Biology, English I, and English II tests in Spring 2023. In total, this study included 14,758 students from 103 schools within 43 districts in Texas.

Prior to initiating the linking analyses, NWEA confirmed that the content standards used to construct the MAP Growth interim assessments were aligned with those of the STAAR EOC, thus warranting a connection. Further investigation into the relationship between MAP Growth and STAAR EOC involved calculating correlation coefficients to illustrate the association between the MAP Growth scores and the summative test scores of STAAR. A high positive correlation (e.g., ≥ 0.70) shows that students who perform well on one assessment also tend to perform well on the other, and vice versa, with 1.00 being a perfect positive correlation. The correlations between the MAP Growth and STAAR EOC test scores in all subjects are at or higher than 0.70, indicating that MAP Growth is a good assessment for predicting performance on the STAAR spring summative assessment.

Figure E.1. Correlation Between STAAR EOC and MAP Growth Tests



The equipercentile linking method and the MAP Growth norms (He, 2022; Thum & Kuhfeld, 2020) were then used to produce the RIT cut scores that correspond to performance levels on the STAAR EOC assessment for every subject and grade. While RIT cut scores were generated

for every performance level on the STAAR EOC assessment, Table E.1 presents the *Meets Grade Level* cut scores that indicate the minimum score a student must get to be considered proficient. Details regarding reported grades and cut scores are provided in MAP Growth Cut Scores.

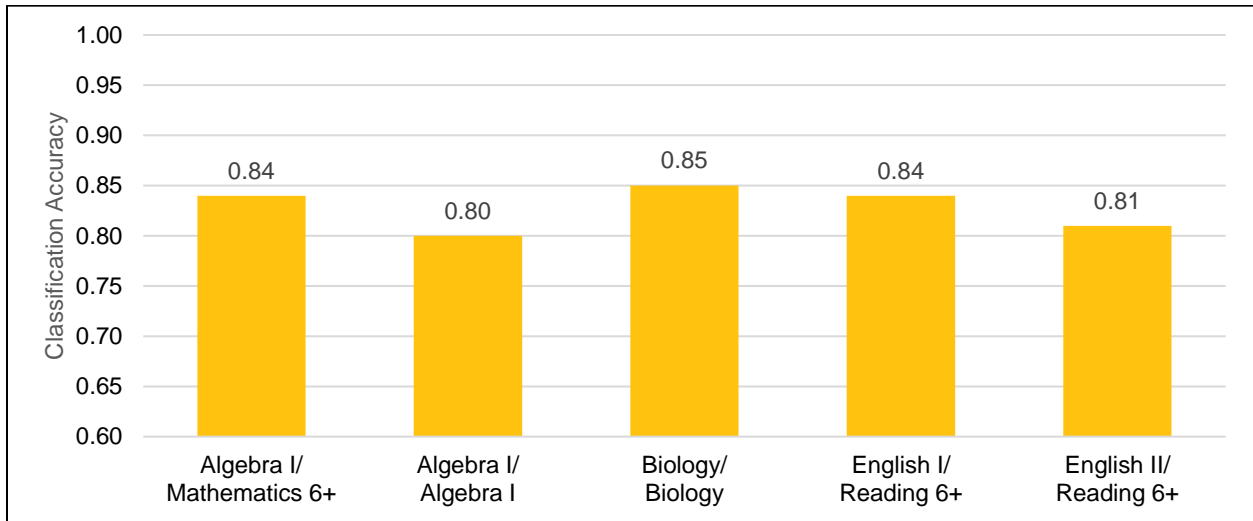
Table E.1. MAP Growth RIT Cut Scores for STAAR EOC Proficiency

Assessment			Cut Score by Grade					
			7	8	9	10	11	12
STAAR Algebra I Spring			4000					
MAP Growth	Mathematics 6+	Fall	227	229	231	231	–	–
		Winter	231	232	233	233	–	–
		Spring	234	234	234	234	–	–
STAAR Algebra I Spring			4000					
MAP Growth	Algebra I	Fall	226					
		Winter	230					
		Spring	234					
STAAR Biology Spring			4000					
MAP Growth	Biology	Fall	211					
		Winter	213					
		Spring	215					
STAAR English I Spring			4000					
MAP Growth	Reading 6+	Fall	–	211	212	212	213	213
		Winter	–	214	214	214	214	214
		Spring	–	215	215	215	215	215
STAAR English II Spring			4000					
MAP Growth	Reading 6+	Fall	–	214	215	215	216	216
		Winter	–	217	217	217	217	217
		Spring	–	218	218	218	218	218

Educators can use these cut scores to determine whether students are on track for proficiency on the state assessment. For example, the *Meets Grade Level* cut score on the STAAR EOC Algebra I test is 4000. A grade 7 student with a MAP Growth Mathematics 6+ RIT score of 227 in the fall is likely to meet proficiency on the STAAR EOC Algebra I test in the spring, whereas a grade 7 student with a RIT score lower than 227 in the fall is in jeopardy of not meeting proficiency.

As further evidence that MAP Growth scores can be used to predict students' proficiency on the state tests, NWEA calculated classification accuracy statistics that show how well the RIT scores correctly classified, or predicted, students as *Meets Grade Level* on the STAAR EOC tests. A high statistic indicates high accuracy. Across the subject areas, the MAP Growth assessments have at least a 0.80 classification accuracy rate, meaning they accurately predicted student proficiency on the state tests for 80% or more of the sample. These results indicate that MAP Growth scores have a high accuracy rate of identifying student proficiency on the STAAR EOC Algebra I, Biology, English I, and English II tests that are the focus of this report, as illustrated in Figure E.2.

Figure E.2. Classification Accuracy of MAP Growth Tests



Please note that the purpose of this report is to explain NWEA's linking study methodology. It is not meant as the main reference for determining a student's likely performance on the state summative assessment. The cut scores in this report are based on the default instructional weeks most encountered for each term (i.e., Weeks 4, 20, and 32 for fall, winter, and spring, respectively), whereas instructional weeks often vary by district. The cut scores in this report may therefore differ from the results in the NWEA reporting system that reflect the specific instructional weeks set by partners. Partners should therefore reference their MAP Growth score reports instead.

1. Introduction

1.1. Purpose of the Study

NWEA® is committed to providing partners with useful tools to help make inferences about student learning from MAP® Growth™ test scores. One important use of MAP Growth results is to predict a student's performance on state summative assessments at different times throughout the year. This allows educators and parents to determine if a student is on track in their learning to meet state standards by the end of the year or, given a student's learning profile, is on track to obtain rigorous, realistic growth in their content knowledge and skills.

This document presents results from a linking study conducted by NWEA to statistically connect the scores of the State of Texas Assessments of Academic Readiness (STAAR) End-of-Course (EOC) Algebra I, Biology, English I, and English II tests with Rasch Unit (RIT) scores from the MAP Growth Mathematics 6+, Algebra I, Biology, and Reading 6+ tests. Specifically, this report presents the following results:

1. Student sample demographics
2. Descriptive statistics of test scores
3. MAP Growth cut scores from fall, winter, and spring that correspond to the performance levels on the spring STAAR EOC assessment
4. Classification accuracy statistics to determine the degree to which MAP Growth accurately predicts student proficiency status on the STAAR EOC tests
5. The probability of achieving grade-level proficiency on the STAAR EOC assessment based on MAP Growth RIT scores from fall, winter, and spring

1.2. Assessment Overview

The STAAR EOC tests are part of Texas's state summative assessment system aligned to the Texas Essential Knowledge and Skills (TEKS) curriculum. Based on their test scores, students are placed into one of four performance levels: *Did Not Meet Grade Level*, *Approaches Grade Level*, *Meets Grade Level*, and *Masters Grade Level*. The *Meets Grade Level* cut score demarks the minimum level of performance considered to be proficient for accountability purposes.

MAP Growth tests are adaptive interim assessments aligned to state-specific content standards and administered in the fall, winter, and spring. Scores are reported on the RIT vertical scale with a range of 100 to 350. To aid the interpretation of scores, NWEA conducts norming studies of student and school performance on MAP Growth. Growth norms provide expected score gains across test administrations (e.g., the relative evaluation of a student's growth from fall to spring), which are used to conduct the linking studies. The most recent norms study was conducted in 2020 (Thum & Kuhfeld, 2020) for the general mathematics and reading tests. The norms study for the MAP Growth course-specific tests was conducted and published in December 2022 (He, 2022).

2. Methods

2.1. Data Collection

This linking study is based on data from the Spring 2023 administration of the MAP Growth and STAAR EOC assessments. Each student's state testing record was matched to their MAP Growth score based on the student's state identifier. Only students who have scores on both the MAP Growth and STAAR EOC summative assessments in Spring 2023 were included in the study sample.

2.2. Post–Stratification Weighting

Post–stratification weights were applied to the calculations to ensure that the linking study sample represented the state's test–taking student population in terms of race, sex, and performance level. These variables were selected because they are known to be correlated with students' academic achievement and are often available in state summative assessment reports. The weighted sample will match the target population as closely as possible for the key demographics and performance characteristics defined by the state.

A raking procedure was used to calculate the post–stratification weights that either compensate for the underrepresentation of certain groups or attenuate the overrepresentation of certain groups. Raking uses iterative procedures to obtain weights that match sample marginal distributions to known population margins. The following steps were taken during this process:

1. Calculate marginal distributions of race, sex, and performance level for the sample and population.
2. Calculate post–stratification weights with the rake function from the survey package in R (Lumley, 2019).
3. Apply the weights to the sample before conducting the linking study analyses.

2.3. Descriptive Statistics

Descriptive statistics are provided to summarize the test scores for both the MAP Growth and STAAR EOC assessments, including the test score mean, standard deviation (SD), minimum, and maximum. The mean presents the average test scores across all students in the study sample, and the SD indicates the variability of test scores, revealing how students' scores are distributed around the average score, or mean. Correlation coefficients between the MAP Growth RIT scores and STAAR EOC scores are also provided to answer the question “How well do the test scores from MAP Growth (that reference the RIT scale) correlate to the scores obtained from the STAAR EOC tests (that reference some other scale) in the same subject?” The correlations were calculated as:

$$r = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 \sum (y_i - \bar{y})^2}}$$

where r is the correlation coefficient, x_i and y_i are the values of the x and y variables in a sample, and \bar{x} and \bar{y} are the mean of the values of the x and y variables.

2.4. MAP Growth Cut Scores

MAP Growth cut scores that predict student achievement on the STAAR EOC Algebra I, Biology, English I, and English II assessments are reported. Since the state EOC tests are not grade dependent (i.e., any student can take the assessment once they finish the course), the spring RIT cuts were established based on all the students in the study sample regardless of their grade. Fall and winter RIT cut scores were then projected using the growth norms and the spring RIT cuts. The RIT cuts for grades 7–10 mathematics and grades 8–12 reading were reported because it is common for students in these grade ranges to take the STAAR EOC Algebra I, English I, and English II tests. The growth norms from fall or winter to spring are grade specific for the MAP Growth Mathematics 6+ and Reading 6+ tests; therefore, the corresponding RIT cut scores varied across grades. In contrast, the growth norms for the MAP Growth Algebra I and Biology tests are available for fall or winter to spring projections for all eligible grades combined. Therefore, the fall and winter RIT cuts were reported independent of grade level.

Percentile ranks based on the NWEA norms are also provided. These are useful for understanding how students' scores compare with peers nationwide and the relative rigor of a state's performance level designations for its summative assessment.

The equipercentile linking method (Kolen & Brennan, 2004) was used to identify the spring MAP Growth RIT scores that correspond to the spring STAAR EOC performance level cut scores. The equipercentile linking procedure matches scores on the two scales that have the same percentile rank (i.e., the proportion of tests at or below each score). For example, let x represent a score on Test X (e.g., STAAR). Its equipercentile equivalent score on Test Y (e.g., MAP Growth), $e_y(x)$, can be obtained through a cumulative–distribution–based linking function defined as:

$$e_y(x) = G^{-1}[P(x)]$$

where $e_y(x)$ is the equipercentile equivalent of score x on STAAR on the scale of MAP Growth, $P(x)$ is the percentile rank of a given score on STAAR, and G^{-1} is the inverse of the percentile rank function for the scores on the MAP Growth scale. The inverse function finds the score on MAP Growth that corresponds to a given percentile rank. Polynomial loglinear pre-smoothing was applied to reduce irregularities of the score distributions and equipercentile linking curve.

The MAP Growth conditional growth norms provide students' expected score gains across terms, such as growth from fall to spring within the same grade or from spring of a lower grade to spring of the adjacent higher grade. This information was used to calculate the fall and winter cut scores. The equation below was used to determine the previous term's or grade's MAP Growth score needed to reach the spring cut score, considering the expected growth associated with the previous RIT score:

$$RIT_{PredSpring} = RIT_{previous} + g$$

where:

- $RIT_{PredSpring}$ is the predicted MAP Growth spring score,
- $RIT_{previous}$ is the previous term's or grade's RIT score, and
- g is the expected growth from the previous RIT (e.g., fall or winter) to the spring RIT score.

2.5. Classification Accuracy

The degree to which MAP Growth predicts student proficiency status on the STAAR EOC tests can be described using classification accuracy statistics based on the MAP Growth spring RIT cut scores. The results show the proportion of students correctly classified by their RIT scores as proficient (i.e., *Meets Grade Level*) or not proficient on the STAAR EOC tests. Table 2.1 describes the classification accuracy statistics provided in this report (Pommerich et al., 2004).

Table 2.1. Description of Classification Accuracy Summary Statistics

Statistic	Description	Interpretation
Overall Classification Accuracy Rate	$(TP + TN) / (\text{total sample size})$	Proportion of the study sample whose proficiency classification on the state test was correctly predicted by MAP Growth cut scores
False Negative (FN) Rate	$FN / (FN + TP)$	Proportion of students identified by MAP Growth as not proficient in those observed as proficient on the state test
False Positive (FP) Rate	$FP / (FP + TN)$	Proportion of students identified by MAP Growth as not proficient in those observed as not proficient on the state test
Sensitivity	$TP / (TP + FN)$	Proportion of students identified by MAP Growth as proficient in those observed as such on the state test
Specificity	$TN / (TN + FP)$	Proportion of students identified by MAP Growth as not proficient in those observed as such on the state test
Precision	$TP / (TP + FP)$	Proportion of students observed as proficient on the state test in those identified as such by the MAP Growth test
Area Under the Curve (AUC)	Area under the receiver operating characteristics (ROC) curve	How well MAP Growth cut scores separate the study sample into proficiency categories that match those from the state test cut scores. An AUC at or above 0.80 is considered “good” accuracy.

Note. FP = false positives; FN = false negatives; TP = true positives; TN = true negatives.

2.6. Proficiency Projections

Given that all test scores contain measurement errors, reaching the *Meets Grade Level* RIT cut does not guarantee that the student is proficient on the state test. Instead, it can be claimed that a student meeting the RIT cut score has a 50% chance of reaching proficiency on the state test, with their chances increasing the greater their score is from the cut. The proficiency projections indicate these probabilities for various RIT scores throughout the year.

In addition to calculating the MAP Growth fall and winter cut scores, the MAP Growth conditional growth norms data were also used to calculate the probability of reaching proficiency on the STAAR EOC tests based on a student’s RIT scores from fall and winter:

$$Pr(\text{Achieving proficiency in spring} | \text{starting RIT}) = \Phi \left(\frac{RIT_{previous} + g - RIT_{SpringCut}}{SD} \right)$$

where:

- Φ is the standard normal cumulative distribution function,
- $RIT_{previous}$ is the student’s RIT score in fall or winter,
- g is the expected growth from the previous RIT (e.g., fall or winter) to the spring RIT,
- $RIT_{SpringCut}$ is the MAP Growth *Meets Grade Level* cut score for spring, and
- SD is the conditional standard deviation of the expected growth, g .

The equation below was used to estimate the probability of a student achieving *Meets Grade Level* performance on the STAAR EOC tests based on their spring RIT score (RIT_{spring}):

$$Pr(\text{Achieving proficiency in spring} \mid \text{spring RIT}) = \Phi\left(\frac{RIT_{spring} - RIT_{springCut}}{SE}\right)$$

where SE is the standard error of measurement for MAP Growth.

3. Results

3.1. Study Sample

The data used in this study were collected from 43 districts and 103 schools across Texas in Spring 2023. Only students who took both the MAP Growth and STAAR EOC assessments were included in the study sample. Table 3.1 presents the distributions of students by race, sex, and performance level in the original unweighted study sample. Table 3.2 presents the distributions of the target population of students who took the STAAR EOC tests. Since the student distributions in the original study sample are different from the target STAAR population, post-stratification weights were applied to improve the sample representativeness. Table 3.3 presents the demographic distributions of the sample after weighting, which are almost identical to the STAAR student population distributions. The analyses in this study were conducted using the weighted sample.

Table 3.1. Linking Study Sample Demographics (Unweighted)

Demographic Subgroup	Assessment	Percentage of Students by Sample				
	STAAR MAP Growth	Algebra I Mathematics	Algebra I Algebra I	Biology Biology	English I Reading	English II Reading
Total N-Count		1,916	3,697	2,820	7,541	4,852
Race	AI/AN	1.8	1.1	1.1	0.9	0.4
	Asian	5.4	1.9	4.5	4.1	4.0
	Black	6.1	20.3	15.7	15.7	17.2
	Hispanic	29.1	47.2	56.6	39.6	42.4
	NH/PI	0.1	0.1	0.1	0.2	0.1
	Other	4.4	2.8	2.3	2.9	3.9
	White	53.0	26.6	19.6	36.7	32.0
Gender	Female	46.1	49.1	49.7	50.1	49.9
	Male	53.9	50.9	50.3	49.9	50.1
Performance Level	<i>Did Not Meet</i>	8.9	21.7	9.6	18.4	13.4
	<i>Approaches</i>	20.1	43.8	33.3	14.8	17.8
	<i>Meets</i>	23.1	22.2	39.2	49.2	58.6
	<i>Masters</i>	47.9	12.3	17.9	17.5	10.2

Note. AI/AN = American Indian or Alaska Native; NH/PI = Native Hawaiian or Other Pacific Islander; Other = Two or More Races or Not Specified.

Table 3.2. Linking Study Population Demographics

Demographic Subgroup	Assessment	Percentage of Students by Sample				
	STAAR MAP Growth	Algebra I Mathematics	Algebra I Algebra I	Biology Biology	English I Reading	English II Reading
Total N–Count		476,740	476,740	461,494	517,385	469,426
Race	AI/AN	0.3	0.3	0.3	0.3	0.3
	Asian	4.5	4.5	4.8	4.3	4.5
	Black	13.7	13.7	13.3	13.6	13.3
	Hispanic	54.4	54.4	54.4	55.9	55.2
	NH/PI	0.2	0.2	0.2	0.2	0.2
	Other	3.2	3.2	3.2	3.0	3.0
	White	23.7	23.7	24.0	22.6	23.7
Gender	Female	47.7	47.7	48.4	46.8	47.6
	Male	52.3	52.3	51.6	53.2	52.4
Performance Level	<i>Did Not Meet</i>	22.0	22.0	11.0	29.0	26.0
	<i>Approaches</i>	33.0	33.0	32.0	17.0	18.0
	<i>Meets</i>	21.0	21.0	35.0	40.0	47.0
	<i>Masters</i>	24.0	24.0	22.0	14.0	9.0

Note. AI/AN = American Indian or Alaska Native; NH/PI = Native Hawaiian or Other Pacific Islander; Other = Two or More Races or Not Specified.

Table 3.3. Linking Study Sample Demographics (Weighted)

Demographic Subgroup	Assessment	Percentage of Students by Sample				
	STAAR MAP Growth	Algebra I Mathematics	Algebra I Algebra I	Biology Biology	English I Reading	English II Reading
Total N–Count		1,916	3,697	2,820	7,541	4,852
Race	AI/AN	0.3	0.3	0.3	0.3	0.3
	Asian	4.5	4.5	4.8	4.3	4.5
	Black	13.7	13.7	13.3	13.6	13.3
	Hispanic	54.4	54.3	54.3	55.9	55.2
	NH/PI	0.2	0.2	0.2	0.1	0.1
	Other	3.2	3.2	3.2	3.0	3.0
	White	23.7	23.7	24.0	22.6	23.7
Gender	Female	47.7	47.7	48.4	46.8	47.6
	Male	52.3	52.3	51.6	53.2	52.4
Performance Level	<i>Did Not Meet</i>	22.0	22.0	11.0	29.0	26.0
	<i>Approaches</i>	33.0	33.0	32.0	17.0	18.0
	<i>Meets</i>	21.0	21.0	35.0	40.0	47.0
	<i>Masters</i>	24.0	24.0	22.0	14.0	9.0

Note. AI/AN = American Indian or Alaska Native; NH/PI = Native Hawaiian or Other Pacific Islander; Other = Two or More Races or Not Specified.

3.2. Descriptive Statistics

Table 3. presents descriptive statistics of the MAP Growth and STAAR EOC test scores from Spring 2023, including the correlation coefficients (r) between them. The coefficients between the scores range from 0.70 to 0.84. These values indicate a high positive correlation between the scores, which is important validity evidence for the claim that MAP Growth scores are good predictors of performance on the STAAR EOC assessment.

Table 3.4. Descriptive Statistics of Test Scores

Test	N	r	Mean	SD	Min.	Max.
STAAR Algebra I MAP Growth Mathematics 6+	1,916	0.74	3996.8 231.1	556.2 18.8	1500 172	6430 280
STAAR Algebra I MAP Growth Algebra I	3,697	0.70	3945.9 231.1	484.2 18.5	1500 176	5694 285
STAAR Biology MAP Growth Biology	2,820	0.84	4122.3 218.1	500.9 18.3	2524 164	6260 261
STAAR English I MAP Growth Reading 6+	7,541	0.81	4060.1 214.6	468.3 20	1750 154	6000 270
STAAR English II MAP Growth Reading 6+	4,852	0.73	4071.5 217.7	462.9 19.1	1650 158	6050 276

Note. SD = standard deviation; Min. = minimum; Max. = maximum.

3.3. MAP Growth Cut Scores

Table 3.5–Table 3.9 present the STAAR EOC scale score ranges and the corresponding MAP Growth RIT cut scores and percentile ranges. Bold numbers indicate the cut scores considered to be at least proficient. These tables can be used to predict a student’s likely performance level on the STAAR EOC spring assessment when MAP Growth is taken in the fall, winter, or spring. For example, a grade 7 student who obtained a MAP Growth mathematics RIT score of 227 in the fall is likely to achieve *Meets Grade Level* performance on the STAAR EOC Algebra I test. The spring cut score is higher than the fall cut score because growth is expected between fall and spring as students receive more instruction during the school year.

Within this report, the cut scores for fall and winter are derived from the spring cuts and the typical growth scores from fall to spring or winter to spring. The typical growth scores are based on the default instructional weeks most encountered for each term (i.e., Weeks 4, 20, and 32 for fall, winter, and spring, respectively). Since instructional weeks often vary by district, the cut scores in this report may differ slightly from the MAP Growth score reports that reflect instructional weeks set by partners. If the actual instructional weeks deviate substantially from the default ones, a student’s expected performance level could be different from the projections presented in this document. Partners are therefore encouraged to use the projected performance level in students’ score reports since these reflect the specific instructional weeks set by partners.

Table 3.5. Cut Scores—STAAR EOC Algebra I & MAP Growth Mathematics 6+

STAAR Algebra I									
Level	<i>Did Not Meet</i>		<i>Approaches</i>		<i>Meets</i>		<i>Masters</i>		
Scale Score	1500–3549		3550–3999		4000–4344		4345–6430		
MAP Growth Mathematics 6+ (Fall)									
Grade	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile	
7	100–209	1–27	210–226	28–64	227 –237	65–84	238–350	85–99	
8	100–209	1–21	210–228	22–58	229 –239	59–78	240–350	79–99	
9	100–211	1–22	212–230	23–58	231 –241	59–77	242–350	78–99	
10	100–211	1–19	212–230	20–53	231 –241	54–73	242–350	74–99	
MAP Growth Mathematics 6+ (Winter)									
7	100–212	1–26	213–230	27–64	231 –241	65–83	242–350	84–99	
8	100–213	1–22	214–231	23–57	232 –242	58–77	243–350	78–99	
9	100–214	1–24	215–232	25–58	233 –243	59–77	244–350	78–99	
10	100–214	1–21	215–232	22–52	233 –243	53–72	244–350	73–99	
MAP Growth Mathematics 6+ (Spring)									
7	100–215	1–27	216–233	28–64	234 –244	65–83	245–350	84–99	
8	100–215	1–23	216–233	24–56	234 –244	57–76	245–350	77–99	
9	100–215	1–24	216–233	25–57	234 –244	58–76	245–350	77–99	
10	100–215	1–21	216–233	22–52	234 –244	53–71	245–350	72–99	

Table 3.6. Cut Scores—STAAR EOC Algebra I & MAP Growth Algebra I

STAAR Algebra I									
Level	<i>Did Not Meet</i>		<i>Approaches</i>		<i>Meets</i>		<i>Masters</i>		
Scale Score	1500–3549		3550–3999		4000–4344		4345–6430		
MAP Growth Algebra I									
Term	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile	
Fall	100–208	1–10	209–225	11–42	226 –238	43–72	239–350	73–99	
Winter	100–211	1–11	212–229	12–42	230 –242	43–70	243–350	71–99	
Spring	100–215	1–14	216–233	15–43	234 –246	44–68	247–350	69–99	

Table 3.7. Cut Scores—STAAR EOC Biology & MAP Growth Biology

STAAR Biology									
Level	<i>Did Not Meet</i>		<i>Approaches</i>		<i>Meets</i>		<i>Masters</i>		
Scale Score	1900–3549		3550–3999		4000–4530		4531–6260		
MAP Growth Biology									
Term	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile	
Fall	100–190	1–4	191–210	5–41	211 –230	42–89	231–350	90–99	
Winter	100–191	1–4	192–212	5–41	213 –233	42–88	234–350	89–99	
Spring	100–194	1–7	195–214	8–42	215 –234	43–85	235–350	86–99	

Table 3.8. Cut Scores—STAAR EOC English I & MAP Growth Reading 6+

STAAR English I								
Level	<i>Did Not Meet</i>		<i>Approaches</i>		<i>Meets</i>		<i>Masters</i>	
Scale Score	1750–3774		3775–3999		4000–4605		4606–6000	
MAP Growth Reading 6+ (Fall)								
Grade	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile
8	100–198	1–12	199–210	13–33	211–233	34–82	234–350	83–99
9	100–200	1–16	201–211	17–35	212–233	36–78	234–350	79–99
10	100–200	1–12	201–211	13–29	212–233	30–75	234–350	76–99
11	100–201	1–10	202–212	11–27	213–233	28–71	234–350	72–99
12	100–202	1–13	203–212	14–28	213–233	29–69	234–350	70–99
MAP Growth Reading 6+ (Winter)								
8	100–202	1–14	203–213	15–34	214–234	35–80	235–350	81–99
9	100–203	1–18	204–213	19–35	214–234	36–77	235–350	78–99
10	100–203	1–13	204–213	14–30	214–234	31–74	235–350	75–99
11	100–203	1–11	204–213	12–27	214–234	28–71	235–350	72–99
12	100–203	1–16	204–213	17–31	214–234	32–69	235–350	70–99
MAP Growth Reading 6+ (Spring)								
8	100–204	1–15	205–214	16–34	215–235	35–79	236–350	80–99
9	100–204	1–18	205–214	19–36	215–235	37–77	236–350	78–99
10	100–204	1–14	205–214	15–31	215–235	32–74	236–350	75–99
11	100–204	1–13	205–214	14–29	215–235	30–72	236–350	73–99
12	100–204	1–19	205–214	20–33	215–235	34–68	236–350	69–99

Table 3.9. Cut Scores—STAAR EOC English II & MAP Growth Reading 6+

STAAR English II								
Level	<i>Did Not Meet</i>		<i>Approaches</i>		<i>Meets</i>		<i>Masters</i>	
Scale Score	1650–3774		3775–3999		4000–4733		4734–6050	
MAP Growth Reading 6+ (Fall)								
Grade	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile
8	100–202	1–18	203–213	19–40	214–239	41–89	240–350	90–99
9	100–203	1–21	204–214	22–41	215–239	42–86	240–350	87–99
10	100–204	1–17	205–214	18–35	215–239	36–84	240–350	85–99
11	100–204	1–14	205–215	15–33	216–239	34–81	240–350	82–99
12	100–205	1–17	206–215	18–33	216–239	34–79	240–350	80–99
MAP Growth Reading 6+ (Winter)								
8	100–205	1–18	206–216	19–41	217–240	42–88	241–350	89–99
9	100–206	1–23	207–216	24–42	217–240	43–85	241–350	86–99
10	100–206	1–18	207–216	19–36	217–240	37–84	241–350	85–99
11	100–206	1–15	207–216	16–32	217–240	33–81	241–350	82–99
12	100–206	1–20	207–216	21–36	217–240	37–78	241–350	79–99
MAP Growth Reading 6+ (Spring)								
8	100–207	1–20	208–217	21–40	218–241	41–88	242–350	89–99
9	100–207	1–23	208–217	24–42	218–241	43–85	242–350	86–99
10	100–207	1–19	208–217	20–37	218–241	38–84	242–350	85–99
11	100–207	1–17	208–217	18–35	218–241	36–82	242–350	83–99
12	100–207	1–23	208–217	24–38	218–241	39–77	242–350	78–99

3.4. Classification Accuracy

Table 3.10 presents the classification accuracy summary statistics, including the overall classification accuracy rates. These results indicate how well MAP Growth spring RIT scores predict proficiency on the STAAR EOC tests, providing insight into the predictive validity of MAP Growth. The overall classification accuracy rate is between 0.80–0.85. These values suggest that the RIT cut scores are good at classifying students as proficient (*Meets Grade Level*) or not proficient on the STAAR EOC assessment.

Although the results show that MAP Growth scores can be used to accurately classify students as likely to be proficient on the STAAR EOC tests, there is a notable limitation to how these results should be used and interpreted. The STAAR EOC and MAP Growth assessments are designed for different purposes and measure slightly different constructs even within the same content area. Therefore, scores on the two tests cannot be assumed to be interchangeable.

Table 3.10. Classification Accuracy Results

N	Proficient Cut		Class. Accuracy	Rate		Sensitivity	Specificity	Precision	AUC
	RIT	State		FP	FN				
STAAR Algebra I & MAP Growth Mathematics 6+									
1,916	234	4000	0.84	0.16	0.16	0.84	0.84	0.81	0.91
STAAR Algebra I & MAP Growth Algebra I									
3,697	234	4000	0.80	0.19	0.22	0.78	0.81	0.77	0.86
STAAR Biology & MAP Growth Biology									
2,820	215	4000	0.85	0.18	0.13	0.87	0.82	0.86	0.93
STAAR English I & MAP Growth Reading 6+									
7,541	215	4000	0.84	0.20	0.13	0.87	0.80	0.84	0.92
STAAR English II & MAP Growth Reading 6+									
4,852	218	4000	0.81	0.22	0.16	0.84	0.78	0.83	0.89

Note. Class. Accuracy = overall classification accuracy rate; FP = false positives; FN = false negatives; AUC = area under the ROC curve.

3.5. Proficiency Projections

Table 3.11–Table 3.15 present the estimated probability of achieving *Meets Grade Level* performance on the STAAR EOC tests based on RIT scores from fall, winter, or spring. Due to measurement errors in all test scores, the *Meets Grade Level* MAP Growth cuts do not guarantee that a student will reach proficiency on the STAAR EOC tests. Instead, they indicate a 50% chance that a student will achieve a particular performance level. Therefore, these projections further elucidate the *Meets Grade Level* cut scores by providing the likelihood of reaching proficiency on the state test in the spring at a given percentile throughout the year. For example, an educator can use Table 3.11 to estimate that a grade 7 student who obtained a MAP Growth mathematics RIT score of 227 in the fall has a 50% probability of reaching *Meets Grade Level* or higher on the STAAR EOC test in the spring.

Table 3.11. Proficiency Projections Based on RIT Scores—Algebra I & Mathematics 6+

Grade	Percentile	Spring RIT Cut	Fall			Winter			Spring		
			RIT	Projected Proficiency		RIT	Projected Proficiency		RIT	Projected Proficiency	
				Meets	Prob.		Meets	Prob.		Meets	Prob.
7	5	234	192	No	<0.01	194	No	<0.01	196	No	<0.01
	10	234	198	No	<0.01	201	No	<0.01	203	No	<0.01
	15	234	202	No	<0.01	205	No	<0.01	207	No	<0.01
	20	234	206	No	<0.01	209	No	<0.01	211	No	<0.01
	25	234	208	No	<0.01	212	No	<0.01	214	No	<0.01
	30	234	211	No	<0.01	215	No	<0.01	217	No	<0.01
	35	234	213	No	0.01	217	No	<0.01	220	No	<0.01
	40	234	216	No	0.03	219	No	<0.01	222	No	<0.01
	45	234	218	No	0.07	222	No	0.03	224	No	<0.01
	50	234	220	No	0.13	224	No	0.07	227	No	0.02
	55	234	222	No	0.21	226	No	0.14	229	No	0.08
	60	234	225	No	0.37	229	No	0.33	231	No	0.2
	65	234	227	Yes	0.5	231	Yes	0.5	234	Yes	0.5
	70	234	229	Yes	0.63	233	Yes	0.67	236	Yes	0.72
	75	234	232	Yes	0.79	236	Yes	0.86	239	Yes	0.92
	80	234	235	Yes	0.9	239	Yes	0.96	242	Yes	0.99
	85	234	238	Yes	0.96	243	Yes	>0.99	246	Yes	>0.99
90	234	243	Yes	>0.99	247	Yes	>0.99	251	Yes	>0.99	
95	234	249	Yes	>0.99	254	Yes	>0.99	257	Yes	>0.99	
8	5	234	194	No	<0.01	196	No	<0.01	197	No	<0.01
	10	234	201	No	<0.01	203	No	<0.01	205	No	<0.01
	15	234	205	No	<0.01	208	No	<0.01	210	No	<0.01
	20	234	209	No	<0.01	212	No	<0.01	214	No	<0.01
	25	234	212	No	0.01	215	No	<0.01	217	No	<0.01
	30	234	215	No	0.03	218	No	<0.01	220	No	<0.01
	35	234	218	No	0.06	221	No	0.01	223	No	<0.01
	40	234	220	No	0.1	223	No	0.03	225	No	0.01
	45	234	223	No	0.19	226	No	0.11	228	No	0.04
	50	234	225	No	0.28	228	No	0.2	230	No	0.13
	55	234	227	No	0.39	231	No	0.42	233	No	0.39
	60	234	230	Yes	0.56	233	Yes	0.58	235	Yes	0.61
	65	234	232	Yes	0.67	236	Yes	0.8	238	Yes	0.87
	70	234	235	Yes	0.81	238	Yes	0.89	241	Yes	0.98
	75	234	238	Yes	0.9	241	Yes	0.97	244	Yes	>0.99
	80	234	241	Yes	0.96	244	Yes	0.99	247	Yes	>0.99
	85	234	245	Yes	0.99	248	Yes	>0.99	251	Yes	>0.99
90	234	249	Yes	>0.99	253	Yes	>0.99	256	Yes	>0.99	
95	234	256	Yes	>0.99	260	Yes	>0.99	263	Yes	>0.99	

Grade	Percentile	Spring RIT Cut	Fall			Winter			Spring		
			RIT	Projected Proficiency		RIT	Projected Proficiency		RIT	Projected Proficiency	
				Meets	Prob.		Meets	Prob.		Meets	Prob.
9	5	234	194	No	<0.01	196	No	<0.01	196	No	<0.01
	10	234	201	No	<0.01	203	No	<0.01	204	No	<0.01
	15	234	206	No	<0.01	208	No	<0.01	209	No	<0.01
	20	234	210	No	<0.01	212	No	<0.01	213	No	<0.01
	25	234	213	No	0.01	215	No	<0.01	216	No	<0.01
	30	234	216	No	0.03	218	No	<0.01	219	No	<0.01
	35	234	219	No	0.07	221	No	0.01	222	No	<0.01
	40	234	221	No	0.11	224	No	0.04	225	No	0.01
	45	234	224	No	0.21	226	No	0.08	227	No	0.02
	50	234	226	No	0.29	229	No	0.21	230	No	0.13
	55	234	229	No	0.45	231	No	0.34	233	No	0.39
	60	234	231	Yes	0.5	234	Yes	0.58	235	Yes	0.61
	65	234	234	Yes	0.66	236	Yes	0.73	238	Yes	0.87
	70	234	237	Yes	0.79	239	Yes	0.89	241	Yes	0.98
	75	234	240	Yes	0.89	242	Yes	0.96	244	Yes	>0.99
	80	234	243	Yes	0.95	246	Yes	>0.99	247	Yes	>0.99
	85	234	247	Yes	0.98	249	Yes	>0.99	251	Yes	>0.99
90	234	252	Yes	>0.99	254	Yes	>0.99	256	Yes	>0.99	
95	234	259	Yes	>0.99	262	Yes	>0.99	264	Yes	>0.99	
10	5	234	196	No	<0.01	197	No	<0.01	197	No	<0.01
	10	234	203	No	<0.01	205	No	<0.01	205	No	<0.01
	15	234	208	No	<0.01	210	No	<0.01	210	No	<0.01
	20	234	212	No	0.01	214	No	<0.01	215	No	<0.01
	25	234	215	No	0.02	217	No	<0.01	218	No	<0.01
	30	234	218	No	0.05	220	No	<0.01	221	No	<0.01
	35	234	221	No	0.09	223	No	0.02	224	No	<0.01
	40	234	224	No	0.17	226	No	0.08	227	No	0.02
	45	234	227	No	0.29	229	No	0.21	230	No	0.13
	50	234	229	No	0.39	231	No	0.34	232	No	0.28
	55	234	232	Yes	0.55	234	Yes	0.58	235	Yes	0.61
	60	234	234	Yes	0.66	236	Yes	0.73	238	Yes	0.87
	65	234	237	Yes	0.79	239	Yes	0.89	241	Yes	0.98
	70	234	240	Yes	0.89	242	Yes	0.97	244	Yes	>0.99
	75	234	243	Yes	0.95	245	Yes	0.99	247	Yes	>0.99
	80	234	246	Yes	0.98	249	Yes	>0.99	250	Yes	>0.99
	85	234	250	Yes	>0.99	253	Yes	>0.99	254	Yes	>0.99
90	234	255	Yes	>0.99	258	Yes	>0.99	260	Yes	>0.99	
95	234	262	Yes	>0.99	265	Yes	>0.99	267	Yes	>0.99	

Table 3.12. Proficiency Projections Based on RIT Scores—Algebra I & Algebra I

Grade	Percentile	Spring RIT Cut	Fall			Winter			Spring		
			RIT	Projected Proficiency		RIT	Projected Proficiency		RIT	Projected Proficiency	
				Meets	Prob.		Meets	Prob.		Meets	Prob.
Algebra I	5	234	202	No	0.01	204	No	<0.01	204	No	<0.01
	10	234	208	No	0.03	210	No	0.01	212	No	<0.01
	15	234	212	No	0.07	214	No	0.04	216	No	<0.01
	20	234	215	No	0.12	218	No	0.09	220	No	<0.01
	25	234	218	No	0.19	221	No	0.15	224	No	<0.01
	30	234	220	No	0.28	224	No	0.25	227	No	0.02
	35	234	223	No	0.38	226	No	0.33	229	No	0.08
	40	234	225	No	0.46	228	No	0.41	232	No	0.28
	45	234	227	Yes	0.54	231	Yes	0.55	234	Yes	0.50
	50	234	229	Yes	0.62	233	Yes	0.63	237	Yes	0.80
	55	234	231	Yes	0.69	235	Yes	0.71	239	Yes	0.92
	60	234	233	Yes	0.75	238	Yes	0.82	242	Yes	0.99
	65	234	235	Yes	0.81	240	Yes	0.87	245	Yes	>0.99
	70	234	237	Yes	0.86	242	Yes	0.91	247	Yes	>0.99
	75	234	240	Yes	0.93	245	Yes	0.96	250	Yes	>0.99
	80	234	243	Yes	0.96	248	Yes	0.98	254	Yes	>0.99
	85	234	246	Yes	0.98	252	Yes	0.99	257	Yes	>0.99
90	234	250	Yes	0.99	256	Yes	>0.99	262	Yes	>0.99	
95	234	256	Yes	>0.99	263	Yes	>0.99	269	Yes	>0.99	

Table 3.13. Proficiency Projections Based on RIT Scores—Biology & Biology

Grade	Percentile	Spring RIT Cut	Fall			Winter			Spring		
			RIT	Projected Proficiency		RIT	Projected Proficiency		RIT	Projected Proficiency	
				Meets	Prob.		Meets	Prob.		Meets	Prob.
Biology	5	215	191	No	0.01	192	No	<0.01	192	No	<0.01
	10	215	196	No	0.03	197	No	0.02	197	No	<0.01
	15	215	200	No	0.08	201	No	0.04	201	No	<0.01
	20	215	202	No	0.13	203	No	0.08	204	No	<0.01
	25	215	205	No	0.22	206	No	0.16	207	No	0.01
	30	215	207	No	0.31	208	No	0.24	209	No	0.04
	35	215	208	No	0.35	210	No	0.33	212	No	0.20
	40	215	210	No	0.45	212	No	0.44	214	No	0.39
	45	215	212	Yes	0.55	214	Yes	0.56	216	Yes	0.61
	50	215	214	Yes	0.65	216	Yes	0.67	218	Yes	0.80
	55	215	215	Yes	0.69	218	Yes	0.76	220	Yes	0.92
	60	215	217	Yes	0.78	220	Yes	0.84	222	Yes	0.98
	65	215	219	Yes	0.84	222	Yes	0.90	224	Yes	0.99
	70	215	221	Yes	0.90	224	Yes	0.94	226	Yes	>0.99
	75	215	223	Yes	0.94	226	Yes	0.96	228	Yes	>0.99
	80	215	225	Yes	0.96	228	Yes	0.98	231	Yes	>0.99
	85	215	228	Yes	0.98	231	Yes	0.99	234	Yes	>0.99
90	215	231	Yes	0.99	235	Yes	>0.99	238	Yes	>0.99	
95	215	236	Yes	>0.99	240	Yes	>0.99	244	Yes	>0.99	

Table 3.14. Proficiency Projections Based on RIT Scores—English I & Reading 6+

Grade	Percentile	Spring RIT Cut	Fall			Winter			Spring		
			RIT	Projected Proficiency		RIT	Projected Proficiency		RIT	Projected Proficiency	
				Meets	Prob.		Meets	Prob.		Meets	Prob.
8	5	215	190	No	0.01	193	No	<0.01	194	No	<0.01
	10	215	196	No	0.04	199	No	<0.01	200	No	<0.01
	15	215	200	No	0.11	203	No	0.03	204	No	<0.01
	20	215	204	No	0.2	206	No	0.09	207	No	0.01
	25	215	207	No	0.34	209	No	0.22	210	No	0.08
	30	215	209	No	0.45	212	No	0.35	213	No	0.28
	35	215	211	Yes	0.5	214	Yes	0.5	215	Yes	0.5
	40	215	214	Yes	0.66	216	Yes	0.65	217	Yes	0.72
	45	215	216	Yes	0.76	218	Yes	0.78	220	Yes	0.92
	50	215	218	Yes	0.83	221	Yes	0.91	222	Yes	0.98
	55	215	220	Yes	0.87	223	Yes	0.96	224	Yes	0.99
	60	215	222	Yes	0.92	225	Yes	0.98	226	Yes	>0.99
	65	215	225	Yes	0.96	227	Yes	0.99	228	Yes	>0.99
	70	215	227	Yes	0.98	229	Yes	>0.99	231	Yes	>0.99
	75	215	230	Yes	0.99	232	Yes	>0.99	233	Yes	>0.99
	80	215	232	Yes	>0.99	235	Yes	>0.99	236	Yes	>0.99
85	215	236	Yes	>0.99	238	Yes	>0.99	239	Yes	>0.99	
90	215	240	Yes	>0.99	242	Yes	>0.99	243	Yes	>0.99	
95	215	246	Yes	>0.99	248	Yes	>0.99	249	Yes	>0.99	
9	5	215	188	No	<0.01	190	No	<0.01	190	No	<0.01
	10	215	195	No	0.03	197	No	<0.01	197	No	<0.01
	15	215	199	No	0.07	201	No	0.01	202	No	<0.01
	20	215	203	No	0.16	205	No	0.05	205	No	<0.01
	25	215	206	No	0.27	208	No	0.14	209	No	0.04
	30	215	209	No	0.35	211	No	0.29	211	No	0.13
	35	215	212	Yes	0.5	213	No	0.43	214	No	0.39
	40	215	214	Yes	0.6	216	Yes	0.64	217	Yes	0.72
	45	215	217	Yes	0.73	218	Yes	0.77	219	Yes	0.87
	50	215	219	Yes	0.77	221	Yes	0.9	221	Yes	0.96
	55	215	221	Yes	0.84	223	Yes	0.95	224	Yes	0.99
	60	215	224	Yes	0.91	225	Yes	0.98	226	Yes	>0.99
	65	215	226	Yes	0.95	228	Yes	0.99	229	Yes	>0.99
	70	215	229	Yes	0.98	230	Yes	>0.99	231	Yes	>0.99
	75	215	232	Yes	0.99	233	Yes	>0.99	234	Yes	>0.99
	80	215	235	Yes	>0.99	236	Yes	>0.99	237	Yes	>0.99
85	215	239	Yes	>0.99	240	Yes	>0.99	241	Yes	>0.99	
90	215	243	Yes	>0.99	245	Yes	>0.99	246	Yes	>0.99	
95	215	250	Yes	>0.99	251	Yes	>0.99	253	Yes	>0.99	

Grade	Percentile	Spring RIT Cut	Fall			Winter			Spring		
			RIT	Projected Proficiency		RIT	Projected Proficiency		RIT	Projected Proficiency	
				Meets	Prob.		Meets	Prob.		Meets	Prob.
10	5	215	192	No	0.01	194	No	<0.01	194	No	<0.01
	10	215	199	No	0.06	200	No	<0.01	200	No	<0.01
	15	215	203	No	0.15	204	No	0.03	205	No	<0.01
	20	215	206	No	0.22	208	No	0.13	208	No	0.02
	25	215	209	No	0.35	211	No	0.29	211	No	0.13
	30	215	212	Yes	0.5	214	Yes	0.5	214	No	0.39
	35	215	215	Yes	0.65	216	Yes	0.65	217	Yes	0.72
	40	215	217	Yes	0.7	218	Yes	0.77	219	Yes	0.87
	45	215	219	Yes	0.78	221	Yes	0.9	221	Yes	0.96
	50	215	221	Yes	0.85	223	Yes	0.95	224	Yes	0.99
	55	215	224	Yes	0.92	225	Yes	0.98	226	Yes	>0.99
	60	215	226	Yes	0.95	227	Yes	0.99	228	Yes	>0.99
	65	215	228	Yes	0.97	230	Yes	>0.99	231	Yes	>0.99
	70	215	231	Yes	0.99	232	Yes	>0.99	233	Yes	>0.99
	75	215	234	Yes	>0.99	235	Yes	>0.99	236	Yes	>0.99
	80	215	237	Yes	>0.99	238	Yes	>0.99	239	Yes	>0.99
85	215	240	Yes	>0.99	241	Yes	>0.99	242	Yes	>0.99	
90	215	244	Yes	>0.99	246	Yes	>0.99	247	Yes	>0.99	
95	215	251	Yes	>0.99	252	Yes	>0.99	253	Yes	>0.99	
11	5	215	194	No	0.02	195	No	<0.01	194	No	<0.01
	10	215	201	No	0.1	202	No	0.02	201	No	<0.01
	15	215	205	No	0.21	206	No	0.08	206	No	0.01
	20	215	209	No	0.32	210	No	0.24	209	No	0.04
	25	215	212	No	0.45	213	No	0.43	212	No	0.2
	30	215	214	Yes	0.55	215	Yes	0.57	215	Yes	0.5
	35	215	217	Yes	0.68	218	Yes	0.76	218	Yes	0.8
	40	215	219	Yes	0.76	220	Yes	0.86	220	Yes	0.92
	45	215	221	Yes	0.82	222	Yes	0.92	222	Yes	0.98
	50	215	224	Yes	0.9	225	Yes	0.97	225	Yes	>0.99
	55	215	226	Yes	0.94	227	Yes	0.99	227	Yes	>0.99
	60	215	228	Yes	0.96	229	Yes	>0.99	229	Yes	>0.99
	65	215	230	Yes	0.98	231	Yes	>0.99	232	Yes	>0.99
	70	215	233	Yes	0.99	234	Yes	>0.99	234	Yes	>0.99
	75	215	235	Yes	0.99	237	Yes	>0.99	237	Yes	>0.99
	80	215	238	Yes	>0.99	240	Yes	>0.99	240	Yes	>0.99
85	215	242	Yes	>0.99	243	Yes	>0.99	244	Yes	>0.99	
90	215	246	Yes	>0.99	247	Yes	>0.99	248	Yes	>0.99	
95	215	253	Yes	>0.99	254	Yes	>0.99	255	Yes	>0.99	

Grade	Percentile	Spring RIT Cut	Fall			Winter			Spring		
			RIT	Projected Proficiency		RIT	Projected Proficiency		RIT	Projected Proficiency	
				Meets	Prob.		Meets	Prob.		Meets	Prob.
12	5	215	192	No	0.01	189	No	<0.01	186	No	<0.01
	10	215	199	No	0.05	197	No	<0.01	195	No	<0.01
	15	215	204	No	0.15	202	No	0.02	200	No	<0.01
	20	215	208	No	0.28	206	No	0.08	205	No	<0.01
	25	215	211	No	0.41	210	No	0.24	209	No	0.04
	30	215	214	Yes	0.55	213	No	0.43	212	No	0.2
	35	215	216	Yes	0.64	216	Yes	0.64	215	Yes	0.5
	40	215	219	Yes	0.76	218	Yes	0.76	218	Yes	0.8
	45	215	221	Yes	0.82	221	Yes	0.9	221	Yes	0.96
	50	215	224	Yes	0.9	224	Yes	0.96	224	Yes	0.99
	55	215	226	Yes	0.93	227	Yes	0.99	227	Yes	>0.99
	60	215	229	Yes	0.97	229	Yes	>0.99	230	Yes	>0.99
	65	215	231	Yes	0.98	232	Yes	>0.99	233	Yes	>0.99
	70	215	234	Yes	0.99	235	Yes	>0.99	236	Yes	>0.99
	75	215	237	Yes	>0.99	238	Yes	>0.99	240	Yes	>0.99
	80	215	240	Yes	>0.99	242	Yes	>0.99	244	Yes	>0.99
	85	215	244	Yes	>0.99	246	Yes	>0.99	248	Yes	>0.99
90	215	249	Yes	>0.99	251	Yes	>0.99	254	Yes	>0.99	
95	215	256	Yes	>0.99	259	Yes	>0.99	262	Yes	>0.99	

Table 3.15. Proficiency Projections Based on RIT Scores—English II & Reading 6+

Grade	Percentile	Spring RIT Cut	Fall			Winter			Spring		
			RIT	Projected Proficiency		RIT	Projected Proficiency		RIT	Projected Proficiency	
				Meets	Prob.		Meets	Prob.		Meets	Prob.
8	5	218	190	No	<0.01	193	No	<0.01	194	No	<0.01
	10	218	196	No	0.01	199	No	<0.01	200	No	<0.01
	15	218	200	No	0.05	203	No	0.01	204	No	<0.01
	20	218	204	No	0.11	206	No	0.03	207	No	<0.01
	25	218	207	No	0.2	209	No	0.09	210	No	0.01
	30	218	209	No	0.29	212	No	0.17	213	No	0.08
	35	218	211	No	0.34	214	No	0.28	215	No	0.2
	40	218	214	Yes	0.5	216	No	0.42	217	No	0.39
	45	218	216	Yes	0.61	218	Yes	0.58	220	Yes	0.72
	50	218	218	Yes	0.71	221	Yes	0.78	222	Yes	0.87
	55	218	220	Yes	0.76	223	Yes	0.87	224	Yes	0.96
	60	218	222	Yes	0.83	225	Yes	0.94	226	Yes	0.99
	65	218	225	Yes	0.92	227	Yes	0.97	228	Yes	>0.99
	70	218	227	Yes	0.95	229	Yes	0.99	231	Yes	>0.99
	75	218	230	Yes	0.97	232	Yes	>0.99	233	Yes	>0.99
	80	218	232	Yes	0.99	235	Yes	>0.99	236	Yes	>0.99
	85	218	236	Yes	>0.99	238	Yes	>0.99	239	Yes	>0.99
90	218	240	Yes	>0.99	242	Yes	>0.99	243	Yes	>0.99	
95	218	246	Yes	>0.99	248	Yes	>0.99	249	Yes	>0.99	

Grade	Percentile	Spring RIT Cut	Fall			Winter			Spring		
			RIT	Projected Proficiency		RIT	Projected Proficiency		RIT	Projected Proficiency	
				Meets	Prob.		Meets	Prob.		Meets	Prob.
9	5	218	188	No	<0.01	190	No	<0.01	190	No	<0.01
	10	218	195	No	0.01	197	No	<0.01	197	No	<0.01
	15	218	199	No	0.03	201	No	<0.01	202	No	<0.01
	20	218	203	No	0.09	205	No	0.01	205	No	<0.01
	25	218	206	No	0.16	208	No	0.05	209	No	0.01
	30	218	209	No	0.23	211	No	0.14	211	No	0.02
	35	218	212	No	0.35	213	No	0.23	214	No	0.13
	40	218	214	No	0.45	216	No	0.43	217	No	0.39
	45	218	217	Yes	0.6	218	Yes	0.57	219	Yes	0.61
	50	218	219	Yes	0.65	221	Yes	0.77	221	Yes	0.8
	55	218	221	Yes	0.73	223	Yes	0.86	224	Yes	0.96
	60	218	224	Yes	0.84	225	Yes	0.93	226	Yes	0.99
	65	218	226	Yes	0.89	228	Yes	0.98	229	Yes	>0.99
	70	218	229	Yes	0.95	230	Yes	0.99	231	Yes	>0.99
	75	218	232	Yes	0.98	233	Yes	>0.99	234	Yes	>0.99
	80	218	235	Yes	0.99	236	Yes	>0.99	237	Yes	>0.99
85	218	239	Yes	>0.99	240	Yes	>0.99	241	Yes	>0.99	
90	218	243	Yes	>0.99	245	Yes	>0.99	246	Yes	>0.99	
95	218	250	Yes	>0.99	251	Yes	>0.99	253	Yes	>0.99	
10	5	218	192	No	<0.01	194	No	<0.01	194	No	<0.01
	10	218	199	No	0.03	200	No	<0.01	200	No	<0.01
	15	218	203	No	0.08	204	No	0.01	205	No	<0.01
	20	218	206	No	0.12	208	No	0.05	208	No	<0.01
	25	218	209	No	0.22	211	No	0.13	211	No	0.02
	30	218	212	No	0.35	214	No	0.29	214	No	0.13
	35	218	215	Yes	0.5	216	No	0.43	217	No	0.39
	40	218	217	Yes	0.55	218	Yes	0.57	219	Yes	0.61
	45	218	219	Yes	0.65	221	Yes	0.77	221	Yes	0.8
	50	218	221	Yes	0.74	223	Yes	0.87	224	Yes	0.96
	55	218	224	Yes	0.85	225	Yes	0.93	226	Yes	0.99
	60	218	226	Yes	0.9	227	Yes	0.97	228	Yes	>0.99
	65	218	228	Yes	0.94	230	Yes	0.99	231	Yes	>0.99
	70	218	231	Yes	0.97	232	Yes	>0.99	233	Yes	>0.99
	75	218	234	Yes	0.99	235	Yes	>0.99	236	Yes	>0.99
	80	218	237	Yes	>0.99	238	Yes	>0.99	239	Yes	>0.99
85	218	240	Yes	>0.99	241	Yes	>0.99	242	Yes	>0.99	
90	218	244	Yes	>0.99	246	Yes	>0.99	247	Yes	>0.99	
95	218	251	Yes	>0.99	252	Yes	>0.99	253	Yes	>0.99	

Grade	Percentile	Spring RIT Cut	Fall			Winter			Spring		
			RIT	Projected Proficiency		RIT	Projected Proficiency		RIT	Projected Proficiency	
				Meets	Prob.		Meets	Prob.		Meets	Prob.
11	5	218	194	No	0.01	195	No	<0.01	194	No	<0.01
	10	218	201	No	0.05	202	No	<0.01	201	No	<0.01
	15	218	205	No	0.12	206	No	0.03	206	No	<0.01
	20	218	209	No	0.21	210	No	0.11	209	No	0.01
	25	218	212	No	0.32	213	No	0.24	212	No	0.04
	30	218	214	No	0.41	215	No	0.36	215	No	0.2
	35	218	217	Yes	0.55	218	Yes	0.57	218	Yes	0.5
	40	218	219	Yes	0.64	220	Yes	0.7	220	Yes	0.72
	45	218	221	Yes	0.72	222	Yes	0.81	222	Yes	0.87
	50	218	224	Yes	0.82	225	Yes	0.92	225	Yes	0.98
	55	218	226	Yes	0.88	227	Yes	0.96	227	Yes	0.99
	60	218	228	Yes	0.92	229	Yes	0.98	229	Yes	>0.99
	65	218	230	Yes	0.95	231	Yes	0.99	232	Yes	>0.99
	70	218	233	Yes	0.98	234	Yes	>0.99	234	Yes	>0.99
	75	218	235	Yes	0.99	237	Yes	>0.99	237	Yes	>0.99
	80	218	238	Yes	0.99	240	Yes	>0.99	240	Yes	>0.99
85	218	242	Yes	>0.99	243	Yes	>0.99	244	Yes	>0.99	
90	218	246	Yes	>0.99	247	Yes	>0.99	248	Yes	>0.99	
95	218	253	Yes	>0.99	254	Yes	>0.99	255	Yes	>0.99	
12	5	218	192	No	<0.01	189	No	<0.01	186	No	<0.01
	10	218	199	No	0.03	197	No	<0.01	195	No	<0.01
	15	218	204	No	0.08	202	No	<0.01	200	No	<0.01
	20	218	208	No	0.18	206	No	0.02	205	No	<0.01
	25	218	211	No	0.28	210	No	0.1	209	No	0.01
	30	218	214	No	0.41	213	No	0.24	212	No	0.04
	35	218	216	Yes	0.5	216	No	0.43	215	No	0.2
	40	218	219	Yes	0.64	218	Yes	0.57	218	Yes	0.5
	45	218	221	Yes	0.72	221	Yes	0.76	221	Yes	0.8
	50	218	224	Yes	0.82	224	Yes	0.9	224	Yes	0.96
	55	218	226	Yes	0.88	227	Yes	0.96	227	Yes	0.99
	60	218	229	Yes	0.93	229	Yes	0.98	230	Yes	>0.99
	65	218	231	Yes	0.96	232	Yes	>0.99	233	Yes	>0.99
	70	218	234	Yes	0.98	235	Yes	>0.99	236	Yes	>0.99
	75	218	237	Yes	0.99	238	Yes	>0.99	240	Yes	>0.99
	80	218	240	Yes	>0.99	242	Yes	>0.99	244	Yes	>0.99
85	218	244	Yes	>0.99	246	Yes	>0.99	248	Yes	>0.99	
90	218	249	Yes	>0.99	251	Yes	>0.99	254	Yes	>0.99	
95	218	256	Yes	>0.99	259	Yes	>0.99	262	Yes	>0.99	

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