Predicting Proficiency on the Florida Assessment of Student Thinking (FAST) Based on NWEA MAP Growth Scores

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NWEA Psychometrics and Analytics

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Linking Study Updates

Date	Description
2020-07-24	Initial linking study conducted for the Florida Statewide Assessment (FSA) Program in grades 3–8 for mathematics and English language arts (ELA), as well as the Next Generation Sunshine State Standards (NGSSS) assessments in grades 5 and 8 for science using Spring 2018 data
2024-06-04	Updated the linking study for the Florida Assessment of Student Thinking (FAST) using Spring 2023 data for grades 3–8 in mathematics and grades 3–10 in ELA. The linking study for NGSSS grades 5 and 8 in science was sourced from 2018 data as found in the 2020 FL linking study report.
2025-07	Updated the linking study based on the 2025 norms.

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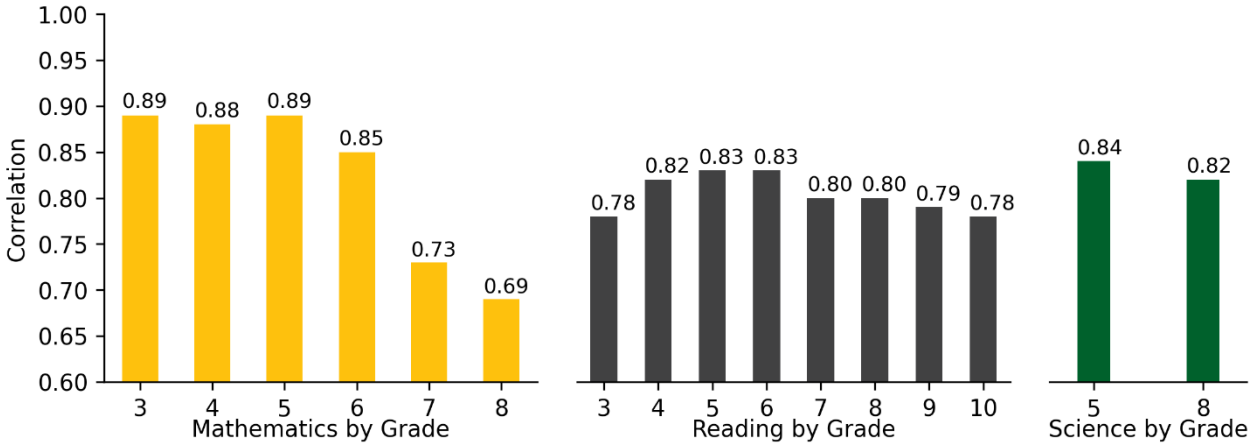
Executive Summary

Linking studies allow partners to use MAP® Growth™ Rasch Unit (RIT) scores throughout the year to predict students' achievement levels on state summative assessments. This is accomplished through statistical analyses that produce RIT cut scores that correspond to state summative achievement levels. A "cut score" is the minimum score a student must get on a test to be placed at a certain achievement level. The linking study for the Florida Assessment of Student Thinking (FAST) and the Next Generation Sunshine State Standards (NGSSS) assessments described in this report provides RIT cut scores for the fall, winter, and spring MAP Growth administrations that correspond to the FAST and NGSSS achievement levels for each subject and grade. Educators can use the RIT cut scores for fall and winter to identify students at risk of not meeting state proficiency standards and provide targeted instruction to improve academic outcomes.

The linking study for FAST is based on test scores from students in grades 3–8 for mathematics and grades 3–10 for ELA/reading who took both the MAP Growth and FAST assessments in Spring 2023. In total, this study included 37,791 students from 63 schools within a single district in Florida. All linking study results for science grades 5 and 8 were sourced from the 2020 Florida linking study report, which used data from Spring 2018.

Prior to initiating the linking analyses, NWEA confirmed that the content standards used to construct the MAP Growth interim assessment were aligned with those of the FAST and NGSSS summative assessments, thus warranting a connection. Further investigation into the relationship between MAP Growth and FAST, as well as NGSSS, involved calculating correlation coefficients to illustrate the association between the MAP Growth scores and the summative test scores of FAST and NGSSS. 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. Although the correlation coefficient between the MAP Growth and FAST test scores for grade 8 mathematics is slightly below 0.70 (as shown in Figure E.1), the correlations between the MAP Growth and FAST—as well as NGSSS—summative test scores in other relevant subjects and grades are all higher than 0.70, indicating that MAP Growth is a good assessment for predicting performance on the FAST and NGSSS spring summative assessments.

Figure E.1. Correlations Between MAP Growth and State Summative Assessment Scores



The equipercentile linking method (Kolen & Brennan, 2004) was used to produce the RIT cut scores for the spring administration that correspond to performance on the FAST and NGSSS summative assessments for every subject and grade. MAP Growth cut scores for grade 2, as well as those for the fall and winter administrations of all grades, are also provided so that educators can track grade 2 students' progress on the FAST test by grade 3, alongside all other students, early in the year. These cut scores were derived from the spring cuts[1] and the growth norms for the adjacent grades (i.e., grades 2 to 3), or fall and winter administrations to the spring administration. While RIT cut scores were generated for every achievement level on the FAST and NGSSS summative assessments, Table E.1 presents the Level 3 cut scores that indicate the minimum score a student must get to be considered proficient.

[1] To enhance content validity, NWEA developed an Enhanced Item-Selection Algorithm (EISA) for the MAP Growth assessment to prioritize grade-level content. A pilot study (Meyer et al., 2023) showed that students taking MAP Growth with EISA demonstrated higher average math scores compared with those taking traditional MAP Growth. To improve score comparability, NWEA (Lewis & Kuhfeld, 2024) developed concordance tables to adjust mathematics scores from traditional assessments to align with scores from MAP Growth with EISA, or vice versa. Given that the data for this study were collected from traditional MAP Growth tests but that the results will be used for MAP Growth with EISA, the spring cuts for mathematics were adjusted using the concordance tables before being used to derive other cut scores. This score adjustment will become unnecessary for future linking studies once the new data from EISA tests are collected.

Table E.1. MAP Growth RIT Level 3 Cut Scores in State Summative Assessments

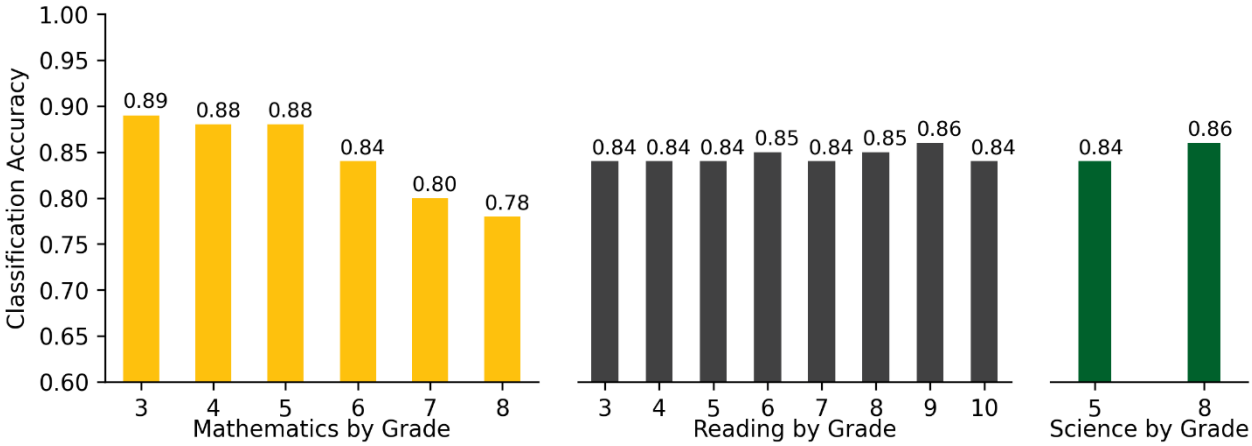
Assessment		Level 3 Cut Scores by Grade								
		2	3	4	5	6	7	8	9	10
Mathematics										
FAST Spring		–	198	211	222	229	235	244	–	–
MAP Growth Mathematics	Fall	178	189	205	214	215	218	221	–	–
	Winter	186	198	213	220	221	222	225	–	–
	Spring	192	204	218	224	225	225	228	–	–
ELA/Reading										
FAST Spring		–	201	213	222	225	232	238	242	247
MAP Growth Reading	Fall	180	193	205	212	215	219	223	225	227
	Winter	186	198	208	215	216	220	224	226	228
	Spring	190	201	210	216	217	221	225	227	229
Science										
NGSSS Spring		–	–	–	200	–	–	203	–	–
MAP Growth Science	Fall	–	–	–	207	–	–	215	–	–
	Winter	–	–	–	210	–	–	217	–	–
	Spring	–	–	–	212	–	–	218	–	–

Educators can use these cut scores to determine whether students are on track for proficiency on the state assessments. For example, the Level 3 cut score on the grade 3 FAST mathematics summative test is 198. A grade 3 student with a MAP Growth mathematics RIT score of 189 in the fall is likely to meet proficiency on the FAST mathematics summative test in the spring, whereas a grade 3 student with an RIT score lower than 189 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 proficient on the FAST and NGSSS summative tests.[2] For example, the grade 3 MAP Growth mathematics Level 3 cut score has a 0.89 accuracy rate, meaning it accurately predicted student achievement on the state test for 89% of the sample. A high statistic indicates high accuracy. Overall, MAP Growth scores have a high accuracy rate of identifying student proficiency on the FAST and NGSSS summative tests, as illustrated in Figure E.2.

[2] The classification accuracy calculations for the mathematics spring cuts were based on the concorded cut scores.

Figure E.2. Accuracy of MAP Growth Classifications



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 assessments. 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 report presents findings from a linking study performed by NWEA aiming to statistically connect the Rasch Unit (RIT) scores obtained from the MAP Growth assessments with the results of the Florida Assessment of Student Thinking (FAST) and Next Generation Sunshine State Standards (NGSSS) spring summative assessments. These assessments cover mathematics for grades 3–8, English language arts (ELA) for grades 3–10, and NGSSS science for grades 5 and 8. The data utilized to generate this report are comprised of the FAST mathematics and ELA test scores collected during Spring 2023, alongside the NGSSS science data gathered in Spring 2018. MAP Growth cut scores are also included for grade 2 so that educators can track early learners' progress toward proficiency on the FAST summative test by grade 3. 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 achievement levels on the FAST and NGSSS spring summative assessments
4. Classification accuracy statistics to determine the degree to which MAP Growth accurately predicts student proficiency status on the FAST and NGSSS summative tests
5. The probability of achieving grade-level proficiency on the FAST and NGSSS summative assessments based on MAP Growth RIT scores from fall, winter, and spring

1.2. Assessment Overview

The FAST and NGSSS tests are Florida's state summative assessments aligned to Florida's Learning Standards. Based on their test scores, students are placed into one of five achievement levels: Level 1, Level 2, Level 3, Level 4, and Level 5. The Level 3 cut score demarks the minimum level of achievement 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 2025 (NWEA, 2025).

2. Methods

2.1. Data Collection

This linking study is based on data from the Spring 2023 administration of the MAP Growth and FAST summative assessments. Each student's state testing record was matched to their MAP Growth score based on the student's first and last names, date of birth, student ID, and other available identifying information. Only students who have scores on both the MAP Growth and FAST summative assessments in Spring 2023 were included in the study sample. As previously noted, the data analysis in the current linking study focused solely on mathematics and ELA, with no examination of science data. The NGSSS science linking study results included in this report were retrieved from the earlier FL 2020 linking study report to facilitate readers' access.

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 achievement 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 achievement 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 the MAP Growth, FAST, and NGSSS assessments, including 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 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 FAST and NGSSS summative tests (that reference some other scale) in the same subject?" The correlations were calculated as:

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

where r is the correlation coefficient, x_i and y_i are the values of the *x*- and *y*-variables in a sample, and $\overline{x}$ and $\overline{y}$ 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 FAST and NGSSS summative assessments are reported for grades 3–8 in mathematics, grades 3–10 in ELA, and grades 5 and 8 in science, as well as for grade 2 in mathematics and ELA so that educators can track early learners' progress toward proficiency on the FAST summative test by grade 3. Percentile ranks based on the most recent 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 achievement level designations for its summative assessment.

The equipercentile linking method (Kolen & Brennan, 2004) was used to identify the spring MAP Growth RIT scores for grades 3–8 in mathematics and grades 3–10 in ELA, as well as grades 5 and 8 in science, that correspond to the FAST/NGSSS spring summative achievement 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., FAST/NGSSS summative). 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 the FAST/NGSSS summative tests on the scale of MAP Growth, $P(x)$ is the percentile rank of a given score on the FAST/NGSSS summative tests, and G^{-1} is the inverse of the percentile rank function for MAP Growth that indicates the score on MAP Growth corresponding to a given percentile. 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 for grades 3–8 in mathematics, grades 3–10 in ELA, and grades 5 and 8 in science. The equation below was used to determine the previous term'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 RIT score, and
- g is the expected growth from the previous RIT (e.g., fall or winter) to the spring RIT score.

The most recent MAP Growth conditional growth norms were also used to calculate the fall, winter, and spring cuts for grade 2. Students do not begin taking the FAST summative assessment until grade 3. Thus, to derive the spring cut scores for grade 2, the growth score from spring of one year to the next was used (i.e., the growth score from spring of grade 2 to spring of grade 3). The calculation of fall and winter cuts for grade 2 followed the same process

as for the other grades. For example, the growth score from fall to spring in grade 2 was used to calculate the fall cuts for this grade.

2.5. Classification Accuracy

The degree to which MAP Growth predicts student proficiency status on the FAST/NGSSS summative 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 or not proficient on the FAST/NGSSS spring summative 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) / (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 Level 3 RIT cut does not guarantee that a 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 (and the projected grade 2 cut scores), the MAP Growth conditional growth norms data were also used to calculate the probability of reaching proficiency on the FAST/NGSSS summative tests based on a student’s RIT scores from fall and winter:

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

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 Level 3 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 Level 3 performance on the FAST/NGSSS summative tests based on their spring RIT score (RIT_{Spring}):

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

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

3. Results

3.1. Study Sample

Only students who have scores on both the MAP Growth and FAST summative assessments in Spring 2023, along with NGSSS student data from 2018, were included in the study sample. The mathematics and ELA data used in this study were collected from 1 district and 63 schools in Florida. Table 3.1 presents the distributions of students by race, sex, and achievement level in the original unweighted study sample. Table 3.2 presents the distributions of the target population of students who took the FAST and NGSSS tests. Since the original study sample is different from the target FAST and NGSSS population, post-stratification weights were applied. Table 3.3 presents the demographic distributions of the sample after weighting, which are almost identical to the FAST and NGSSS student population distributions.

Table 3.1. Linking Study Sample Demographics (Unweighted)

Demographic Subgroup		% Students by Grade							
		3	4	5	6	7	8	9	10
Mathematics									
	Total N	5,681	5,341	5,095	5,667	4,209	2,665	–	–
Race	Asian	3.0	3.8	3.7	2.6	1.8	1.1	–	–
	Black	27.4	27.7	26.6	27.4	26.3	29.5	–	–
	Hispanic	44.8	42.9	44.3	46.9	49.1	50.2	–	–
	Other [a]	0.4	0.6	0.5	0.4	0.6	0.6	–	–
	Two or More Races	3.9	3.3	2.9	2.9	3.3	2.9	–	–
	White	20.6	21.7	21.9	19.8	18.8	15.6	–	–
Sex	Female	51.6	50.8	51.7	50.7	50.4	50.0	–	–
	Male	48.4	49.2	48.3	49.3	49.6	50.0	–	–
Achievement Level	Level 1	18.2	25.1	29.1	22.6	27.0	28.1	–	–
	Level 2	24.1	20.7	27.3	31.9	23.4	31.2	–	–
	Level 3	23.5	21.6	21.0	21.0	25.5	23.8	–	–
	Level 4	23.9	22.9	13.7	18.6	15.8	12.5	–	–
	Level 5	10.3	9.7	8.9	5.9	8.1	4.4	–	–
ELA/Reading									
	Total N	5,685	5,337	5,321	6,231	5,691	5,416	1,989	1,731
Race	Asian	3.0	3.9	3.9	2.9	3.0	3.0	2.7	2.8
	Black	27.3	27.7	26.1	26.2	25.4	25.3	15.8	16.5
	Hispanic	45.0	42.8	44.2	47.1	46.3	46.4	45.6	44.7
	Other [a]	0.4	0.6	0.5	0.4	0.7	0.9	0.6	0.5
	Two or More Races	3.9	3.3	3.0	3.0	3.5	3.2	4.2	3.5
	White	20.4	21.7	22.3	20.3	21.1	21.3	31.2	32.0
Sex	Female	51.3	50.6	51.3	50.2	49.8	49.2	49.5	47.5
	Male	48.7	49.4	48.7	49.8	50.2	50.8	50.5	52.5
Achievement Level	Level 1	24.0	26.6	26.3	22.0	22.2	20.6	19.3	20.1
	Level 2	25.0	24.9	28.1	27.8	29.5	29.1	28.4	28.5
	Level 3	24.4	22.9	19.5	24.5	19.6	24.1	23.2	22.8
	Level 4	17.5	17.7	18.5	18.2	20.5	15.2	18.0	18.0

Demographic Subgroup		% Students by Grade							
		3	4	5	6	7	8	9	10
	Level 5	9.2	7.8	7.6	7.6	8.2	11.1	11.1	10.5
Science									
	Total N	–	–	7,108	–	–	3,727	–	–
Race	Black	–	–	26.0	–	–	27.7	–	–
	Hispanic	–	–	32.3	–	–	38.2	–	–
	Other [a]	–	–	6.6	–	–	8.6	–	–
	White	–	–	35.0	–	–	25.5	–	–
Sex	Female	–	–	50.8	–	–	49.2	–	–
	Male	–	–	49.2	–	–	50.8	–	–
Achievement Level	Level 1	–	–	20.2	–	–	21.0	–	–
	Level 2	–	–	26.9	–	–	32.5	–	–
	Level 3	–	–	29.0	–	–	23.5	–	–
	Level 4	–	–	12.5	–	–	12.8	–	–
	Level 5	–	–	11.4	–	–	10.2	–	–

[a] The “Other” category includes races of American Indian, Pacific Islander, and Not Reported.

Table 3.2. Linking Study Population Demographics

Demographic Subgroup		% Students by Grade							
		3	4	5	6	7	8	9	10
Mathematics									
	Total N	221,011	197,766	206,221	210,747	150,831	170,149	–	–
Race	Asian	2.7	2.9	2.9	2.6	1.7	2.3	–	–
	Black	20.4	19.5	19.8	20.9	22.9	22.3	–	–
	Hispanic	36.6	36.1	36.7	37.6	38.3	38.2	–	–
	Other [a]	1.8	2.0	1.8	1.8	2.2	1.9	–	–
	Two or More Races	4.4	4.3	4.2	3.9	3.8	3.7	–	–
	White	34.2	35.2	34.7	33.2	31.3	31.5	–	–
Sex	Female	48.6	49.0	49.2	48.8	48.9	48.8	–	–
	Male	51.4	51.0	50.8	51.2	51.1	51.2	–	–
Achievement Level	Level 1	24.0	24.0	27.0	23.0	30.0	28.0	–	–
	Level 2	17.0	15.0	18.0	22.0	23.0	17.0	–	–
	Level 3	25.0	24.0	20.0	23.0	26.0	26.0	–	–
	Level 4	23.0	20.0	19.0	21.0	15.0	16.0	–	–
	Level 5	11.0	17.0	16.0	11.0	7.0	14.0	–	–
ELA/Reading									
	Total N	221,504	201,024	207,369	216,018	209,002	214,928	222,102	213,323
Race	Asian	2.7	3.0	2.9	2.8	2.9	2.9	2.9	3.0
	Black	20.4	19.4	19.7	20.7	20.1	20.3	20.2	19.8
	Hispanic	36.5	36.0	36.6	37.4	37.0	37.2	36.7	36.3
	Other [a]	1.8	1.9	1.8	1.7	1.8	1.7	1.7	1.5

Demographic Subgroup		% Students by Grade							
		3	4	5	6	7	8	9	10
	Two or More Races	4.4	4.3	4.2	4.0	3.9	3.8	3.7	3.6
	White	34.2	35.4	34.8	33.4	34.3	34.1	34.8	35.8
Sex	Female	48.6	48.9	49.2	48.7	49.1	49.0	49.3	49.7
	Male	51.4	51.1	50.9	51.3	50.9	51.0	50.7	50.3
Achievement Level	Level 1	27.0	23.0	24.0	31.0	32.0	34.0	31.0	30.0
	Level 2	23.0	19.0	22.0	22.0	21.0	20.0	21.0	20.0
	Level 3	25.0	24.0	24.0	19.0	20.0	21.0	18.0	18.0
	Level 4	18.0	21.0	20.0	18.0	16.0	15.0	18.0	19.0
	Level 5	7.0	12.0	11.0	10.0	11.0	11.0	11.0	12.0
Science									
	Total N	–	–	211,986	–	–	194,389	–	–
Race	Black	–	–	20.9	–	–	21.0	–	–
	Hispanic	–	–	34.4	–	–	33.2	–	–
	Other [a]	–	–	6.9	–	–	6.7	–	–
	White	–	–	37.8	–	–	39.2	–	–
Sex	Female	–	–	49.5	–	–	48.9	–	–
	Male	–	–	50.5	–	–	51.0	–	–
Achievement Level	Level 1	–	–	20.3	–	–	21.8	–	–
	Level 2	–	–	24.7	–	–	28.2	–	–
	Level 3	–	–	28.1	–	–	22.6	–	–
	Level 4	–	–	13.4	–	–	14.6	–	–
	Level 5	–	–	13.5	–	–	12.8	–	–

[a] The “Other” category includes races of American Indian, Pacific Islander, and Not Reported.

Table 3.3. Linking Study Sample Demographics (Weighted)

Demographic Subgroup		% Students by Grade							
		3	4	5	6	7	8	9	10
Mathematics									
	Total N	5,681	5,341	5,095	5,667	4,251	2,692	–	–
Race	Asian	2.6	2.9	2.9	2.6	1.6	2.3	–	–
	Black	20.4	19.5	19.8	20.9	22.9	22.3	–	–
	Hispanic	36.6	36.1	36.7	37.6	38.3	38.2	–	–
	Other [a]	1.8	1.9	1.8	1.8	2.2	1.9	–	–
	Two or More Races	4.4	4.3	4.2	3.9	3.8	3.7	–	–
	White	34.2	35.2	34.7	33.2	31.3	31.5	–	–
Sex	Female	48.6	49.0	49.2	48.8	48.9	48.8	–	–
	Male	51.4	51.0	50.8	51.2	51.1	51.2	–	–
Achievement Level	Level 1	24.0	24.0	27.0	23.0	29.7	27.7	–	–
	Level 2	17.0	15.0	18.0	22.0	22.8	16.8	–	–
	Level 3	25.0	24.0	20.0	23.0	25.7	25.7	–	–
	Level 4	23.0	20.0	19.0	21.0	14.9	15.8	–	–

Demographic Subgroup		% Students by Grade							
		3	4	5	6	7	8	9	10
	Level 5	11.0	17.0	16.0	11.0	6.9	13.9	–	–
ELA/Reading									
	Total N	5,685	5,284	5,374	6,231	5,691	5,470	1,969	1,714
Race	Asian	2.6	3.0	2.9	2.8	2.9	2.9	2.9	3.0
	Black	20.4	19.4	19.7	20.7	20.1	20.3	20.2	19.8
	Hispanic	36.5	36.0	36.6	37.4	37.0	37.2	36.7	36.3
	Other [a]	1.8	1.9	1.8	1.7	1.8	1.7	1.7	1.5
	Two or More Races	4.4	4.3	4.2	4.0	3.9	3.8	3.7	3.6
	White	34.1	35.4	34.8	33.4	34.3	34.1	34.8	35.8
Sex	Female	48.6	48.9	49.2	48.7	49.1	49.0	49.3	49.7
	Male	51.4	51.1	50.8	51.3	50.9	51.0	50.7	50.3
Achievement Level	Level 1	27.0	23.2	23.8	31.0	32.0	33.7	31.3	30.3
	Level 2	23.0	19.2	21.8	22.0	21.0	19.8	21.2	20.2
	Level 3	25.0	24.2	23.8	19.0	20.0	20.8	18.2	18.2
	Level 4	18.0	21.2	19.8	18.0	16.0	14.9	18.2	19.2
	Level 5	7.0	12.1	10.9	10.0	11.0	10.9	11.1	12.1
Science									
	Total N	–	–	7,108	–	–	3,727	–	–
Race	Black	–	–	20.9	–	–	21.0	–	–
	Hispanic	–	–	34.4	–	–	33.2	–	–
	Other [a]	–	–	6.9	–	–	6.7	–	–
	White	–	–	37.8	–	–	39.2	–	–
Sex	Female	–	–	49.5	–	–	48.9	–	–
	Male	–	–	50.5	–	–	51.1	–	–
Achievement Level	Level 1	–	–	20.3	–	–	21.8	–	–
	Level 2	–	–	24.7	–	–	28.2	–	–
	Level 3	–	–	28.1	–	–	22.6	–	–
	Level 4	–	–	13.4	–	–	14.6	–	–
	Level 5	–	–	13.5	–	–	12.8	–	–

[a] The “Other” category includes races of American Indian, Pacific Islander, and Not Reported.

3.2. Descriptive Statistics

Table 3.4 presents descriptive statistics of the MAP Growth and FAST summative test scores from Spring 2023, along with the NGSSS test scores from Spring 2018, including the correlation coefficients (*r*) between them. The coefficients between the scores range from 0.69 to 0.89 for mathematics, 0.78 to 0.83 for ELA/reading, and 0.82 to 0.84 for science. These values indicate a high positive correlation among the scores (with the exception of grade 8 mathematics), which is important validity evidence for the claim that MAP Growth scores are good predictors of performance on the FAST/NGSSS spring summative assessments.

Table 3.4. Descriptive Statistics of Test Scores

Grade	N	*r*	State Summative				MAP Growth			
			Mean	SD	Min.	Max.	Mean	SD	Min.	Max.
Mathematics										
3	5,681	0.89	198.8	22.1	140	260	202.2	14.7	131	255
4	5,341	0.88	215.0	23.1	155	273	214.3	14.7	139	263
5	5,095	0.89	221.9	24.6	158	285	221.0	16.2	141	270
6	5,667	0.85	228.4	21.6	168	287	221.9	15.5	168	265
7	4,251	0.73	230.2	21.8	175	288	221.1	14.0	174	274
8	2,692	0.69	239.1	23.5	183	286	222.6	14.0	168	277
ELA/Reading										
3	5,685	0.78	196.8	22.6	140	260	199.1	16.3	135	237
4	5,284	0.82	213.3	21.2	154	270	209.8	14.7	145	248
5	5,374	0.83	220.4	21.4	160	279	214.3	14.5	144	258
6	6,231	0.83	221.0	22.7	161	284	214.0	16.1	158	260
7	5,691	0.80	226.9	23.8	165	292	217.3	16.2	161	279
8	5,470	0.80	232.4	24.6	169	300	221.6	15.6	154	270
9	1,969	0.79	237.3	24.8	174	303	223.7	15.9	162	269
10	1,714	0.78	243.8	23.9	179	308	226.7	15.3	169	270
Science										
5	7,108	0.84	202.0	21.2	140	260	211.7	11.5	149	258
8	3,727	0.82	201.2	21.1	140	260	216.4	13.7	162	258

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

3.3. MAP Growth Cut Scores

Table 3.5 to Table 3.7 present the FAST/NGSSS summative scale score ranges and the corresponding MAP Growth RIT cut scores and percentile ranges by content area and grade. Bold numbers indicate the cut scores considered to be at least proficient for accountability purposes. These tables can be used to predict a student's likely achievement level based on the FAST/NGSSS spring summative assessments when MAP Growth is taken in the fall and winter. For example, a grade 3 student who obtained a MAP Growth mathematics RIT score of 189 in the fall is likely to achieve the Level 3 performance on the FAST summative mathematics test. A grade 3 student who obtained a MAP Growth mathematics RIT score of 198 in the winter is also likely to achieve the Level 3 performance on the FAST spring summative assessment. The winter cut score is higher than the fall cut score because growth is expected between fall and winter 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 (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 achievement level could be different from the projections presented in this report. Partners are therefore encouraged to use the projected achievement level in students' score reports, since these reflect the specific instructional weeks set by partners.

Table 3.5. MAP Growth Cut Scores—Mathematics

FAST Summative Mathematics					
Grade	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
3	140–182	183–197	**198**–208	209–224	225–260
4	155–199	200–210	**211**–220	221–237	238–273
5	158–206	207–221	**222**–233	234–245	246–285
6	168–212	213–228	**229**–238	239–253	254–287
7	175–222	223–234	**235**–246	247–257	258–288
8	183–226	227–243	**244**–253	254–262	263–291

MAP Growth Mathematics										
Grade	**Level 1**		**Level 2**		**Level 3**		**Level 4**		**Level 5**	
	RIT	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**
Fall										
2	100–163	1–27	164–177	28–62	**178**–187	63–83	188–203	84–97	204–350	98–99
3	100–177	1–34	178–188	35–61	**189**–196	62–79	197–209	80–94	210–350	95–99
4	100–197	1–51	198–204	52–68	**205**–211	69–82	212–220	83–92	221–350	93–99
5	100–203	1–44	204–213	45–67	**214**–221	68–82	222–229	83–92	230–350	93–99
6	100–205	1–39	206–214	40–61	**215**–221	62–76	222–233	77–92	234–350	93–99
7	100–208	1–31	209–217	32–51	**218**–226	52–71	227–238	72–89	239–350	90–99
8	100–211	1–28	212–220	29–47	**221**–229	48–66	230–240	67–84	241–350	85–99
Winter										
2	100–172	1–29	173–185	30–61	**186**–195	62–82	196–211	83–97	212–350	98–99
3	100–185	1–33	186–197	34–62	**198**–205	63–78	206–218	79–94	219–350	95–99
4	100–204	1–50	205–212	51–68	**213**–219	69–81	220–228	82–92	229–350	93–99
5	100–209	1–45	210–219	46–67	**220**–227	68–81	228–235	82–91	236–350	92–99
6	100–211	1–40	212–220	41–60	**221**–228	61–76	229–240	77–92	241–350	93–99
7	100–212	1–32	213–221	33–51	**222**–231	52–72	232–243	73–88	244–350	89–99
8	100–215	1–29	216–224	30–47	**225**–233	48–65	234–245	66–84	246–350	85–99
Spring										
2	100–179	1–31	180–191	32–60	**192**–200	61–79	201–214	80–95	215–350	96–99
3	100–192	1–35	193–203	36–60	**204**–211	61–77	212–223	78–92	224–350	93–99
4	100–210	1–51	211–217	52–66	**218**–224	67–79	225–233	80–90	234–350	91–99
5	103–213	1–45	214–223	46–66	**224**–231	67–80	232–239	81–89	240–350	90–99

MAP Growth Mathematics										
Grade	Level 1		Level 2		Level 3		Level 4		Level 5	
	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile
6	102–215	1–40	216–224	41–59	**225**–232	60–74	233–244	75–90	245–350	91–99
7	105–215	1–33	216–224	34–51	**225**–233	52–69	234–245	70–86	246–350	87–99
8	105–218	1–30	219–227	31–47	**228**–236	48–65	237–247	66–82	248–350	83–99

Note. Bold numbers indicate the cut scores considered to be at least proficient for accountability purposes.

Table 3.6. MAP Growth Cut Scores—ELA/Reading

FAST Summative ELA/Reading					
Grade	Level 1	Level 2	Level 3	Level 4	Level 5
3	140–185	186–200	**201**–212	213–224	225–260
4	154–198	199–212	**213**–223	224–236	237–270
5	160–205	206–221	**222**–231	232–245	246–279
6	161–208	209–224	**225**–236	237–249	250–284
7	165–214	215–231	**232**–241	242–256	257–292
8	169–219	220–237	**238**–250	251–261	262–300
9	174–223	224–241	**242**–253	254–266	267–303
10	179–229	230–246	**247**–257	258–270	271–308

MAP Growth ELA/Reading										
Grade	Level 1		Level 2		Level 3		Level 4		Level 5	
	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile
Fall										
2	100–165	1–40	166–179	41–71	**180**–191	72–89	192–205	90–97	206–350	98–99
3	100–180	1–41	181–192	42–67	**193**–202	68–83	203–214	84–94	215–350	95–99
4	100–194	1–47	195–204	48–68	**205**–212	69–82	213–221	83–92	222–350	93–99
5	100–200	1–43	201–211	44–67	**212**–218	68–80	219–227	81–91	228–350	92–99
6	100–202	1–35	203–214	36–63	**215**–222	64–79	223–231	80–90	232–350	91–99
7	100–207	1–39	208–218	40–64	**219**–224	65–77	225–233	78–89	234–350	90–99
8	100–211	1–40	212–222	41–66	**223**–230	67–81	231–236	82–88	237–350	89–99
9	100–214	1–46	215–224	47–68	**225**–231	69–80	232–239	81–90	240–350	91–99
10	100–216	1–47	217–226	48–69	**227**–233	70–81	234–240	82–89	241–350	90–99

MAP Growth ELA/Reading										
Grade	Level 1		Level 2		Level 3		Level 4		Level 5	
	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile
Winter										
2	100–171	1–38	172–185	39–70	**186**–197	71–88	198–211	89–97	212–350	98–99
3	100–186	1–43	187–197	44–66	**198**–207	67–83	208–218	84–94	219–350	95–99
4	100–197	1–46	198–207	47–67	**208**–215	68–81	216–223	82–91	224–350	92–99
5	100–203	1–44	204–214	45–68	**215**–220	69–79	221–228	80–90	229–350	91–99
6	100–204	1–36	205–215	37–61	**216**–223	62–78	224–232	79–90	233–350	91–99
7	100–208	1–38	209–219	39–63	**220**–225	64–76	226–234	77–89	235–350	90–99
8	100–213	1–42	214–223	43–65	**224**–231	66–80	232–237	81–88	238–350	89–99
9	100–215	1–47	216–225	48–68	**226**–232	69–80	233–240	81–90	241–350	91–99
10	100–217	1–49	218–227	50–70	**228**–234	71–81	235–241	82–90	242–350	91–99
Spring										
2	100–177	1–41	178–189	42–67	**190**–200	68–86	201–212	87–95	213–350	96–99
3	100–190	1–43	191–200	44–64	**201**–209	65–80	210–219	81–92	220–350	93–99
4	100–200	1–47	201–209	48–66	**210**–216	67–79	217–224	80–89	225–350	90–99
5	100–205	1–44	206–215	45–66	**216**–221	67–78	222–229	79–89	230–350	90–99
6	100–206	1–37	207–216	38–61	**217**–224	62–77	225–233	78–90	234–350	91–99
7	100–210	1–40	211–220	41–63	**221**–226	64–75	227–235	76–88	236–350	89–99
8	100–214	1–42	215–224	43–65	**225**–232	66–80	233–238	81–88	239–350	89–99
9	100–216	1–49	217–226	50–69	**227**–233	70–81	234–241	82–90	242–350	91–99
10	100–218	1–50	219–228	51–71	**229**–235	72–82	236–242	83–90	243–350	91–99

Note. Bold numbers indicate the cut scores considered to be at least proficient for accountability purposes.

Table 3.7. MAP Growth Cut Scores—Science

NGSSS Summative Science										
Grade	**Level 1**		**Level 2**		**Level 3**		**Level 4**		**Level 5**	
5	140–184		185–199		**200**–214		215–224		225–260	
8	140–184		185–202		**203**–214		215–224		225–260	
MAP Growth Science										
Grade	**Level 1**		**Level 2**		**Level 3**		**Level 4**		**Level 5**	
	RIT	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**
Fall										
5	100–196	1–37	197–206	38–67	**207**–214	68–85	215–218	86–91	219–350	92–99
8	100–202	1–31	203–214	32–64	**215**–222	65–82	223–228	83–90	229–350	91–99
Winter										
5	100–199	1–37	200–209	38–66	**210**–217	67–84	218–221	85–90	222–350	91–99
8	100–204	1–32	205–216	33–64	**217**–223	65–79	224–229	80–89	230–350	90–99
Spring										
5	100–202	1–39	203–211	40–64	**212**–218	65–80	219–222	81–87	223–350	88–99
8	100–206	1–34	207–217	35–62	**218**–224	63–78	225–230	79–88	231–350	89–99

Note. Bold numbers indicate the cut scores considered to be at least proficient for accountability purposes.

3.4. Classification Accuracy

Table 3.8 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 FAST/NGSSS spring summative tests, providing insight into the predictive validity of MAP Growth. The overall classification accuracy rates range from 0.78 to 0.89 for mathematics, 0.84 to 0.86 for ELA/reading, and 0.84 to 0.86 for science. These values suggest that the RIT cut scores are good at classifying students as proficient or not proficient on the FAST/NGSSS summative assessments for most of the subjects and grades.

Although the results show that MAP Growth scores can be used to predict student proficiency on the FAST/NGSSS summative tests with relatively high accuracy, there is a notable limitation to how these results should be used and interpreted. The MAP Growth and FAST/NGSSS summative assessments are designed for different purposes and measure slightly different constructs even within the same content area. Therefore, scores on these tests cannot be assumed to be interchangeable. MAP Growth may not be used as a substitute for the state tests and vice versa.

Table 3.8. Classification Accuracy Results

Grade	N	Cut Score		Class. Accuracy	Rate		Sensitivity	Specificity	Precision	AUC
		MAP Growth	FAST		FP	FN				
Mathematics										
3	5,681	202	198	0.89	0.14	0.10	0.90	0.86	0.90	0.88
4	5,341	213	211	0.88	0.13	0.12	0.88	0.87	0.91	0.87
5	5,095	221	222	0.88	0.12	0.11	0.89	0.88	0.90	0.88
6	5,667	222	229	0.84	0.14	0.16	0.84	0.86	0.88	0.85
7	4,251	223	235	0.80	0.18	0.22	0.78	0.82	0.80	0.80
8	2,692	224	244	0.78	0.17	0.25	0.75	0.83	0.84	0.79
ELA/Reading										
3	5,685	201	201	0.84	0.19	0.13	0.87	0.81	0.82	0.84
4	5,284	210	213	0.84	0.19	0.14	0.86	0.81	0.86	0.84
5	5,374	216	222	0.84	0.17	0.15	0.85	0.83	0.86	0.84
6	6,231	217	225	0.85	0.16	0.13	0.87	0.84	0.83	0.85
7	5,691	221	232	0.84	0.15	0.18	0.82	0.85	0.83	0.84
8	5,470	225	238	0.85	0.15	0.16	0.84	0.85	0.83	0.85
9	1,969	227	242	0.86	0.14	0.15	0.85	0.86	0.85	0.86
10	1,714	229	247	0.84	0.17	0.16	0.84	0.83	0.83	0.84
Science										
5	7,108	212	200	0.84	0.15	0.16	0.84	0.85	0.87	0.93
8	3,727	218	203	0.86	0.14	0.14	0.86	0.86	0.86	0.93

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

3.5. Proficiency Projections

Table 3.9 to Table 3.11 present the estimated probability of achieving Level 3 and higher performance on the FAST/NGSSS summative tests based on RIT scores from fall, winter, or spring. Due to measurement error in all test scores, the Level 3 MAP Growth cuts do not guarantee that a student will reach proficiency on the FAST/NGSSS summative tests. Instead, they indicate a 50% chance that a student will reach a particular achievement level. Therefore, these projections further elucidate the Level 3 cut scores by providing the likelihood of reaching proficiency on the FAST/NGSSS spring summative assessments at a given percentile throughout the year.

For example, a fall RIT score of 190 in grade 3 mathematics suggests a 55% probability of the student reaching proficiency in the spring, as shown in Table 3.9. Additionally, an educator can also use the table to estimate that a grade 3 student who obtained a MAP Growth mathematics score of 210 in the winter has a 94% probability of reaching Level 3 or higher on the FAST mathematics spring summative assessment.

Table 3.9. Proficiency Projections Based on RIT Scores—Mathematics

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 3	Prob.		Level 3	Prob.		Level 3	Prob.
2	5	192	147	No	<0.01	155	No	<0.01	161	No	<0.01
	10	192	153	No	<0.01	161	No	<0.01	167	No	<0.01
	15	192	157	No	0.01	165	No	0.01	171	No	<0.01
	20	192	160	No	0.03	168	No	0.02	174	No	<0.01
	25	192	162	No	0.04	171	No	0.03	177	No	<0.01
	30	192	165	No	0.07	173	No	0.06	179	No	<0.01
	35	192	167	No	0.11	175	No	0.09	181	No	<0.01
	40	192	169	No	0.16	177	No	0.14	183	No	0.01
	45	192	171	No	0.23	179	No	0.18	185	No	0.02
	50	192	173	No	0.31	181	No	0.25	187	No	0.08
	55	192	175	No	0.36	183	No	0.35	189	No	0.2
	60	192	177	No	0.45	185	No	0.45	192	Yes	0.5
	65	192	179	Yes	0.55	187	Yes	0.55	194	Yes	0.72
	70	192	181	Yes	0.64	189	Yes	0.6	196	Yes	0.87
	75	192	183	Yes	0.73	192	Yes	0.75	198	Yes	0.96
	80	192	186	Yes	0.8	194	Yes	0.82	201	Yes	0.99
	85	192	189	Yes	0.89	197	Yes	0.91	204	Yes	>0.99
	90	192	193	Yes	0.94	201	Yes	0.96	208	Yes	>0.99
	95	192	198	Yes	0.99	207	Yes	0.99	214	Yes	>0.99
3	5	204	158	No	<0.01	166	No	<0.01	171	No	<0.01
	10	204	164	No	<0.01	172	No	<0.01	177	No	<0.01
	15	204	168	No	<0.01	176	No	<0.01	181	No	<0.01
	20	204	171	No	0.01	179	No	0.01	185	No	<0.01
	25	204	174	No	0.03	182	No	0.02	188	No	<0.01
	30	204	176	No	0.05	184	No	0.04	190	No	<0.01
	35	204	178	No	0.08	186	No	0.06	193	No	<0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 3	Prob.		Level 3	Prob.		Level 3	Prob.
	40	204	180	No	0.13	189	No	0.13	195	No	0.01
	45	204	182	No	0.19	191	No	0.2	197	No	0.02
	50	204	184	No	0.26	193	No	0.24	199	No	0.08
	55	204	186	No	0.35	195	No	0.34	201	No	0.2
	60	204	188	No	0.45	197	No	0.45	203	No	0.39
	65	204	190	Yes	0.55	199	Yes	0.55	206	Yes	0.72
	70	204	192	Yes	0.65	201	Yes	0.66	208	Yes	0.87
	75	204	195	Yes	0.78	204	Yes	0.8	211	Yes	0.98
	80	204	197	Yes	0.85	206	Yes	0.87	213	Yes	0.99
	85	204	200	Yes	0.92	210	Yes	0.94	217	Yes	>0.99
	90	204	204	Yes	0.97	214	Yes	0.98	221	Yes	>0.99
	95	204	210	Yes	0.99	220	Yes	>0.99	227	Yes	>0.99
4	5	218	171	No	<0.01	176	No	<0.01	180	No	<0.01
	10	218	177	No	<0.01	183	No	<0.01	187	No	<0.01
	15	218	181	No	<0.01	187	No	<0.01	191	No	<0.01
	20	218	184	No	<0.01	190	No	<0.01	195	No	<0.01
	25	218	186	No	0.01	193	No	<0.01	198	No	<0.01
	30	218	189	No	0.02	196	No	0.01	201	No	<0.01
	35	218	191	No	0.04	198	No	0.02	203	No	<0.01
	40	218	193	No	0.07	200	No	0.04	206	No	<0.01
	45	218	195	No	0.11	202	No	0.08	208	No	<0.01
	50	218	197	No	0.16	204	No	0.13	210	No	0.01
	55	218	199	No	0.23	207	No	0.24	212	No	0.04
	60	218	201	No	0.31	209	No	0.28	215	No	0.2
	65	218	203	No	0.4	211	No	0.39	217	No	0.39
	70	218	205	Yes	0.5	213	Yes	0.5	220	Yes	0.72
	75	218	208	Yes	0.65	216	Yes	0.67	222	Yes	0.87

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 3	Prob.		Level 3	Prob.		Level 3	Prob.
	80	218	210	Yes	0.73	219	Yes	0.8	225	Yes	0.98
	85	218	214	Yes	0.87	222	Yes	0.9	229	Yes	>0.99
	90	218	217	Yes	0.93	226	Yes	0.97	233	Yes	>0.99
	95	218	223	Yes	0.99	232	Yes	>0.99	240	Yes	>0.99
5	5	224	180	No	<0.01	183	No	<0.01	186	No	<0.01
	10	224	185	No	<0.01	189	No	<0.01	192	No	<0.01
	15	224	189	No	<0.01	194	No	<0.01	197	No	<0.01
	20	224	193	No	<0.01	197	No	<0.01	200	No	<0.01
	25	224	195	No	0.01	200	No	<0.01	204	No	<0.01
	30	224	198	No	0.02	203	No	0.01	206	No	<0.01
	35	224	200	No	0.04	205	No	0.02	209	No	<0.01
	40	224	202	No	0.06	207	No	0.03	211	No	<0.01
	45	224	204	No	0.1	210	No	0.08	214	No	<0.01
	50	224	206	No	0.15	212	No	0.13	216	No	0.01
	55	224	208	No	0.22	214	No	0.2	218	No	0.04
	60	224	210	No	0.3	216	No	0.28	221	No	0.2
	65	224	212	No	0.4	219	No	0.44	223	No	0.39
	70	224	215	Yes	0.55	221	Yes	0.56	226	Yes	0.72
	75	224	217	Yes	0.65	224	Yes	0.72	228	Yes	0.87
	80	224	220	Yes	0.78	226	Yes	0.8	232	Yes	0.99
	85	224	223	Yes	0.88	230	Yes	0.92	235	Yes	>0.99
	90	224	227	Yes	0.95	234	Yes	0.98	240	Yes	>0.99
	95	224	233	Yes	0.99	240	Yes	>0.99	246	Yes	>0.99
6	5	225	184	No	<0.01	187	No	<0.01	190	No	<0.01
	10	225	190	No	<0.01	194	No	<0.01	197	No	<0.01
	15	225	194	No	<0.01	198	No	<0.01	201	No	<0.01
	20	225	197	No	0.01	201	No	<0.01	205	No	<0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 3	Prob.		Level 3	Prob.		Level 3	Prob.
	25	225	199	No	0.02	204	No	0.01	208	No	<0.01
	30	225	202	No	0.05	207	No	0.04	211	No	<0.01
	35	225	204	No	0.09	209	No	0.05	213	No	<0.01
	40	225	206	No	0.13	212	No	0.11	216	No	0.01
	45	225	208	No	0.19	214	No	0.17	218	No	0.02
	50	225	210	No	0.27	216	No	0.25	220	No	0.08
	55	225	212	No	0.36	218	No	0.34	223	No	0.28
	60	225	214	No	0.45	220	No	0.45	225	Yes	0.5
	65	225	216	Yes	0.55	223	Yes	0.61	227	Yes	0.72
	70	225	219	Yes	0.69	225	Yes	0.71	230	Yes	0.92
	75	225	221	Yes	0.81	228	Yes	0.83	233	Yes	0.99
	80	225	224	Yes	0.89	231	Yes	0.91	236	Yes	>0.99
	85	225	227	Yes	0.95	234	Yes	0.96	239	Yes	>0.99
	90	225	231	Yes	0.98	238	Yes	0.99	244	Yes	>0.99
	95	225	237	Yes	>0.99	245	Yes	>0.99	251	Yes	>0.99
7	5	225	189	No	<0.01	191	No	<0.01	192	No	<0.01
	10	225	195	No	<0.01	197	No	<0.01	199	No	<0.01
	15	225	199	No	0.01	202	No	0.01	204	No	<0.01
	20	225	203	No	0.03	206	No	0.02	208	No	<0.01
	25	225	206	No	0.07	209	No	0.04	211	No	<0.01
	30	225	208	No	0.11	211	No	0.07	214	No	<0.01
	35	225	211	No	0.2	214	No	0.15	216	No	0.01
	40	225	213	No	0.27	216	No	0.22	219	No	0.04
	45	225	215	No	0.36	219	No	0.35	221	No	0.13
	50	225	217	No	0.45	221	No	0.45	224	No	0.39
	55	225	219	Yes	0.55	223	Yes	0.55	226	Yes	0.61
	60	225	222	Yes	0.69	226	Yes	0.7	229	Yes	0.87

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 3	Prob.		Level 3	Prob.		Level 3	Prob.
	65	225	224	Yes	0.77	228	Yes	0.78	231	Yes	0.96
	70	225	226	Yes	0.83	231	Yes	0.85	234	Yes	0.99
	75	225	229	Yes	0.91	233	Yes	0.9	237	Yes	>0.99
	80	225	232	Yes	0.96	236	Yes	0.96	240	Yes	>0.99
	85	225	235	Yes	0.98	240	Yes	0.99	244	Yes	>0.99
	90	225	239	Yes	0.99	245	Yes	>0.99	249	Yes	>0.99
	95	225	246	Yes	>0.99	251	Yes	>0.99	256	Yes	>0.99
8	5	228	192	No	<0.01	194	No	<0.01	196	No	<0.01
	10	228	199	No	0.01	201	No	<0.01	203	No	<0.01
	15	228	203	No	0.02	206	No	0.01	208	No	<0.01
	20	228	207	No	0.05	210	No	0.04	212	No	<0.01
	25	228	210	No	0.1	213	No	0.07	215	No	<0.01
	30	228	212	No	0.15	216	No	0.13	218	No	<0.01
	35	228	215	No	0.25	219	No	0.23	221	No	0.02
	40	228	217	No	0.32	221	No	0.31	224	No	0.13
	45	228	220	No	0.45	224	No	0.45	226	No	0.28
	50	228	222	Yes	0.55	226	Yes	0.55	229	Yes	0.61
	55	228	224	Yes	0.63	228	Yes	0.65	231	Yes	0.8
	60	228	227	Yes	0.75	231	Yes	0.77	234	Yes	0.96
	65	228	229	Yes	0.82	233	Yes	0.84	237	Yes	0.99
	70	228	232	Yes	0.9	236	Yes	0.92	239	Yes	>0.99
	75	228	234	Yes	0.93	239	Yes	0.95	242	Yes	>0.99
	80	228	237	Yes	0.97	242	Yes	0.98	246	Yes	>0.99
	85	228	241	Yes	0.99	246	Yes	0.99	250	Yes	>0.99
	90	228	246	Yes	>0.99	251	Yes	>0.99	255	Yes	>0.99
	95	228	252	Yes	>0.99	258	Yes	>0.99	262	Yes	>0.99

Table 3.10. Proficiency Projections Based on RIT Scores—ELA/Reading

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 3	Prob.		Level 3	Prob.		Level 3	Prob.
2	5	190	142	No	<0.01	149	No	<0.01	153	No	<0.01
	10	190	148	No	<0.01	155	No	<0.01	159	No	<0.01
	15	190	152	No	<0.01	159	No	<0.01	164	No	<0.01
	20	190	156	No	0.01	162	No	0.01	167	No	<0.01
	25	190	159	No	0.02	165	No	0.01	170	No	<0.01
	30	190	161	No	0.04	168	No	0.03	173	No	<0.01
	35	190	163	No	0.06	170	No	0.05	175	No	<0.01
	40	190	166	No	0.09	172	No	0.07	177	No	<0.01
	45	190	168	No	0.13	175	No	0.11	180	No	<0.01
	50	190	170	No	0.19	177	No	0.17	182	No	0.01
	55	190	172	No	0.22	179	No	0.24	184	No	0.04
	60	190	174	No	0.29	181	No	0.27	186	No	0.13
	65	190	177	No	0.41	183	No	0.36	188	No	0.28
	70	190	179	No	0.46	186	Yes	0.5	191	Yes	0.61
	75	190	182	Yes	0.59	188	Yes	0.59	193	Yes	0.8
	80	190	184	Yes	0.67	191	Yes	0.68	196	Yes	0.96
	85	190	188	Yes	0.78	194	Yes	0.8	200	Yes	>0.99
	90	190	192	Yes	0.89	199	Yes	0.91	204	Yes	>0.99
	95	190	198	Yes	0.96	205	Yes	0.98	210	Yes	>0.99
3	5	201	155	No	<0.01	160	No	<0.01	164	No	<0.01
	10	201	161	No	<0.01	167	No	<0.01	171	No	<0.01
	15	201	166	No	<0.01	171	No	<0.01	175	No	<0.01
	20	201	169	No	0.01	175	No	0.01	179	No	<0.01
	25	201	172	No	0.02	178	No	0.02	182	No	<0.01
	30	201	175	No	0.04	180	No	0.03	184	No	<0.01
	35	201	178	No	0.07	183	No	0.06	187	No	<0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 3	Prob.		Level 3	Prob.		Level 3	Prob.
	40	201	180	No	0.11	185	No	0.08	189	No	<0.01
	45	201	182	No	0.13	188	No	0.14	192	No	0.01
	50	201	185	No	0.22	190	No	0.2	194	No	0.02
	55	201	187	No	0.29	192	No	0.27	196	No	0.08
	60	201	189	No	0.37	194	No	0.32	198	No	0.2
	65	201	192	No	0.46	197	No	0.45	201	Yes	0.5
	70	201	194	Yes	0.54	199	Yes	0.55	203	Yes	0.72
	75	201	197	Yes	0.63	202	Yes	0.68	206	Yes	0.92
	80	201	200	Yes	0.75	205	Yes	0.76	209	Yes	0.99
	85	201	204	Yes	0.84	209	Yes	0.88	213	Yes	>0.99
	90	201	208	Yes	0.93	213	Yes	0.94	217	Yes	>0.99
	95	201	215	Yes	0.98	220	Yes	0.99	224	Yes	>0.99
4	5	210	166	No	<0.01	170	No	<0.01	173	No	<0.01
	10	210	173	No	<0.01	177	No	<0.01	179	No	<0.01
	15	210	177	No	<0.01	181	No	<0.01	184	No	<0.01
	20	210	181	No	0.01	184	No	<0.01	187	No	<0.01
	25	210	184	No	0.02	187	No	0.01	190	No	<0.01
	30	210	186	No	0.02	190	No	0.02	193	No	<0.01
	35	210	189	No	0.05	193	No	0.04	195	No	<0.01
	40	210	191	No	0.08	195	No	0.07	198	No	<0.01
	45	210	194	No	0.12	197	No	0.1	200	No	<0.01
	50	210	196	No	0.17	199	No	0.16	202	No	0.01
	55	210	198	No	0.24	202	No	0.23	204	No	0.04
	60	210	200	No	0.32	204	No	0.31	207	No	0.2
	65	210	203	No	0.41	206	No	0.4	209	No	0.39
	70	210	205	Yes	0.5	209	Yes	0.55	211	Yes	0.61
	75	210	208	Yes	0.64	211	Yes	0.6	214	Yes	0.87

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 3	Prob.		Level 3	Prob.		Level 3	Prob.
	80	210	211	Yes	0.72	214	Yes	0.73	217	Yes	0.98
	85	210	215	Yes	0.86	218	Yes	0.87	220	Yes	>0.99
	90	210	219	Yes	0.92	222	Yes	0.95	225	Yes	>0.99
	95	210	226	Yes	0.98	229	Yes	0.99	231	Yes	>0.99
5	5	216	175	No	<0.01	178	No	<0.01	180	No	<0.01
	10	216	181	No	<0.01	184	No	<0.01	186	No	<0.01
	15	216	186	No	<0.01	189	No	<0.01	191	No	<0.01
	20	216	189	No	0.01	192	No	0.01	194	No	<0.01
	25	216	192	No	0.01	195	No	0.01	197	No	<0.01
	30	216	195	No	0.03	197	No	0.02	199	No	<0.01
	35	216	197	No	0.06	200	No	0.05	202	No	<0.01
	40	216	199	No	0.07	202	No	0.08	204	No	<0.01
	45	216	201	No	0.11	204	No	0.1	206	No	<0.01
	50	216	204	No	0.2	206	No	0.15	208	No	0.01
	55	216	206	No	0.23	209	No	0.26	211	No	0.08
	60	216	208	No	0.31	211	No	0.3	213	No	0.2
	65	216	210	No	0.4	213	No	0.4	215	No	0.39
	70	216	213	Yes	0.5	215	Yes	0.5	217	Yes	0.61
	75	216	215	Yes	0.6	218	Yes	0.65	220	Yes	0.87
	80	216	218	Yes	0.73	221	Yes	0.78	223	Yes	0.98
	85	216	222	Yes	0.84	224	Yes	0.88	226	Yes	>0.99
	90	216	226	Yes	0.93	228	Yes	0.95	230	Yes	>0.99
	95	216	232	Yes	0.99	235	Yes	0.99	237	Yes	>0.99
6	5	217	181	No	<0.01	183	No	<0.01	185	No	<0.01
	10	217	187	No	<0.01	189	No	<0.01	191	No	<0.01
	15	217	191	No	0.01	193	No	<0.01	195	No	<0.01
	20	217	195	No	0.02	197	No	0.02	198	No	<0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 3	Prob.		Level 3	Prob.		Level 3	Prob.
	25	217	198	No	0.04	199	No	0.03	201	No	<0.01
	30	217	200	No	0.06	202	No	0.05	203	No	<0.01
	35	217	202	No	0.09	204	No	0.08	206	No	<0.01
	40	217	205	No	0.16	206	No	0.13	208	No	0.01
	45	217	207	No	0.2	209	No	0.22	210	No	0.02
	50	217	209	No	0.27	211	No	0.26	212	No	0.08
	55	217	211	No	0.36	213	No	0.35	214	No	0.2
	60	217	213	No	0.45	215	No	0.45	216	No	0.39
	65	217	215	Yes	0.5	217	Yes	0.55	218	Yes	0.61
	70	217	218	Yes	0.64	219	Yes	0.65	221	Yes	0.87
	75	217	220	Yes	0.73	222	Yes	0.78	223	Yes	0.96
	80	217	223	Yes	0.84	225	Yes	0.87	226	Yes	0.99
	85	217	226	Yes	0.91	228	Yes	0.94	229	Yes	>0.99
	90	217	231	Yes	0.97	232	Yes	0.98	233	Yes	>0.99
	95	217	237	Yes	>0.99	238	Yes	>0.99	239	Yes	>0.99
7	5	221	185	No	<0.01	186	No	<0.01	187	No	<0.01
	10	221	191	No	<0.01	192	No	<0.01	193	No	<0.01
	15	221	195	No	0.01	196	No	<0.01	197	No	<0.01
	20	221	198	No	0.01	200	No	0.01	201	No	<0.01
	25	221	201	No	0.03	202	No	0.02	203	No	<0.01
	30	221	204	No	0.06	205	No	0.04	206	No	<0.01
	35	221	206	No	0.08	207	No	0.07	208	No	<0.01
	40	221	208	No	0.12	210	No	0.14	211	No	<0.01
	45	221	210	No	0.18	212	No	0.16	213	No	0.01
	50	221	212	No	0.24	214	No	0.23	215	No	0.04
	55	221	214	No	0.28	216	No	0.31	217	No	0.13
	60	221	217	No	0.41	218	No	0.4	219	No	0.28

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 3	Prob.		Level 3	Prob.		Level 3	Prob.
	65	221	219	Yes	0.5	220	Yes	0.5	221	Yes	0.5
	70	221	221	Yes	0.59	223	Yes	0.64	224	Yes	0.8
	75	221	224	Yes	0.72	225	Yes	0.73	226	Yes	0.92
	80	221	226	Yes	0.79	228	Yes	0.84	229	Yes	0.99
	85	221	230	Yes	0.9	231	Yes	0.91	232	Yes	>0.99
	90	221	234	Yes	0.96	235	Yes	0.97	237	Yes	>0.99
	95	221	240	Yes	0.99	241	Yes	0.99	243	Yes	>0.99
8	5	225	188	No	<0.01	189	No	<0.01	190	No	<0.01
	10	225	194	No	<0.01	195	No	<0.01	196	No	<0.01
	15	225	198	No	0.01	199	No	<0.01	200	No	<0.01
	20	225	201	No	0.01	203	No	0.01	203	No	<0.01
	25	225	204	No	0.03	205	No	0.02	206	No	<0.01
	30	225	207	No	0.04	208	No	0.04	209	No	<0.01
	35	225	209	No	0.07	210	No	0.06	211	No	<0.01
	40	225	211	No	0.11	213	No	0.1	213	No	<0.01
	45	225	214	No	0.15	215	No	0.14	216	No	0.01
	50	225	216	No	0.21	217	No	0.2	218	No	0.02
	55	225	218	No	0.29	219	No	0.28	220	No	0.08
	60	225	220	No	0.37	221	No	0.36	222	No	0.2
	65	225	222	No	0.45	223	No	0.45	224	No	0.39
	70	225	225	Yes	0.59	226	Yes	0.59	227	Yes	0.72
	75	225	227	Yes	0.67	228	Yes	0.68	229	Yes	0.87
	80	225	230	Yes	0.79	231	Yes	0.8	232	Yes	0.98
	85	225	233	Yes	0.87	235	Yes	0.9	236	Yes	>0.99
	90	225	238	Yes	0.96	239	Yes	0.96	240	Yes	>0.99
	95	225	244	Yes	0.99	245	Yes	0.99	246	Yes	>0.99
9	5	227	186	No	<0.01	187	No	<0.01	187	No	<0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 3	Prob.		Level 3	Prob.		Level 3	Prob.
	10	227	193	No	<0.01	194	No	<0.01	194	No	<0.01
	15	227	197	No	<0.01	198	No	<0.01	198	No	<0.01
	20	227	201	No	0.01	201	No	0.01	202	No	<0.01
	25	227	204	No	0.02	205	No	0.02	205	No	<0.01
	30	227	207	No	0.03	207	No	0.03	208	No	<0.01
	35	227	209	No	0.05	210	No	0.04	210	No	<0.01
	40	227	212	No	0.09	212	No	0.07	213	No	<0.01
	45	227	214	No	0.13	214	No	0.1	215	No	<0.01
	50	227	216	No	0.18	217	No	0.17	217	No	<0.01
	55	227	218	No	0.24	219	No	0.23	219	No	0.01
	60	227	221	No	0.34	221	No	0.3	222	No	0.08
	65	227	223	No	0.42	224	No	0.42	224	No	0.2
	70	227	226	Yes	0.54	226	Yes	0.5	227	Yes	0.5
	75	227	228	Yes	0.62	229	Yes	0.62	230	Yes	0.8
	80	227	231	Yes	0.73	232	Yes	0.74	233	Yes	0.96
	85	227	235	Yes	0.85	236	Yes	0.86	236	Yes	0.99
	90	227	239	Yes	0.92	240	Yes	0.93	241	Yes	>0.99
	95	227	246	Yes	0.98	247	Yes	0.99	247	Yes	>0.99
10	5	229	188	No	<0.01	188	No	<0.01	188	No	<0.01
	10	229	195	No	<0.01	195	No	<0.01	195	No	<0.01
	15	229	199	No	0.01	199	No	<0.01	200	No	<0.01
	20	229	203	No	0.01	203	No	0.01	203	No	<0.01
	25	229	206	No	0.03	206	No	0.02	206	No	<0.01
	30	229	208	No	0.03	209	No	0.03	209	No	<0.01
	35	229	211	No	0.06	211	No	0.04	211	No	<0.01
	40	229	213	No	0.09	214	No	0.08	214	No	<0.01
	45	229	215	No	0.12	216	No	0.11	216	No	<0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 3	Prob.		Level 3	Prob.		Level 3	Prob.
	50	229	218	No	0.19	218	No	0.16	218	No	<0.01
	55	229	220	No	0.25	220	No	0.21	221	No	0.01
	60	229	222	No	0.31	223	No	0.31	223	No	0.04
	65	229	225	No	0.42	225	No	0.38	225	No	0.13
	70	229	227	Yes	0.5	228	Yes	0.5	228	No	0.39
	75	229	230	Yes	0.61	230	Yes	0.58	231	Yes	0.72
	80	229	233	Yes	0.72	233	Yes	0.69	234	Yes	0.92
	85	229	236	Yes	0.81	237	Yes	0.82	237	Yes	0.99
	90	229	241	Yes	0.91	241	Yes	0.91	242	Yes	>0.99
	95	229	247	Yes	0.97	248	Yes	0.98	248	Yes	>0.99

Table 3.11. Proficiency Projections Based on RIT Scores—Science

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 3	Prob.		Level 3	Prob.		Level 3	Prob.
5	5	212	179	No	<0.01	182	No	<0.01	184	No	<0.01
	10	212	184	No	<0.01	187	No	<0.01	189	No	<0.01
	15	212	187	No	0.01	190	No	<0.01	192	No	<0.01
	20	212	190	No	0.02	193	No	0.01	195	No	<0.01
	25	212	192	No	0.04	195	No	0.02	197	No	<0.01
	30	212	194	No	0.05	197	No	0.04	199	No	<0.01
	35	212	196	No	0.09	199	No	0.07	201	No	<0.01
	40	212	198	No	0.14	201	No	0.12	203	No	0.01
	45	212	199	No	0.17	203	No	0.19	205	No	0.02
	50	212	201	No	0.25	204	No	0.19	207	No	0.08
	55	212	203	No	0.29	206	No	0.28	208	No	0.13
	60	212	204	No	0.34	208	No	0.38	210	No	0.28
	65	212	206	No	0.45	209	No	0.44	212	Yes	0.5
	70	212	208	Yes	0.55	211	Yes	0.56	214	Yes	0.72
	75	212	210	Yes	0.66	213	Yes	0.67	216	Yes	0.87
	80	212	212	Yes	0.75	216	Yes	0.77	218	Yes	0.96
	85	212	215	Yes	0.83	218	Yes	0.85	221	Yes	0.99
	90	212	218	Yes	0.91	221	Yes	0.93	224	Yes	>0.99
	95	212	223	Yes	0.97	226	Yes	0.99	229	Yes	>0.99
8	5	218	186	No	<0.01	187	No	<0.01	188	No	<0.01
	10	218	191	No	<0.01	193	No	<0.01	194	No	<0.01
	15	218	195	No	0.01	196	No	0.01	197	No	<0.01
	20	218	198	No	0.02	199	No	0.02	200	No	<0.01
	25	218	200	No	0.04	202	No	0.03	203	No	<0.01
	30	218	202	No	0.06	204	No	0.05	205	No	<0.01
	35	218	204	No	0.1	206	No	0.09	207	No	<0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	Projected Proficiency		Winter RIT	Projected Proficiency		Spring RIT	Projected Proficiency	
				Level 3	Prob.		Level 3	Prob.		Level 3	Prob.
	40	218	206	No	0.16	208	No	0.14	209	No	0.01
	45	218	208	No	0.19	210	No	0.21	211	No	0.02
	50	218	210	No	0.26	211	No	0.21	213	No	0.08
	55	218	211	No	0.31	213	No	0.3	215	No	0.2
	60	218	213	No	0.4	215	No	0.39	217	No	0.39
	65	218	215	Yes	0.5	217	Yes	0.5	219	Yes	0.61
	70	218	217	Yes	0.55	219	Yes	0.61	221	Yes	0.8
	75	218	219	Yes	0.65	221	Yes	0.7	223	Yes	0.92
	80	218	222	Yes	0.78	224	Yes	0.83	226	Yes	0.99
	85	218	224	Yes	0.84	227	Yes	0.91	228	Yes	>0.99
	90	218	228	Yes	0.94	230	Yes	0.96	232	Yes	>0.99
	95	218	233	Yes	0.98	236	Yes	0.99	238	Yes	>0.99

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