Predicting Performance on the Florida Statewide Assessment Program based on MAP® Growth™ Scores

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NWEA Psychometric Solutions

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Table of Contents

List of Tables

Executive Summary

To predict student achievement on Florida's K–12 Statewide Assessment Program tests based on MAP® Growth™ scores, NWEA® conducted a linking study to derive cut scores on the MAP Growth assessments that correspond to the state tests' achievement levels and sublevels. With this information, educators can identify students at risk of failing to meet state proficiency standards early in the year and provide tailored educational interventions.

Florida's assessment program includes the Florida Standards Assessments (FSA) in English Language Arts (ELA) and Mathematics and the Florida Statewide Science Assessments. Table E.1 presents the Level 3 achievement level cut scores for the Florida statewide assessments and the corresponding MAP Growth Rasch Unit (RIT) cut scores that allow teachers to identify students who are on track for proficiency on the state summative test and those who are not. For example, the Level 3 cut score on the FSA ELA Grade 3 test is 300. A Grade 3 student with a MAP Growth Reading RIT score of 189 in the fall is likely to meet Level 3 proficiency on the FSA ELA test in the spring, whereas a Grade 3 student with a Reading RIT score lower than 189 in the fall is in jeopardy of not meeting proficiency.

Table E.1. MAP Growth Cut Score Predictions for Proficiency on Florida's Statewide Assessments

Assessment		Level 3 Cut Scores by Grade					
		3	4	5	6	7	8
ELA/Reading							
FSA ELA		300	311	321	326	333	337
MAP Growth	Fall	189	199	207	212	215	217
	Winter	196	205	211	216	218	219
	Spring	199	207	213	217	219	220
Mathematics							
FSA Mathematics		297	310	320	325	330	337
MAP Growth	Fall	187	200	210	214	218	220
	Winter	195	207	216	219	222	223
	Spring	200	212	220	222	224	225
Science							
Statewide Science		–	–	200	–	–	203
MAP Growth	Fall	–	–	208	–	–	216
	Winter	–	–	211	–	–	217
	Spring	–	–	212	–	--	218

E.1. Assessment Overviews

MAP Growth tests are adaptive interim assessments aligned to Florida's content standards and administered in the fall, winter, and spring. RIT scores are reported on the RIT vertical scale with a range of 100–350. The FSA assessments are Florida's state summative tests aligned to the Florida Standards and administered to students in Grades 3–10 in ELA and Grades 3–8 in Mathematics. The Statewide Science Assessments are administered in Grades 5 and 8 for use with the Next Generation Sunshine State Standards (NGSSS). Based on their state test scores, students are placed into one of five achievement levels: Level 1: Inadequate, Level 2: Below Satisfactory, Level 3: Satisfactory, Level 4: Proficient, and Level 5: Mastery. The Level 3 cut score demarks the minimum level of achievement considered to be proficient.

To support the calculation of learning gains used in Florida to measure the performance of a school, Level 1 also has three sublevels (low, middle, high), and Level 2 has two sublevels (low, high). This report also includes MAP Growth score predictions based on the learning gains criteria to support teachers and schools as they help students grow in their learning and determine the RIT score required to achieve a learning gain.

E.2. Linking Methods

Based on scores from the Spring 2018 test administration, the equipercentile linking method was used to identify the spring MAP Growth scores that correspond to the spring Florida statewide assessment achievement level cut scores by grade and content area. MAP Growth fall and winter cut scores that predict proficiency on the spring FSA and Statewide Science tests were then projected using the 2015 NWEA growth norms that provide expected score gains across test administrations (i.e., fall/winter RIT score = spring RIT score – expected growth).

E.3. Student Sample

Table E.2 presents the weighted number of Florida students from five districts and 204 schools with both MAP Growth and the Florida statewide assessment test scores in Spring 2018 who were included in the linking study sample. Student scores were weighted to ensure the sample was representative of the state population on gender, race, and achievement level.

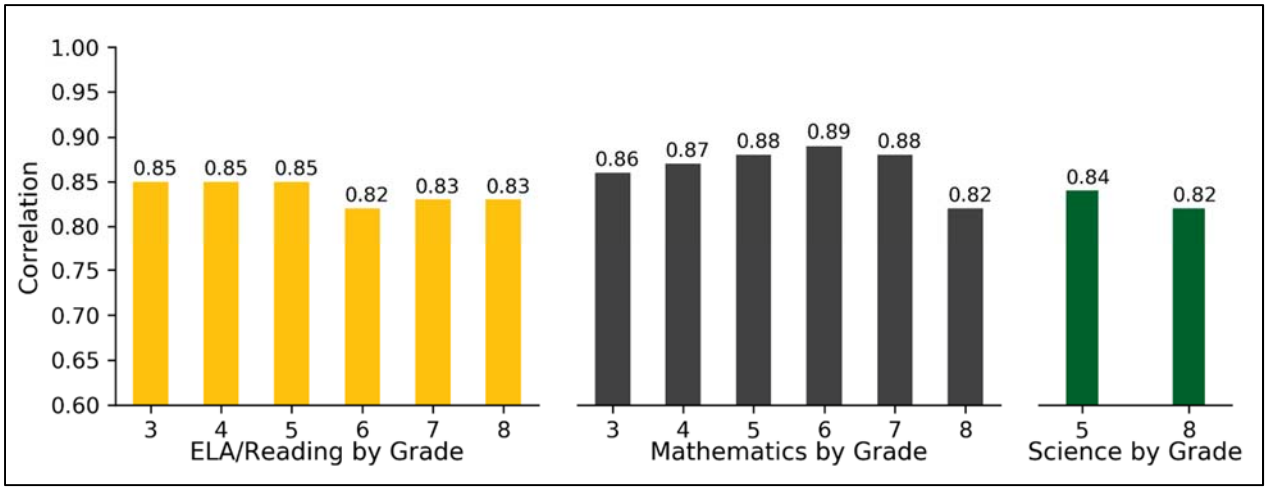
Table E.2. Number of Students in the Linking Study Sample

	Number of Students by Grade					
Content Area	**3**	**4**	**5**	**6**	**7**	**8**
ELA/Reading	14,081	11,970	11,106	7,608	6,333	5,389
Mathematics	13,144	11,996	11,153	7,436	5,499	3,657
Science	–	–	7,108	–	–	3,727

E.4. Test Score Relationships

Correlations between MAP Growth scores and Florida's statewide assessment test scores range from 0.82 to 0.89, as shown in Figure E.1. These values indicate a strong relationship among the scores, which provides evidence that the two tests measure similar constructs.

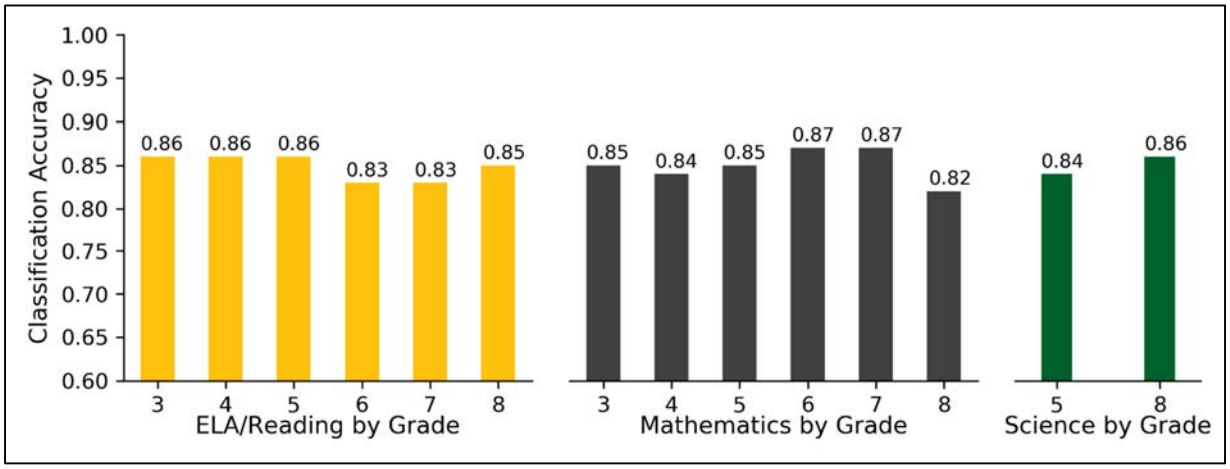
Figure E.1. Correlations between MAP Growth and Florida's Statewide Tests



E.5. Accuracy of MAP Growth Classifications

Figure E.2 presents the classification accuracy statistics that show the proportion of students correctly classified by their MAP Growth scores as proficient (i.e., Level 3 or above) or not proficient (i.e., Level 2 or below) on the Florida statewide tests. For example, the MAP Growth Reading Grade 3 Level 3 cut score has a 0.86 accuracy rate, meaning it accurately classified student achievement on the state test for 86% of the sample. The results range from 0.83 to 0.86, indicating that MAP Growth scores have a high accuracy rate of identifying student proficiency on Florida's statewide assessments.

Figure E.2. Accuracy of MAP Growth Classifications



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 the MAP® Growth™ test scores. An important use of MAP Growth results is to predict a student's performance on the state summative assessment 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 in April 2019 to statistically connect the scores of the Florida Standards Assessment (FSA) English Language Arts (ELA) and Mathematics Grades 3–10 assessments and the Statewide Science Assessment in Grades 5 and 8 with scores from MAP Growth assessments taken during the Spring 2018 term. Specifically, this report presents the following:

- MAP Growth Reading and Mathematics Rasch Unit (RIT) cut scores that correspond to the cut scores on the FSA ELA and Mathematics and Statewide Science tests using the equipercentile linking procedure for MAP Growth spring results and the 2015 norms (Thum & Houser, 2015) for MAP Growth fall and winter results.
- Classification accuracy statistics based on the MAP Growth cut score predictions to determine the degree to which MAP Growth tests accurately predict student proficiency status on Florida's statewide assessments.
- The probability of meeting or exceeding grade-level proficiency (i.e., achieving Level 3 or above performance) on the FSA and Statewide Science tests based on the observed MAP Growth scores taken during the fall, winter, and spring using the 2015 norms.

1.2. Assessment Overview

1.2.1. Florida Statewide Assessment Program

Florida's Statewide Assessment Program includes the FSA tests aligned to the Florida Standards and administered to students in Grades 3–10 in ELA and Grades 3–8 in Mathematics and the Statewide Science Assessments administered in Grades 5 and 8 for use with the Next Generation Sunshine State Standards (NGSSS). Each grade and content area, there are four cut scores that distinguish between the following achievement levels.

- Level 1: Inadequate
- Level 2: Below Satisfactory
- Level 3: Satisfactory
- Level 4: Proficient
- Level 5: Mastery

A cut score is the minimum score a student must get on a test to be placed in a certain achievement level. The Level 3 cut score that distinguishes between Level 2 and Level 3 performance demarks the minimum level of performance considered to be proficient for accountability purposes.

A student's achievement levels from one year to the next in ELA and Mathematics is also taken into consideration as part of Florida's school grading system that is based on student success measures, including achievement, learning gains, graduation, acceleration success, and maintaining a focus on students who need the most support (Florida Department of Education, 2017). A learning gain is a measurement of growth from one year to the next. Growth must sufficiently meet the state's prescribed criteria (provided below) in order to count toward a school's grade. To support the calculation of learning gains, Level 1 also has three sublevels (low, middle, high), and Level 2 has two sublevels (low, high). MAP Growth score predictions can be used to determine the RIT score required to achieve a learning gain in all achievement levels and sublevels, allowing teachers to provide the needed support to ensure that all students can grow.

There are four learning gains components in the Florida school grading system: learning gains in ELA and Mathematics (components 1 and 2) and learning gains for the lowest 25% of students in the ELA and Mathematics (components 3 and 4). The points earned for each component are added together and divided by the total number of available points to determine the percentage of points earned. Each learning gains component is worth 100 points and is based on the percentage of students who meet one of the following learning gains criteria from the prior year to the current year on the FSA in the same content area (Florida Department of Education, 2017):

1. Students who increased at least one achievement level (e.g., from Level 1 to Level 2).
2. Students who scored below Level 3 and increased at least one sublevel with Level 1 or Level 2 (e.g., from Level 1 low to Level 1 middle).
3. Students whose score remained at Level 3 or Level 4 but with increased scale scores.
4. Students who took an FSA End-of-Course (EOC) assessment and remained at Level 3 or Level 4.[1]
5. Students whose score remained at Level 5.

1.2.2. MAP Growth

MAP Growth assessments are computer adaptive interim tests aligned to the Florida Standards for ELA and Mathematics and the NGSSS for Science. MAP Growth scores are reported on the RIT vertical scale with a range of 100–350. Each content area has its own scale. To aid interpretation of MAP Growth scores, NWEA periodically conducts norming studies of student and school performance on MAP Growth. The most recent MAP Growth norming study by Thum & Hauser (2015) employed multi-level growth models on nearly 500,000 longitudinal test scores from over 100,000 students that were weighted to create large, nationally representative norms.

[1] Given the small sample size, this linking study was not conducted for the EOC assessments.

2. Methods

2.1. Data Collection

This linking study was based on data from the Spring 2018 administrations of MAP Growth and Florida's statewide assessments. NWEA recruited Florida school districts to participate in the study by sharing their student and score data for the target term. Districts also gave NWEA permission to access students' associated MAP Growth scores from NWEA's in-house database. Once Florida state score information was received by participating districts, each student's state testing record was matched to their MAP Growth score by using the student's first and last names, date of birth, student ID, and other available identifying information. Only students who took both the MAP Growth and Florida statewide assessments in Spring 2018 were included in the study sample.

2.2. Post-Stratification Weighting

Post-stratification weights were applied to the calculations to ensure that the sample represented the state population in terms of ethnicity, gender, and achievement level. These variables were selected because they were correlated with a student's academic achievement within this study, and these data are often provided for the state population. When weighted, the sample matches the target population as closely as possible on the key demographics and test score characteristics.

Specifically, a raking procedure was used to calculate the post-stratification weights and improve the representativeness of the sample. Raking uses iterative procedures to obtain weights that match sample marginal distributions to known population margins. The following steps were taken during this process:

- Calculate marginal distributions of ethnicity, gender, and achievement level for the sample and population.
- Calculate post-stratification weights with the rake function from the survey package in R.
- Trim the weight if it is not in the range of 0.3 to 3.0.
- Apply the weights to the sample before conducting the linking study analyses.

2.3. Equipercentile Linking Procedure

The equipercentile procedure (Kolen & Brennan, 2004) was used to link the Florida statewide assessment scores and the MAP Growth spring RIT scores, and the 2015 MAP Growth norms (Thum & Hauser, 2015) were used to link the Florida test scores and the MAP Growth fall and winter RIT scores. The MAP Growth spring cut scores could be calculated using the equipercentile linking method because that data is directly connected to Florida's spring data used in the study.

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). Consider the linked scores between two tests. Let x represent a score on Test X (e.g., Florida's statewide test). 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 in Equation 1:

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

where $e_y(x)$ is the equipercentile equivalent of score x on the Florida test on the scale of MAP Growth, $P(x)$ is the percentile rank of a given score on the Florida test, 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.

2.4. Classification Accuracy

The degree to which MAP Growth tests predict student proficiency status on the Florida statewide assessments can be described using classification accuracy statistics that show the proportion of students correctly classified by their MAP Growth scores as proficient (i.e., Level 3 or above) or not proficient (i.e., Level 2 or below) on the Florida assessments. Table 2.1 describes the classification accuracy statistics provided in this report. The results are based on the Spring 2018 MAP Growth and Florida statewide assessment data for Level 3 proficiency (i.e., the cut score between Level 2 and Level 3).

Table 2.1. Descriptions of Classification Accuracy Summary Statistics

Classification Accuracy Statistic	Description*	Interpretation
Overall Classification Accuracy Rate	(TP + TN) / (total sample size)	The proportion of students in the study sample whose proficiency classification on the state test was correctly predicted by MAP Growth cut scores (Pommerich, Hanson, Harris, & Sconing, 2004).
Sensitivity	TP / (TP + FN)	The proportion of proficient students who were correctly identified on the MAP Growth test as such.
Specificity	TN / (TN + FP)	The proportion of below-proficient students who were correctly identified on the MAP Growth test as such.
False Negative Rate	FN / (FN + TP)	The proportion of proficient students who were incorrectly predicted by MAP Growth test to be below proficiency.
False Positive Rate	FP / (FP + TN)	The proportion of below-proficient students who were incorrectly predicted by MAP Growth test to be proficient.
Area Under the Curve (AUC)	Area under the 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.

*TN = true negatives. FP = false positives. FN = false negatives. TP = true positives. ROC = receiver operating characteristics.

2.5. Proficiency Projection

MAP Growth conditional growth norms provide students’ expected score gains across testing seasons (Thum & Hauser, 2015). This information was used to estimate the previous fall and winter MAP Growth scores that would meet the MAP Growth spring cut. Equation 2 was used to determine the fall or winter MAP Growth score needed to reach the spring cut score, considering the expected growth associated with the previous RIT score:

$$RIT_{PredSpring} = RIT_{previous} + g \quad (2)$$

where:

- $RIT_{PredSpring}$ is the predict MAP Growth spring score.
- $RIT_{previous}$ is the unknown fall or winter RIT score.
- g is the expected growth from fall or winter to spring corresponding to $RIT_{previous}$.

The MAP Growth conditional growth norms data were also used to calculate the probability of reaching proficiency on the Florida statewide assessments based on a student's MAP Growth scores from fall, winter, and spring. Equation 3 was used to calculate the probability of a student achieving Level 3 proficiency on the Florida tests based on their fall or winter MAP Growth score:

$$Pr(Achieving\ Level\ 3\ in\ spring|\ starting\ RIT) = \Phi\left(\frac{RIT_{previous} + g - RIT_{SpringCut}}{SD}\right) \quad (3)$$

where:

- Φ is a standardized normal cumulative distribution.
- $RIT_{previous}$ is the student's RIT score in fall or winter.
- g is the expected growth from fall or winter to spring corresponding to that previous RIT.
- $RIT_{SpringCut}$ is the MAP Growth Level 3 cut score for spring.
- SD is the conditional standard deviation of growth from fall or winter to spring.

Equation 4 was used to estimate the probability of a student achieving Level 3 proficiency on the state tests based on their spring score (RIT_{Spring}):

$$Pr(Achieving\ Level\ 3\ in\ spring\ |\ spring\ RIT) = \Phi\left(\frac{RIT_{Spring} - RIT_{SpringCut}}{SE}\right) \quad (4)$$

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

3. Results

3.1. Study Sample

Only students who took both the MAP Growth and Florida statewide assessments in Spring 2018 were included in the study sample. Table 3.1 presents the unweighted ethnicity, gender, and achievement level distributions for the 204 schools across five districts in Florida that participated in this linking study. Table 3.2 presents the student demographics of Florida's statewide assessment student population, which includes all students who took the Spring 2018 FSA and Statewide Science tests (Florida Department of Education, 2018).

Since the unweighted data were quite different from the Florida population, post-stratification weights were applied to the linking study sample to improve its representativeness. Table 3.3 presents the sample percentages after weighting, which are almost identical to the Florida student population distributions. The differences are no more than 1%. The analyses in this study (i.e., descriptive statistics, MAP Growth cut score predictions, classification accuracy statistics, and proficiency projections) were therefore conducted based on the weighted sample.

Table 3.1. Linking Study Sample Demographics (Unweighted)

Demographic Subgroup		Percentage of Students in Each Subgroup by Grade					
		3	4	5	6	7	8
ELA/Reading							
	Total N	**14,081**	**11,970**	**11,218**	**7,608**	**6,397**	**5,443**
Ethnicity	White	42.2	40.1	40.6	33.1	31.0	30.2
	Black	24.3	24.5	23.6	27.5	28.0	28.1
	Hispanic	25.1	26.8	27.7	32.1	32.9	32.8
	Other	8.4	8.6	8.1	7.3	8.0	8.9
Gender	Female	48.6	49.9	50.4	50.3	50.6	49.9
	Male	51.4	50.1	49.6	49.7	49.4	50.1
Achievement Level	Level 1	21.4	23.9	22.1	24.2	25.7	20.1
	Level 2	24.5	25.4	27.4	26.9	25.2	24.7
	Level 3	28.5	26.4	25.7	22.3	24.0	27.6
	Level 4	18.3	18.6	17.4	19.6	15.9	18.5
	Level 5	7.4	5.8	7.3	7.0	9.3	9.1
Mathematics							
	Total N	**13,014**	**11,996**	**11,153**	**7,436**	**5,499**	**3,657**
Ethnicity	White	41.4	40.2	40.5	32.7	30.9	28.8
	Black	24.5	24.8	23.8	27.9	28.6	31.1
	Hispanic	25.9	26.5	27.8	32.0	33.3	32.4
	Other	8.2	8.6	7.9	7.3	7.2	7.7
Gender	Female	48.6	50.0	50.4	49.9	51.1	49.8
	Male	51.4	50.0	49.6	50.1	48.9	50.2
Achievement Level	Level 1	19.3	24.5	21.6	25.2	27.4	32.7
	Level 2	19.2	17.8	20.7	26.9	24.1	27.5
	Level 3	28.0	27.3	23.9	25.3	28.7	27.0
	Level 4	22.8	19.7	21.2	16.9	14.3	9.1
	Level 5	10.7	10.7	12.7	5.7	5.5	3.7

Demographic Subgroup		Percentage of Students in Each Subgroup by Grade					
		3	4	5	6	7	8
Science							
	Total N	–	–	**7,108**	–	–	**3,727**
Ethnicity	White	–	–	35.0	–	–	25.5
	Black	–	–	26.0	–	–	27.7
	Hispanic	–	–	32.3	–	–	38.2
	Other	–	–	6.7	–	–	8.6
Gender	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

Table 3.2. Spring 2018 Florida Population Demographics

Demographic Subgroup		Percentage of Students in Each Subgroup by Grade					
		3	4	5	6	7	8
ELA/Reading							
	Total N	**222,913**	**217,434**	**213,499**	**203,162**	**180,892**	**131,055**
Ethnicity	White	35.8	37.1	37.8	36.8	37.6	34.0
	Black	22.8	21.6	20.9	22.0	22.0	25.0
	Hispanic	34.6	34.5	34.4	34.8	34.0	35.0
	Other	6.8	6.8	6.9	6.4	6.4	6.0
Gender	Female	48.5	48.9	49.5	49.2	48.9	47.9
	Male	51.5	51.2	50.6	50.8	51.1	52.1
Achievement Level	Level 1	19.0	22.0	20.0	25.0	23.0	20.0
	Level 2	19.0	16.0	19.0	23.0	18.0	17.0
	Level 3	28.0	27.0	24.0	24.0	26.0	27.0
	Level 4	23.0	22.0	22.0	20.0	18.0	17.0
	Level 5	11.0	13.0	14.0	8.0	14.0	18.0
Mathematics							
	Total N	**221,883**	**215,827**	**211,086**	**211,279**	**201,439**	**202,500**
Ethnicity	White	35.9	37.2	37.9	37.5	38.5	38.8
	Black	22.8	21.5	20.9	21.5	21.2	20.9
	Hispanic	34.5	34.3	34.3	34.3	33.7	33.6
	Other	6.8	7.0	6.9	6.7	6.7	6.7
Gender	Female	48.6	48.9	49.5	49.2	49.4	49.2
	Male	51.5	51.1	50.5	50.8	50.6	50.8
Achievement Level	Level 1	20.0	21.0	20.0	24.0	26.0	21.0
	Level 2	23.0	23.0	25.0	24.0	23.0	21.0
	Level 3	29.0	27.0	26.0	21.0	22.0	26.0
	Level 4	20.0	21.0	20.0	21.0	18.0	19.0
	Level 5	9.0	8.0	9.0	10.0	11.0	13.0

Demographic Subgroup		Percentage of Students in Each Subgroup by Grade					
		3	4	5	6	7	8
Science							
	Total N	–	–	**211,986**	–	–	**194,389**
Ethnicity	White	–	–	37.8	–	–	39.2
	Black	–	–	20.9	–	–	21.0
	Hispanic	–	–	34.4	–	–	33.2
	Other	–	–	6.9	–	–	6.7
Gender	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

Table 3.3. Linking Study Sample Demographics (Weighted)

Demographic Subgroup		Percentage of Students in Each Subgroup by Grade					
		3	4	5	6	7	8
ELA/Reading							
	Total N	**14,081**	**11,970**	**11,106**	**7,608**	**6,333**	**5,389**
Ethnicity	White	35.8	37.1	37.8	36.8	37.6	34.0
	Black	22.8	21.6	20.9	22.0	22.0	25.0
	Hispanic	34.6	34.5	34.4	34.8	34.0	35.0
	Other	6.8	6.8	6.9	6.4	6.4	6.0
Gender	Female	48.5	48.9	49.5	49.2	48.9	47.9
	Male	51.5	51.1	50.5	50.8	51.1	52.1
Achievement Level	Level 1	19.0	22.0	20.2	25.0	23.2	20.2
	Level 2	19.0	16.0	19.2	23.0	18.2	17.2
	Level 3	28.0	27.0	24.2	24.0	26.3	27.3
	Level 4	23.0	22.0	22.2	20.0	18.2	17.2
	Level 5	11.0	13.0	14.1	8.0	14.1	18.2
Mathematics							
	Total N	**13,144**	**11,996**	**11,153**	**7,436**	**5,499**	**3,657**
Ethnicity	White	35.9	37.2	37.9	37.5	38.5	38.8
	Black	22.8	21.5	20.9	21.5	21.1	20.9
	Hispanic	34.5	34.3	34.3	34.3	33.7	33.6
	Other	6.8	7.0	6.9	6.7	6.7	6.7
Gender	Female	48.6	48.9	49.5	49.2	49.4	49.2
	Male	51.4	51.1	50.5	50.8	50.6	50.8
Achievement Level	Level 1	19.8	21.0	20.0	24.0	26.0	21.0
	Level 2	22.8	23.0	25.0	24.0	23.0	21.0
	Level 3	28.7	27.0	26.0	21.0	22.0	26.0
	Level 4	19.8	21.0	20.0	21.0	18.0	19.0
	Level 5	8.9	8.0	9.0	10.0	11.0	13.0

Demographic Subgroup		Percentage of Students in Each Subgroup by Grade					
		3	4	5	6	7	8
Science							
	Total N	–	–	**7,108**	–	–	**3,727**
Ethnicity	White	–	–	37.8	–	–	39.2
	Black	–	–	20.9	–	–	21.0
	Hispanic	–	–	34.4	–	–	33.2
	Other	–	–	6.9	–	–	6.7
Gender	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

3.2. Descriptive Statistics

Table 3.4 presents descriptive statistics of the MAP Growth and Florida statewide assessment test scores for Spring 2018, including the correlation coefficient (*r*) between the two scales. As shown in the table, the correlation coefficients between the MAP Growth and Florida test scores range from 0.82 to 0.85 for ELA/Reading, 0.82 to 0.89 for Mathematics, and 0.82 to 0.84 for Science. These values indicate a strong relationship among the scores, which provides evidence that the two tests measure similar constructs.

Table 3.4. Descriptive Statistics of MAP Growth and Florida Statewide Test Scores

Grade	N	*r*	Florida Statewide Tests*				MAP Growth*			
			Mean	SD	Min.	Max.	Mean	SD	Min.	Max.
ELA/Reading										
3	14,081	0.85	304.0	21.7	240	360	200.9	15.2	139	239
4	11,970	0.85	314.5	21.7	251	372	208.6	14.7	144	259
5	11,106	0.85	324.8	24.2	257	385	215.0	13.9	148	267
6	7,608	0.82	324.2	23.3	259	391	214.9	15.0	150	265
7	6,333	0.83	334.2	23.6	267	397	219.3	15.6	150	259
8	5,389	0.83	342.0	23.9	274	403	221.8	16.5	152	263
Mathematics										
3	13,144	0.86	299.9	20.5	240	360	201.8	12.4	144	258
4	11,996	0.87	312.6	21.4	251	376	213.2	12.8	148	275
5	11,153	0.88	321.8	22.2	256	388	221.5	14.5	146	276
6	7,436	0.89	325.3	23.9	260	390	222.2	16.3	148	273
7	5,499	0.88	330.2	23.9	269	391	223.9	17.2	137	269
8	3,657	0.82	338.9	23.0	273	393	225.2	15.5	143	273
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

*SD = standard deviation. Min. = minimum. Max. = maximum.

3.3. MAP Growth Score Predictions

Table 3.5, Table 3.6, and Table 3.7 present the Florida statewide assessment scale score ranges for each achievement level and the corresponding MAP Growth RIT cut scores and percentile ranges by content area and grade. These tables can be used to predict a student's likely achievement level on the Florida statewide tests when MAP Growth is taken in the fall, winter, or spring. For example, a Grade 3 student who obtained a MAP Growth Reading RIT score of 189 in the fall is likely to reach Level 3 proficiency on the FSA ELA spring test. A Grade 3 student who obtained a MAP Growth Reading RIT score of 199 in the spring is also likely to reach Level 3 proficiency on the FSA ELA spring test. The spring cut score is higher than the fall cut score because growth is expected between fall and spring as students receive more instructions during the school year.

Table 3.8 and Table 3.9 provide a further breakdown by presenting the MAP Growth score predictions for the Level 1 and Level 2 sublevels. Learning gains are a measure of students' growth from one year to the next that are used to measure the performance of a school. A school gains points if they meet the state's prescribed criteria for learning gains (presented in Section 1.2.1). Together, Table 3.5 – Table 3.9 can be used to predict a student's learning gains in ELA and Mathematics across school years by following the steps below:

1. Find the student's score from a prior FSA test and identify the corresponding MAP Growth RIT score.
2. Identify the achievement level needed to achieve a learning gain and find the corresponding MAP Growth score.
3. Calculate the difference between the initial and final MAP Growth scores to find out how much a student must grow to show a learning gain.

Below are some examples of how to use these score prediction tables to make learning gain predictions and plan instruction accordingly to support students' learning gains.

- If a Grade 3 student scored 284 and was at Level 1 High on the FSA ELA test (Tables 3.5 and 3.8), this student is likely to have a RIT score of 188 (25th percentile) on the spring MAP Growth Reading test. If this student retook MAP Growth Reading in the fall in Grade 4, their score is likely to be in the range of 100–188 (1st–26th percentiles). To move this Grade 4 student to Level 2 Low or higher on Florida's ELA test in the spring, extra effort needs to be made to help them score at least 195 in the winter and 198 in the spring on the MAP Growth test (28th and 29th percentiles, respectively).

- Students who scored at Level 3, Level 4 or Level 5 on the Florida state tests in the prior year and remain at the same level in the current year are excepted to achieve certain RIT scores throughout the year. For example, if a Grade 3 student scored 330 and was at Level 5 on the FSA ELA test (Table 3.5), they are expected to receive MAP Growth Reading RIT scores of at least 220 in the fall, 224 in the winter, and 225 in the spring to remain at Level 5 in Grade 4 (92nd, 91st, and 90th percentiles, respectively).

- For Level 3 and Level 4, although the score prediction tables provide the expected RIT score ranges in different terms for students to keep the same achievement level, they do not provide the exact prediction between each RIT score and the state scale scores. In other words, a student may increase one or two points on the RIT scale but not necessarily increase the same amount of points on the state test, or vice versa. Hence, these tables can only partially support a learning gain decision according to the third learning gains criterion above.

Although Table 3.5 – Table 3.9 provide the projected RIT score ranges that correspond to different achievement levels on the Florida state assessments, in practice one needs to be aware of different sources of measurement error that could lead to an incorrect classification when applying these tables. For example, according to Table 3.5, if a Grade 3 student scored 189 on the MAP Growth Reading test in the fall, they are "likely" (see the exact probability in Table 3.11) to be at Level 3 in the spring on the FSA ELA test. However, in reality, this student could be at Level 2. The reasons for the misclassification may include the following:

1. Measurement errors of state scale scores and RIT scores. For example, if a RIT score is 200 and its SEM is 5, the student score is more likely to be in the range of 195 and 205 if this student took the test again.
2. The imperfect correlation between the state scale scores and RIT scores (i.e., the correlation is not equal to 1).
3. Conditional growth measurement errors in the growth norms when projecting the score ranges in the fall and winter from the scores in the spring.
4. The actual instructional weeks of each school district may differ from the standard default instructional weeks used in this study to estimate the growth from fall or winter to spring, which can impact the classification accuracy of the fall and winter cut scores.
5. The score distribution of the study sample may not represent the distribution of the population perfectly, although the post-stratification is applied to improve the gender, ethnicity, and achievement level distributions correlated with the score distribution.
6. The irregularities in score distribution can cause problems in the linking study results (Livingston, 2004). In other words, when no students receive a particular RIT score or range of RIT scores, this can cause problems for equating. The score distribution irregularities become worse at the lower and higher ends of the study sample, although a polynomial loglinear pre-smoothing is used to reduce the irregularities in this study. As a result, the RIT score ranges provided in Table 3.8 and Table 3.9 may result in less accurate classification of students into different sublevels.

Table 3.5. MAP Growth Score Predictions—ELA/Reading

FSA ELA					
Grade	**Level 1**	**Level 2**	**Level 3***	**Level 4**	**Level 5**
3	240–284	285–299	**300**–314	315–329	330–360
4	251–296	297–310	**311**–324	325–339	340–372
5	257–303	304–320	**321**–335	336–351	352–385
6	259–308	309–325	**326**–338	339–355	356–391
7	267–317	318–332	**333**–345	346–359	360–397
8	274–321	322–336	**337**–351	352–365	366–403

MAP Growth Reading										
	Level 1		**Level 2**		**Level 3***		**Level 4**		**Level 5**	
Grade	**RIT**	**Percentile**	**RIT**	**Percentile**	**RIT***	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**
Fall										
3	100–176	1–22	177–188	23–50	**189**–198	51–74	199–210	75–91	211–350	92–99
4	100–188	1–26	189–198	27–50	**199**–209	51–76	210–219	77–91	220–350	92–99
5	100–196	1–27	197–206	28–52	**207**–215	53–74	216–226	75–91	227–350	92–99
6	100–200	1–24	201–211	25–51	**212**–219	52–71	220–231	72–91	232–350	92–99
7	100–204	1–25	205–214	26–50	**215**–223	51–72	224–232	73–88	233–350	89–99
8	100–206	1–24	207–216	25–48	**217**–226	49–72	227–234	73–86	235–350	87–99
Winter										
3	100–184	1–23	185–195	24–49	**196**–205	50–74	206–215	75–90	216–350	91–99
4	100–194	1–27	195–204	28–52	**205**–213	53–74	214–223	75–90	224–350	91–99
5	100–201	1–28	202–210	29–51	**211**–219	52–74	220–228	75–89	229–350	90–99
6	100–204	1–25	205–215	26–53	**216**–222	54–71	223–232	72–89	233–350	90–99
7	100–207	1–26	208–217	27–51	**218**–225	52–71	226–233	72–86	234–350	87–99
8	100–209	1–26	210–218	27–48	**219**–227	49–70	228–235	71–85	236–350	86–99
Spring										
3	100–188	1–25	189–198	26–49	**199**–207	50–72	208–217	73–89	218–350	90–99
4	100–197	1–28	198–206	29–51	**207**–215	52–73	216–224	74–89	225–350	90–99
5	100–203	1–28	204–212	29–51	**213**–220	52–72	221–229	73–88	230–350	89–99
6	100–206	1–26	207–216	27–52	**217**–223	53–70	224–233	71–88	234–350	89–99
7	100–209	1–28	210–218	29–50	**219**–226	51–70	227–234	71–85	235–350	86–99
8	100–210	1–27	211–219	28–48	**220**–228	49–70	229–236	71–85	237–350	86–99

*Bolded numbers indicate the cut scores considered to be at least proficient for accountability purposes.

Table 3.6. MAP Growth Score Predictions—Mathematics

FSA Mathematics										
Grade	**Level 1**		**Level 2**		**Level 3***		**Level 4**		**Level 5**	
3	240–284		285–296		**297**–310		311–326		327–360	
4	251–298		299–309		**310**–324		325–339		340–376	
5	256–305		306–319		**320**–333		334–349		350–388	
6	260–309		310–324		**325**–338		339–355		356–390	
7	269–315		316–329		**330**–345		346–359		360–391	
8	273–321		322–336		**337**–352		353–364		365–393	
MAP Growth Mathematics										
	Level 1		**Level 2**		**Level 3***		**Level 4**		**Level 5**	
Grade	**RIT**	**Percentile**	**RIT**	**Percentile**	**RIT***	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**
Fall										
3	100–178	1–18	179–186	19–38	**187**–195	39–65	196–204	66–85	205–350	86–99
4	100–192	1–24	193–199	25–42	**200**–208	43–68	209–217	69–87	218–350	88–99
5	100–200	1–22	201–209	23–44	**210**–218	45–68	219–229	69–89	230–350	90–99
6	100–203	1–18	204–213	19–39	**214**–222	40–62	223–235	63–87	236–350	88–99
7	100–207	1–18	208–217	19–37	**218**–228	38–63	229–238	64–83	239–350	84–99
8	100–209	1–17	210–219	18–35	**220**–230	36–59	231–241	60–80	242–350	81–99
Winter										
3	100–187	1–21	188–194	22–39	**195**–203	40–65	204–211	66–84	212–350	85–99
4	100–199	1–25	200–206	26–43	**207**–214	44–65	215–223	66–85	224–350	86–99
5	100–206	1–24	207–215	25–45	**216**–224	46–68	225–235	69–88	236–350	89–99
6	100–208	1–19	209–218	20–41	**219**–227	42–63	228–239	64–86	240–350	87–99
7	100–211	1–19	212–221	20–39	**222**–232	40–64	233–242	65–83	243–350	84–99
8	100–212	1–18	213–222	19–35	**223**–233	36–59	234–243	60–78	244–350	79–99
Spring										
3	100–192	1–21	193–199	22–38	**200**–208	39–64	209–216	65–82	217–350	83–99
4	100–204	1–27	205–211	28–44	**212**–219	45–65	220–228	66–84	229–350	85–99
5	100–210	1–25	211–219	26–45	**220**–228	46–67	229–239	68–86	240–350	87–99
6	100–211	1–20	212–221	21–40	**222**–230	41–62	231–242	63–84	243–350	85–99
7	100–213	1–19	214–223	20–38	**224**–234	39–63	235–244	64–81	245–350	82–99
8	100–214	1–19	215–224	20–36	**225**–235	37–59	236–245	60–77	246–350	78–99

*Bolded numbers indicate the cut scores considered to be at least proficient for accountability purposes.

Table 3.7. MAP Growth Score Predictions—Science

Statewide Science Assessment										
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										
	Level 1		**Level 2**		**Level 3***		**Level 4**		**Level 5**	
Grade	**RIT**	**Percentile**	**RIT**	**Percentile**	**RIT***	**Percentile**	**RIT**	**Percentile**	**RIT**	**Percentile**
Fall										
5	100–196	1–36	197–207	37–74	**208**–216	75–92	217–221	93–96	222–350	97–99
8	100–201	1–23	202–215	24–66	**216**–223	67–85	224–230	86–94	231–350	95–99
Winter										
5	100–200	1–38	201–210	39–73	**211**–218	74–91	219–222	92–95	223–350	96–99
8	100–204	1–26	205–216	27–63	**217**–224	64–84	225–230	85–93	231–350	94–99
Spring										
5	100–202	1–38	203–211	39–69	**212**–218	70–87	219–222	88–93	223–350	94–99
8	100–206	1–28	207–217	29–62	**218**–224	63–80	225–230	81–91	231–350	92–99

*Bolded numbers indicate the cut scores considered to be at least proficient for accountability purposes.

Table 3.8. MAP Growth Score Predictions for Level 1 and Level 2 Sublevels—ELA/Reading

FSA ELA										
	Level 1						Level 2			
Grade	Low		Middle		High		Low		High	
3	240–254		255–269		270–284		285–292		293–299	
4	251–266		267–281		282–296		297–303		304–310	
5	257–272		273–288		289–303		304–312		313–320	
6	259–275		276–292		293–308		309–317		318–325	
7	267–283		284–300		301–317		318–325		326–332	
8	274–289		290–305		306–321		322–329		330–336	
MAP Growth Reading										
	Level 1						Level 2			
	Low		Middle		High		Low		High	
Grade	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile
Fall										
3	100–146	<1	147–163	1–5	164–176	6–22	177–182	23–35	183–188	36–50
4	100–163	<1	164–176	1–8	177–188	9–26	189–193	27–38	194–198	39–50
5	100–174	≤1	175–186	2–10	187–196	11–27	197–201	28–39	202–206	40–52
6	100–176	<1	177–188	1–6	189–200	7–24	201–206	25–38	207–211	39–51
7	100–177	<1	178–193	1–8	194–204	9–25	205–210	26–39	211–214	40–50
8	100–178	<1	179–194	1–7	195–206	8–24	207–211	25–35	212–216	36–48
Winter										
3	100–158	<1	159–173	1–7	174–184	8–23	185–190	24–36	191–195	37–49
4	100–172	≤1	173–183	2–8	184–194	9–27	195–198	28–36	199–204	37–52
5	100–180	≤1	181–192	2–11	193–201	12–28	202–206	29–41	207–210	42–51
6	100–182	<1	183–193	1–7	194–204	8–25	205–209	26–37	210–215	38–53
7	100–182	<1	183–197	1–9	198–207	10–26	208–213	27–40	214–217	41–51
8	100–184	<1	185–198	1–9	199–209	10–26	210–214	27–38	215–218	39–48
Spring										
3	100–163	<1	164–177	1–8	178–188	9–25	189–193	26–36	194–198	37–49
4	100–176	≤1	177–187	2–10	188–197	11–28	198–201	29–38	202–206	39–51
5	100–184	1–2	185–195	3–13	196–203	14–28	204–208	29–41	209–212	42–51
6	100–185	≤1	186–196	2–9	197–206	10–26	207–211	27–38	212–216	39–52
7	100–185	≤1	186–199	1–10	200–209	11–28	210–214	29–40	215–218	41–50
8	100–186	≤1	187–200	1–10	201–210	11–27	211–215	28–38	216–219	39–48

Table 3.9. MAP Growth Score Predictions for Level 1 and Level 2 Sublevels—Mathematics

FSA Mathematics					
	Level 1			Level 2	
Grade	Low	Middle	High	Low	High
3	240–254	255–269	270–284	285–290	291–296
4	251–266	267–282	283–298	299–304	305–309
5	256–272	273–289	290–305	306–312	313–319
6	260–276	277–293	294–309	310–317	318–324
7	269–284	285–300	301–315	316–322	323–329
8	273–289	290–305	306–321	322–329	330–336

MAP Growth Mathematics										
	Level 1						Level 2			
	Low		Middle		High		Low		High	
Grade	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile
Fall										
3	100–157	<1	158–169	1–5	170–178	6–18	179–183	19–29	184–186	30–38
4	100–173	≤1	174–183	2–9	184–192	10–24	193–196	25–34	197–199	35–42
5	100–179	<1	180–190	1–7	191–200	8–22	201–205	23–34	206–209	35–44
6	100–182	<1	183–193	1–5	194–203	6–18	204–209	19–30	210–213	31–39
7	100–185	<1	186–197	1–6	198–207	7–18	208–212	19–27	213–217	28–37
8	100–189	≤1	190–199	2–6	200–209	7–17	210–214	18–25	215–219	26–35
Winter										
3	100–166	<1	167–177	1–5	178–187	6–21	188–191	22–30	192–194	31–39
4	100–180	≤1	181–190	2–10	191–199	11–25	200–203	26–35	204–206	36–43
5	100–185	≤1	186–196	2–8	197–206	9–24	207–211	25–35	212–215	36–45
6	100–187	<1	188–198	1–6	199–208	7–19	209–214	20–31	215–218	32–41
7	100–189	<1	190–201	1–7	202–211	8–19	212–216	20–28	217–221	29–39
8	100–192	≤1	193–202	2–7	203–212	8–18	213–217	19–26	218–222	27–35
Spring										
3	100–172	<1	173–183	1–7	184–192	8–21	193–196	22–30	197–199	31–38
4	100–185	1–2	186–195	3–11	196–204	12–27	205–208	28–36	209–211	37–44
5	100–189	≤1	190–200	2–9	201–210	10–25	211–215	26–35	216–219	36–45
6	100–190	≤1	191–201	2–7	202–211	8–20	212–217	21–31	218–221	32–40
7	100–191	≤1	192–203	2–7	204–213	8–19	214–218	20–28	219–223	29–38
8	100–194	1–2	195–204	3–8	205–214	9–19	215–219	20–27	220–224	28–36

3.4. Classification Accuracy

Table 3.10 presents the classification accuracy summary statistics, including the overall classification accuracy rate. These results indicate how well MAP Growth spring scores predict proficiency on the Florida statewide assessments, providing insight into the predictive validity of MAP Growth tests. The overall classification accuracy rate ranges from 0.83 to 0.86 for ELA/Reading, 0.82 to 0.87 for Mathematics, and 0.84 to 0.86 for Science. These values suggest that the MAP Growth cut scores for each content area and grade are good at classifying students as Level 3 on the Florida spring assessments.

Although the results show that MAP Growth scores can be used to accurately classify students as Level 3 on the Florida statewide tests, there is a notable limitation to how these results should be used and interpreted. The MAP Growth and Florida 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. MAP Growth may not be used as a substitute for the state tests and vice versa.

Table 3.10. Classification Accuracy for Proficiency on the State Test

Grade	N	Cut Score		Class. Accuracy*	Rate		Sensitivity	Specificity	AUC*
		MAP Growth	Florida		FP*	FN*			
ELA/Reading									
3	14,081	199	300	0.86	0.18	0.12	0.88	0.82	0.93
4	11,970	207	311	0.86	0.17	0.12	0.88	0.83	0.93
5	11,106	213	321	0.86	0.20	0.10	0.90	0.80	0.94
6	7,608	217	326	0.83	0.18	0.17	0.83	0.82	0.91
7	6,333	219	333	0.83	0.21	0.15	0.85	0.79	0.91
8	5,389	220	337	0.85	0.19	0.12	0.88	0.81	0.92
Mathematics									
3	13,144	200	297	0.85	0.21	0.12	0.88	0.79	0.93
4	11,996	212	310	0.84	0.20	0.12	0.88	0.80	0.93
5	11,153	220	320	0.85	0.19	0.12	0.88	0.81	0.93
6	7,436	222	325	0.87	0.15	0.10	0.90	0.85	0.95
7	5,499	224	330	0.87	0.14	0.11	0.89	0.86	0.95
8	3,657	225	337	0.82	0.18	0.17	0.83	0.82	0.91
Science									
5	7,108	212	200	0.84	0.15	0.16	0.84	0.85	0.93
8	3,727	218	203	0.86	0.14	0.14	0.86	0.86	0.93

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

3.5. Proficiency Projection

Table 3.11, Table 3.12, and Table 3.13 present the estimated probability of achieving Level 3 achievement level on the Florida spring assessments based on students' observed MAP Growth score when MAP Growth is taken in the fall, winter, or spring. For example, a Grade 3 student who obtained a MAP Growth Reading score of 202 in the fall has a 0.94 or 94% chance of reaching Level 3 proficiency or higher on the FSA ELA spring test.

Table 3.11. Florida State Test Proficiency Projection based on MAP Growth Fall and Winter RIT Scores—ELA/Reading

		ELA/Reading (Fall)				ELA/Reading (Winter)			
			Projected Proficiency				Projected Proficiency		
Grade	Start Percentile	Fall RIT	Spring Cut	Level 3	Prob.*	Winter RIT	Spring Cut	Level 3	Prob.*
3	5	162	199	No	<0.01	171	199	No	<0.01
	10	168	199	No	0.01	176	199	No	<0.01
	15	172	199	No	0.03	180	199	No	<0.01
	20	175	199	No	0.05	183	199	No	0.01
	25	178	199	No	0.10	185	199	No	0.03
	30	180	199	No	0.16	188	199	No	0.09
	35	182	199	No	0.20	190	199	No	0.13
	40	184	199	No	0.29	192	199	No	0.22
	45	186	199	No	0.39	194	199	No	0.35
	50	188	199	No	0.44	196	199	Yes	0.50
	55	190	199	Yes	0.56	198	199	Yes	0.65
	60	192	199	Yes	0.66	199	199	Yes	0.72
	65	194	199	Yes	0.71	201	199	Yes	0.83
	70	197	199	Yes	0.84	204	199	Yes	0.91
	75	199	199	Yes	0.90	206	199	Yes	0.96
	80	202	199	Yes	0.94	208	199	Yes	0.98
	85	205	199	Yes	0.97	211	199	Yes	>0.99
	90	209	199	Yes	0.99	215	199	Yes	>0.99
	95	214	199	Yes	>0.99	221	199	Yes	>0.99
4	5	173	207	No	<0.01	179	207	No	<0.01
	10	178	207	No	<0.01	184	207	No	<0.01
	15	182	207	No	0.01	188	207	No	<0.01
	20	185	207	No	0.04	191	207	No	0.01
	25	188	207	No	0.07	194	207	No	0.02
	30	190	207	No	0.12	196	207	No	0.06
	35	192	207	No	0.19	198	207	No	0.12
	40	194	207	No	0.23	200	207	No	0.22
	45	196	207	No	0.33	202	207	No	0.28
	50	198	207	No	0.44	204	207	No	0.42
	55	200	207	Yes	0.56	205	207	Yes	0.50
	60	202	207	Yes	0.62	207	207	Yes	0.65
	65	204	207	Yes	0.72	209	207	Yes	0.78
	70	206	207	Yes	0.81	211	207	Yes	0.88
	75	209	207	Yes	0.88	214	207	Yes	0.96
	80	211	207	Yes	0.93	216	207	Yes	0.98
	85	214	207	Yes	0.97	219	207	Yes	0.99
	90	218	207	Yes	0.99	223	207	Yes	>0.99
	95	224	207	Yes	>0.99	228	207	Yes	>0.99

Grade	Start Percentile	ELA/Reading (Fall)				ELA/Reading (Winter)			
			Projected Proficiency				Projected Proficiency		
		Fall RIT	Spring Cut	Level 3	Prob.*	Winter RIT	Spring Cut	Level 3	Prob.*
5	5	181	213	No	<0.01	186	213	No	<0.01
	10	186	213	No	<0.01	191	213	No	<0.01
	15	190	213	No	0.01	195	213	No	<0.01
	20	193	213	No	0.04	197	213	No	0.01
	25	195	213	No	0.07	200	213	No	0.03
	30	198	213	No	0.12	202	213	No	0.04
	35	200	213	No	0.19	204	213	No	0.09
	40	202	213	No	0.28	206	213	No	0.17
	45	204	213	No	0.33	208	213	No	0.28
	50	206	213	No	0.44	210	213	No	0.42
	55	208	213	Yes	0.56	212	213	Yes	0.58
	60	210	213	Yes	0.67	214	213	Yes	0.72
	65	212	213	Yes	0.72	215	213	Yes	0.78
	70	214	213	Yes	0.81	218	213	Yes	0.88
	75	216	213	Yes	0.88	220	213	Yes	0.94
	80	218	213	Yes	0.91	222	213	Yes	0.97
	85	221	213	Yes	0.96	225	213	Yes	0.99
	90	225	213	Yes	0.99	229	213	Yes	>0.99
	95	231	213	Yes	>0.99	234	213	Yes	>0.99
6	5	186	217	No	<0.01	190	217	No	<0.01
	10	192	217	No	<0.01	196	217	No	<0.01
	15	196	217	No	0.02	199	217	No	<0.01
	20	198	217	No	0.04	202	217	No	0.01
	25	201	217	No	0.07	204	217	No	0.02
	30	203	217	No	0.12	207	217	No	0.06
	35	205	217	No	0.19	209	217	No	0.12
	40	207	217	No	0.23	211	217	No	0.22
	45	209	217	No	0.33	212	217	No	0.28
	50	211	217	No	0.44	214	217	No	0.42
	55	213	217	Yes	0.50	216	217	Yes	0.05
	60	215	217	Yes	0.61	218	217	Yes	0.65
	65	217	217	Yes	0.72	220	217	Yes	0.78
	70	219	217	Yes	0.81	222	217	Yes	0.88
	75	221	217	Yes	0.84	224	217	Yes	0.94
	80	224	217	Yes	0.93	226	217	Yes	0.97
	85	226	217	Yes	0.96	229	217	Yes	0.99
	90	230	217	Yes	0.99	233	217	Yes	>0.99
	95	236	217	Yes	>0.99	238	217	Yes	>0.99

Grade	Start Percentile	ELA/Reading (Fall)				ELA/Reading (Winter)			
			Projected Proficiency				Projected Proficiency		
		Fall RIT	Spring Cut	Level 3	Prob.*	Winter RIT	Spring Cut	Level 3	Prob.*
7	5	189	219	No	<0.01	192	219	No	<0.01
	10	195	219	No	<0.01	198	219	No	<0.01
	15	199	219	No	0.02	201	219	No	<0.01
	20	202	219	No	0.04	204	219	No	0.01
	25	204	219	No	0.07	207	219	No	0.03
	30	206	219	No	0.12	209	219	No	0.06
	35	209	219	No	0.19	211	219	No	0.12
	40	211	219	No	0.28	213	219	No	0.17
	45	213	219	No	0.39	215	219	No	0.28
	50	214	219	No	0.44	217	219	No	0.42
	55	216	219	Yes	0.56	219	219	Yes	0.58
	60	218	219	Yes	0.61	221	219	Yes	0.72
	65	220	219	Yes	0.72	223	219	Yes	0.83
	70	222	219	Yes	0.81	225	219	Yes	0.91
	75	225	219	Yes	0.88	227	219	Yes	0.96
	80	227	219	Yes	0.93	230	219	Yes	0.99
	85	230	219	Yes	0.97	232	219	Yes	>0.99
	90	234	219	Yes	0.99	236	219	Yes	>0.99
	95	240	219	Yes	>0.99	242	219	Yes	>0.99
8	5	191	220	No	<0.01	194	220	No	<0.01
	10	197	220	No	0.02	199	220	No	<0.01
	15	201	220	No	0.04	203	220	No	<0.01
	20	204	220	No	0.08	206	220	No	0.01
	25	207	220	No	0.13	209	220	No	0.03
	30	209	220	No	0.19	211	220	No	0.07
	35	211	220	No	0.26	213	220	No	0.14
	40	213	220	No	0.31	215	220	No	0.23
	45	215	220	No	0.40	217	220	No	0.36
	50	217	220	Yes	0.50	219	220	Yes	0.50
	55	219	220	Yes	0.60	221	220	Yes	0.64
	60	221	220	Yes	0.65	223	220	Yes	0.77
	65	223	220	Yes	0.74	225	220	Yes	0.86
	70	225	220	Yes	0.81	227	220	Yes	0.93
	75	228	220	Yes	0.90	229	220	Yes	0.97
	80	230	220	Yes	0.94	232	220	Yes	0.99
	85	234	220	Yes	0.98	235	220	Yes	>0.99
	90	237	220	Yes	0.99	239	220	Yes	>0.99
	95	243	220	Yes	>0.99	244	220	Yes	>0.99

*Prob. = Probability of obtaining proficient status on the FSA ELA test in the spring.

Table 3.12. Florida State Test Proficiency Projection based on MAP Growth Fall and Winter RIT Scores—Mathematics

		Mathematics (Fall)				Mathematics (Winter)			
			Projected Proficiency				Projected Proficiency		
Grade	Start Percentile	Fall RIT	Spring Cut	Level 3	Prob.*	Winter RIT	Spring Cut	Level 3	Prob.*
3	5	169	200	No	<0.01	176	200	No	<0.01
	10	174	200	No	0.03	181	200	No	<0.01
	15	177	200	No	0.08	184	200	No	0.02
	20	179	200	No	0.14	187	200	No	0.05
	25	182	200	No	0.27	189	200	No	0.10
	30	184	200	No	0.32	191	200	No	0.20
	35	185	200	No	0.38	193	200	No	0.34
	40	187	200	Yes	0.50	195	200	Yes	0.50
	45	189	200	Yes	0.62	197	200	Yes	0.66
	50	190	200	Yes	0.68	198	200	Yes	0.74
	55	192	200	Yes	0.78	200	200	Yes	0.86
	60	194	200	Yes	0.86	202	200	Yes	0.93
	65	195	200	Yes	0.89	203	200	Yes	0.95
	70	197	200	Yes	0.94	205	200	Yes	0.98
	75	199	200	Yes	0.96	207	200	Yes	0.99
	80	201	200	Yes	0.98	209	200	Yes	>0.99
	85	204	200	Yes	0.99	212	200	Yes	>0.99
	90	207	200	Yes	>0.99	215	200	Yes	>0.99
	95	212	200	Yes	>0.99	220	200	Yes	>0.99
4	5	179	212	No	<0.01	185	212	No	<0.01
	10	184	212	No	0.01	190	212	No	<0.01
	15	188	212	No	0.03	194	212	No	<0.01
	20	190	212	No	0.06	197	212	No	0.02
	25	193	212	No	0.14	199	212	No	0.04
	30	195	212	No	0.22	201	212	No	0.10
	35	197	212	No	0.32	203	212	No	0.20
	40	198	212	No	0.38	205	212	No	0.34
	45	200	212	Yes	0.50	207	212	Yes	0.50
	50	202	212	Yes	0.62	209	212	Yes	0.66
	55	204	212	Yes	0.73	211	212	Yes	0.80
	60	205	212	Yes	0.73	212	212	Yes	0.86
	65	207	212	Yes	0.83	214	212	Yes	0.93
	70	209	212	Yes	0.89	216	212	Yes	0.97
	75	211	212	Yes	0.94	218	212	Yes	0.99
	80	214	212	Yes	0.98	221	212	Yes	>0.99
	85	216	212	Yes	0.99	223	212	Yes	>0.99
	90	220	212	Yes	>0.99	227	212	Yes	>0.99
	95	225	212	Yes	>0.99	232	212	Yes	>0.99

Grade	Start Percentile	Mathematics (Fall)				Mathematics (Winter)			
		Fall RIT	Projected Proficiency			Winter RIT	Projected Proficiency		
			Spring Cut	Level 3	Prob.*		Spring Cut	Level 3	Prob.*
5	5	187	220	No	<0.01	192	220	No	<0.01
	10	193	220	No	0.01	198	220	No	<0.01
	15	196	220	No	0.02	201	220	No	<0.01
	20	199	220	No	0.05	204	220	No	0.01
	25	202	220	No	0.12	207	220	No	0.03
	30	204	220	No	0.19	209	220	No	0.07
	35	206	220	No	0.28	211	220	No	0.15
	40	208	220	No	0.38	213	220	No	0.27
	45	210	220	Yes	0.50	215	220	No	0.42
	50	211	220	Yes	0.56	217	220	Yes	0.58
	55	213	220	Yes	0.67	219	220	Yes	0.73
	60	215	220	Yes	0.77	221	220	Yes	0.85
	65	217	220	Yes	0.85	223	220	Yes	0.93
	70	219	220	Yes	0.91	225	220	Yes	0.97
	75	221	220	Yes	0.95	228	220	Yes	0.99
	80	224	220	Yes	0.98	230	220	Yes	>0.99
	85	227	220	Yes	0.99	233	220	Yes	>0.99
	90	230	220	Yes	>0.99	237	220	Yes	>0.99
	95	236	220	Yes	>0.99	242	220	Yes	>0.99
6	5	192	222	No	<0.01	196	222	No	<0.01
	10	198	222	No	0.01	202	222	No	<0.01
	15	202	222	No	0.04	205	222	No	<0.01
	20	205	222	No	0.09	209	222	No	0.02
	25	207	222	No	0.15	211	222	No	0.05
	30	209	222	No	0.23	214	222	No	0.15
	35	212	222	No	0.38	216	222	No	0.27
	40	214	222	Yes	0.50	218	222	No	0.42
	45	216	222	Yes	0.62	220	222	Yes	0.58
	50	218	222	Yes	0.72	222	222	Yes	0.73
	55	220	222	Yes	0.81	224	222	Yes	0.85
	60	222	222	Yes	0.88	226	222	Yes	0.93
	65	224	222	Yes	0.93	228	222	Yes	0.97
	70	226	222	Yes	0.96	230	222	Yes	0.99
	75	228	222	Yes	0.98	233	222	Yes	>0.99
	80	231	222	Yes	0.99	236	222	Yes	>0.99
	85	234	222	Yes	>0.99	239	222	Yes	>0.99
	90	238	222	Yes	>0.99	243	222	Yes	>0.99
	95	243	222	Yes	>0.99	248	222	Yes	>0.99

Grade	Start Percentile	Mathematics (Fall)				Mathematics (Winter)			
		Fall RIT	Projected Proficiency			Winter RIT	Projected Proficiency		
			Spring Cut	Level 3	Prob.*		Spring Cut	Level 3	Prob.*
7	5	195	224	No	<0.01	198	224	No	<0.01
	10	201	224	No	<0.01	204	224	No	<0.01
	15	205	224	No	0.02	208	224	No	<0.01
	20	209	224	No	0.08	212	224	No	0.02
	25	211	224	No	0.14	215	224	No	0.07
	30	214	224	No	0.27	217	224	No	0.15
	35	216	224	No	0.38	220	224	No	0.34
	40	218	224	Yes	0.50	222	224	Yes	0.50
	45	221	224	Yes	0.68	224	224	Yes	0.66
	50	223	224	Yes	0.78	226	224	Yes	0.80
	55	225	224	Yes	0.86	228	224	Yes	0.90
	60	227	224	Yes	0.92	230	224	Yes	0.95
	65	229	224	Yes	0.95	233	224	Yes	0.99
	70	231	224	Yes	0.98	235	224	Yes	>0.99
	75	234	224	Yes	0.99	238	224	Yes	>0.99
	80	237	224	Yes	>0.99	240	224	Yes	>0.99
	85	240	224	Yes	>0.99	244	224	Yes	>0.99
	90	244	224	Yes	>0.99	248	224	Yes	>0.99
	95	250	224	Yes	>0.99	254	224	Yes	>0.99
8	5	197	225	No	<0.01	199	225	No	<0.01
	10	203	225	No	0.01	206	225	No	<0.01
	15	208	225	No	0.06	210	225	No	<0.01
	20	211	225	No	0.12	214	225	No	0.04
	25	214	225	No	0.22	217	225	No	0.12
	30	217	225	No	0.35	220	225	No	0.28
	35	219	225	No	0.45	222	225	No	0.42
	40	222	225	Yes	0.60	225	225	Yes	0.65
	45	224	225	Yes	0.70	227	225	Yes	0.79
	50	226	225	Yes	0.78	229	225	Yes	0.88
	55	229	225	Yes	0.88	231	225	Yes	0.94
	60	231	225	Yes	0.92	234	225	Yes	0.99
	65	233	225	Yes	0.94	236	225	Yes	>0.99
	70	236	225	Yes	0.98	239	225	Yes	>0.99
	75	238	225	Yes	0.99	241	225	Yes	>0.99
	80	241	225	Yes	>0.99	245	225	Yes	>0.99
	85	245	225	Yes	>0.99	248	225	Yes	>0.99
	90	249	225	Yes	>0.99	253	225	Yes	>0.99
	95	256	225	Yes	>0.99	259	225	Yes	>0.99

*Prob. = Probability of obtaining proficient status on the FSA Mathematics test in the spring.

Table 3.13. Florida State Test Proficiency Projection based on MAP Growth Fall and Winter RIT Scores—Science

		Science (Fall)				Science (Winter)			
			Projected Proficiency				Projected Proficiency		
Grade	Start Percentile	Fall RIT	Spring Cut	Level 3	Prob.*	Winter RIT	Spring Cut	Level 3	Prob.*
5	5	182	212	No	<0.01	186	212	No	<0.01
	10	186	212	No	<0.01	190	212	No	<0.01
	15	189	212	No	0.01	192	212	No	<0.01
	20	191	212	No	0.02	195	212	No	0.01
	25	193	212	No	0.04	196	212	No	0.01
	30	194	212	No	0.05	198	212	No	0.02
	35	196	212	No	0.07	200	212	No	0.03
	40	197	212	No	0.09	201	212	No	0.05
	45	199	212	No	0.15	202	212	No	0.07
	50	200	212	No	0.19	204	212	No	0.14
	55	202	212	No	0.23	205	212	No	0.18
	60	203	212	No	0.28	206	212	No	0.23
	65	204	212	No	0.33	208	212	No	0.36
	70	206	212	No	0.38	209	212	No	0.36
	75	208	212	Yes	0.50	211	212	Yes	0.50
	80	210	212	Yes	0.56	213	212	Yes	0.64
	85	212	212	Yes	0.67	215	212	Yes	0.77
	90	214	212	Yes	0.77	218	212	Yes	0.86
	95	218	212	Yes	0.88	221	212	Yes	0.95
8	5	190	218	No	<0.01	192	218	No	<0.01
	10	195	218	No	0.01	197	218	No	<0.01
	15	198	218	No	0.02	200	218	No	<0.01
	20	200	218	No	0.04	202	218	No	0.01
	25	202	218	No	0.07	204	218	No	0.02
	30	204	218	No	0.09	206	218	No	0.04
	35	206	218	No	0.14	208	218	No	0.08
	40	207	218	No	0.17	209	218	No	0.08
	45	209	218	No	0.21	211	218	No	0.14
	50	210	218	No	0.25	212	218	No	0.19
	55	212	218	No	0.34	214	218	No	0.30
	60	213	218	No	0.39	215	218	No	0.36
	65	215	218	No	0.45	217	218	Yes	0.50
	70	217	218	Yes	0.55	219	218	Yes	0.64
	75	219	218	Yes	0.66	221	218	Yes	0.76
	80	221	218	Yes	0.75	223	218	Yes	0.81
	85	223	218	Yes	0.79	225	218	Yes	0.89
	90	226	218	Yes	0.89	228	218	Yes	0.96
	95	230	218	Yes	0.95	232	218	Yes	0.99

*Prob. = Probability of obtaining proficient status on the Statewide Science Assessment in the spring.

Table 3.14. Florida State Test Proficiency Projection based on MAP Growth Spring RIT Scores

		ELA/Reading				Mathematics				Science			
			Projected Proficiency				Projected Proficiency				Projected Proficiency		
Grade	Start Percentile	Spring RIT	Cut Score	Level 3	Prob.*	Spring RIT	Cut Score	Level 3	Prob.*	Spring RIT	Cut Score	Level 3	Prob.*
3	5	174	199	No	<0.01	181	200	No	<0.01	–	–	–	–
	10	179	199	No	<0.01	186	200	No	<0.01	–	–	–	–
	15	183	199	No	<0.01	189	200	No	<0.01	–	–	–	–
	20	186	199	No	<0.01	192	200	No	<0.01	–	–	–	–
	25	188	199	No	<0.01	194	200	No	0.02	–	–	–	–
	30	191	199	No	0.01	196	200	No	0.08	–	–	–	–
	35	193	199	No	0.03	198	200	No	0.25	–	–	–	–
	40	195	199	No	0.11	200	200	Yes	0.50	–	–	–	–
	45	197	199	No	0.27	202	200	Yes	0.75	–	–	–	–
	50	199	199	Yes	0.50	203	200	Yes	0.85	–	–	–	–
	55	201	199	Yes	0.73	205	200	Yes	0.96	–	–	–	–
	60	202	199	Yes	0.83	207	200	Yes	0.99	–	–	–	–
	65	204	199	Yes	0.94	209	200	Yes	>0.99	–	–	–	–
	70	207	199	Yes	0.99	211	200	Yes	>0.99	–	–	–	–
	75	209	199	Yes	>0.99	213	200	Yes	>0.99	–	–	–	–
	80	211	199	Yes	>0.99	215	200	Yes	>0.99	–	–	–	–
	85	214	199	Yes	>0.99	218	200	Yes	>0.99	–	–	–	–
	90	218	199	Yes	>0.99	221	200	Yes	>0.99	–	–	–	–
	95	223	199	Yes	>0.99	226	200	Yes	>0.99	–	–	–	–
4	5	181	207	No	<0.01	189	212	No	<0.01	–	–	–	–
	10	187	207	No	<0.01	194	212	No	<0.01	–	–	–	–
	15	190	207	No	<0.01	198	212	No	<0.01	–	–	–	–
	20	193	207	No	<0.01	201	212	No	<0.01	–	–	–	–
	25	196	207	No	<0.01	203	212	No	<0.01	–	–	–	–
	30	198	207	No	<0.01	206	212	No	0.02	–	–	–	–
	35	200	207	No	0.01	208	212	No	0.08	–	–	–	–
	40	202	207	No	0.06	210	212	No	0.25	–	–	–	–
	45	204	207	No	0.17	212	212	Yes	0.05	–	–	–	–
	50	206	207	No	0.38	213	212	Yes	0.63	–	–	–	–
	55	208	207	Yes	0.62	215	212	Yes	0.85	–	–	–	–
	60	210	207	Yes	0.83	217	212	Yes	0.96	–	–	–	–
	65	212	207	Yes	0.94	219	212	Yes	0.99	–	–	–	–
	70	214	207	Yes	0.99	221	212	Yes	>0.99	–	–	–	–
	75	216	207	Yes	>0.99	224	212	Yes	>0.99	–	–	–	–
	80	218	207	Yes	>0.99	226	212	Yes	>0.99	–	–	–	–
	85	221	207	Yes	>0.99	229	212	Yes	>0.99	–	–	–	–
	90	225	207	Yes	>0.99	233	212	Yes	>0.99	–	–	–	–
	95	230	207	Yes	>0.99	238	212	Yes	>0.99	–	–	–	–

Grade	Start Percentile	ELA/Reading				Mathematics				Science			
			Projected Proficiency				Projected Proficiency				Projected Proficiency		
		Spring RIT	Cut Score	Level 3	Prob.*	Spring RIT	Cut Score	Level 3	Prob.*	Spring RIT	Cut Score	Level 3	Prob.*
5	5	188	213	No	<0.01	195	220	No	<0.01	188	212	No	<0.01
	10	193	213	No	<0.01	201	220	No	<0.01	192	212	No	<0.01
	15	197	213	No	<0.01	205	220	No	<0.01	194	212	No	<0.01
	20	199	213	No	<0.01	208	220	No	<0.01	196	212	No	<0.01
	25	202	213	No	<0.01	210	220	No	<0.01	198	212	No	<0.01
	30	204	213	No	<0.01	213	220	No	0.01	200	212	No	<0.01
	35	206	213	No	0.01	215	220	No	0.04	201	212	No	<0.01
	40	208	213	No	0.06	217	220	No	0.15	203	212	No	<0.01
	45	210	213	No	0.17	219	220	No	0.37	204	212	No	0.01
	50	212	213	No	0.38	221	220	Yes	0.63	206	212	No	0.04
	55	214	213	Yes	0.62	223	220	Yes	0.85	207	212	No	0.07
	60	216	213	Yes	0.83	225	220	Yes	0.96	209	212	No	0.19
	65	217	213	Yes	0.89	228	220	Yes	>0.99	210	212	No	0.28
	70	220	213	Yes	0.99	230	220	Yes	>0.99	212	212	Yes	0.50
	75	222	213	Yes	>0.99	232	220	Yes	>0.99	213	212	Yes	0.62
	80	224	213	Yes	>0.99	235	220	Yes	>0.99	215	212	Yes	0.81
	85	227	213	Yes	>0.99	238	220	Yes	>0.99	217	212	Yes	0.93
	90	231	213	Yes	>0.99	242	220	Yes	>0.99	220	212	Yes	0.99
	95	236	213	Yes	>0.99	248	220	Yes	>0.99	224	212	Yes	>0.99
6	5	192	217	No	<0.01	198	222	No	<0.01	–	–	–	–
	10	197	217	No	<0.01	204	222	No	<0.01	–	–	–	–
	15	201	217	No	<0.01	208	222	No	<0.01	–	–	–	–
	20	203	217	No	<0.01	211	222	No	<0.01	–	–	–	–
	25	206	217	No	<0.01	214	222	No	<0.01	–	–	–	–
	30	208	217	No	<0.01	217	222	No	0.04	–	–	–	–
	35	210	217	No	0.01	219	222	No	0.15	–	–	–	–
	40	212	217	No	0.06	221	222	No	0.37	–	–	–	–
	45	214	217	No	0.17	223	222	Yes	0.63	–	–	–	–
	50	216	217	No	0.38	225	222	Yes	0.85	–	–	–	–
	55	218	217	Yes	0.62	227	222	Yes	0.96	–	–	–	–
	60	219	217	Yes	0.73	230	222	Yes	>0.99	–	–	–	–
	65	221	217	Yes	0.89	232	222	Yes	>0.99	–	–	–	–
	70	223	217	Yes	0.97	234	222	Yes	>0.99	–	–	–	–
	75	226	217	Yes	>0.99	237	222	Yes	>0.99	–	–	–	–
	80	228	217	Yes	>0.99	239	222	Yes	>0.99	–	–	–	–
	85	231	217	Yes	>0.99	243	222	Yes	>0.99	–	–	–	–
	90	235	217	Yes	>0.99	247	222	Yes	>0.99	–	–	–	–
	95	240	217	Yes	>0.99	253	222	Yes	>0.99	–	–	–	–

Grade	Start Percentile	ELA/Reading				Mathematics				Science			
			Projected Proficiency				Projected Proficiency				Projected Proficiency		
		Spring RIT	Cut Score	Level 3	Prob.*	Spring RIT	Cut Score	Level 3	Prob.*	Spring RIT	Cut Score	Level 3	Prob.*
7	5	193	219	No	<0.01	199	224	No	<0.01	–	–	–	–
	10	199	219	No	<0.01	206	224	No	<0.01	–	–	–	–
	15	202	219	No	<0.01	210	224	No	<0.01	–	–	–	–
	20	205	219	No	<0.01	214	224	No	<0.01	–	–	–	–
	25	208	219	No	<0.01	217	224	No	0.01	–	–	–	–
	30	210	219	No	<0.01	219	224	No	0.04	–	–	–	–
	35	212	219	No	0.01	222	224	No	0.25	–	–	–	–
	40	214	219	No	0.06	224	224	Yes	0.50	–	–	–	–
	45	216	219	No	0.17	226	224	Yes	0.75	–	–	–	–
	50	218	219	No	0.38	229	224	Yes	0.96	–	–	–	–
	55	220	219	Yes	0.62	231	224	Yes	0.99	–	–	–	–
	60	222	219	Yes	0.83	233	224	Yes	>0.99	–	–	–	–
	65	224	219	Yes	0.94	235	224	Yes	>0.99	–	–	–	–
	70	226	219	Yes	0.99	238	224	Yes	>0.99	–	–	–	–
	75	228	219	Yes	>0.99	241	224	Yes	>0.99	–	–	–	–
	80	231	219	Yes	>0.99	244	224	Yes	>0.99	–	–	–	–
	85	234	219	Yes	>0.99	247	224	Yes	>0.99	–	–	–	–
	90	238	219	Yes	>0.99	251	224	Yes	>0.99	–	–	–	–
	95	243	219	Yes	>0.99	258	224	Yes	>0.99	–	–	–	–
8	5	194	220	No	<0.01	199	225	No	<0.01	193	218	No	<0.01
	10	200	220	No	<0.01	206	225	No	<0.01	197	218	No	<0.01
	15	204	220	No	<0.01	211	225	No	<0.01	200	218	No	<0.01
	20	207	220	No	<0.01	215	225	No	<0.01	203	218	No	<0.01
	25	209	220	No	<0.01	218	225	No	0.01	205	218	No	<0.01
	30	212	220	No	0.01	221	225	No	0.08	207	218	No	<0.01
	35	214	220	No	0.03	224	225	No	0.37	209	218	No	<0.01
	40	216	220	No	0.11	226	225	Yes	0.63	210	218	No	0.01
	45	218	220	No	0.27	229	225	Yes	0.92	212	218	No	0.04
	50	220	220	Yes	0.50	231	225	Yes	0.98	214	218	No	0.12
	55	222	220	Yes	0.73	233	225	Yes	>0.99	215	218	No	0.19
	60	224	220	Yes	0.89	236	225	Yes	>0.99	217	218	No	0.38
	65	226	220	Yes	0.97	238	225	Yes	>0.99	218	218	Yes	0.50
	70	228	220	Yes	0.99	241	225	Yes	>0.99	220	218	Yes	0.72
	75	231	220	Yes	>0.99	244	225	Yes	>0.99	222	218	Yes	0.88
	80	233	220	Yes	>0.99	247	225	Yes	>0.99	224	218	Yes	0.96
	85	236	220	Yes	>0.99	251	225	Yes	>0.99	227	218	Yes	>0.99
	90	240	220	Yes	>0.99	255	225	Yes	>0.99	230	218	Yes	>0.99
	95	246	220	Yes	>0.99	262	225	Yes	>0.99	234	218	Yes	>0.99

*Prob. = Probability of obtaining proficient status on the Florida statewide assessment in the spring.

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