Predicting Performance on the Indiana Learning Evaluation Readiness Network (ILEARN) Based on NWEA MAP Growth Scores

July 2025

NWEA Psychometrics and Analytics

nwea

Linking Study Updates

Date	Description
2020-07	Conducted a linking study for grades 3–8 in mathematics and ELA and grade 4 and 6 science based on the 2020 norms and Spring 2019 data.
2025-07	Updated the linking study based on the 2025 norms.

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Executive Summary

To predict student achievement on the Indiana Learning Evaluation Readiness Network (ILEARN) assessments in grades 3–8 English language arts (ELA) and mathematics and grades 4 and 6 science, NWEA® conducted a linking study using Spring 2019 data to derive Rasch Unit (RIT) cut scores on the MAP® Growth™ assessments that correspond to the ILEARN performance levels. 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. The linking study has been updated since the previous version to incorporate the most recent 2025 NWEA MAP Growth norms (NWEA, 2025).

Table E.1 presents the ILEARN *At Proficiency* performance level cut scores and the corresponding MAP Growth 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 *At Proficiency* cut score on the ILEARN grade 3 ELA test is 5460. A grade 3 student with a MAP Growth reading RIT score of 189 in the fall is likely to meet proficiency on the ILEARN ELA test in the spring, whereas a grade 3 student with a MAP Growth reading RIT score lower than 189 in the fall is in jeopardy of not meeting proficiency. MAP Growth cut scores for grade 2 are also provided so that educators can track early learners' progress toward proficiency on the ILEARN test by grade 3. These cut scores were derived based on the grade 3 cuts and the 2025 NWEA growth norms for the adjacent grade (i.e., grades 2 to 3).

Table E.1. MAP Growth Cut Scores for ILEARN Proficiency

Assessment		*At Proficiency* Cut Scores by Grade						
		2	3	4	5	6	7	8
ELA/Reading								
ILEARN Spring		–	5460	5493	5524	5544	5568	5577
MAP Growth	Fall	178	189	205	217	221	231	240
	Winter	186	198	213	223	228	236	245
	Spring	192	204	218	227	232	238	247
Mathematics								
ILEARN Spring		–	6425	6474	6510	6545	6562	6590
MAP Growth	Fall	182	195	205	210	217	219	222
	Winter	188	200	208	213	218	220	223
	Spring	192	203	210	214	219	221	224
Science								
ILEARN Spring		–	–	7506	–	7504	–	–
MAP Growth	Fall	–	–	199	–	209	–	–
	Winter	–	–	202	–	211	–	–
	Spring	–	–	204	–	212	–	–

Please note that the results in this report may differ from those found in the NWEA reporting system for individual districts. The typical growth scores from fall to spring or winter to spring used 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). However, instructional weeks often vary by district, so the cut scores in this report may differ slightly from the MAP Growth score reports that reflect the specific instructional weeks set by partners.

E.1. Assessment Overview

The ILEARN grades 3–8 ELA and mathematics and grades 4 and 6 science tests are Indiana's state summative assessments aligned to the Indiana Academic Standards. Based on their test scores, students are placed into one of four performance levels: *Below Proficiency*, *Approaching Proficiency*, *At Proficiency*, and *Above Proficiency.* These tests are used to provide evidence of student achievement in ELA, mathematics, and science for various test score uses, such as meeting state and federal accountability requirements. The *At Proficiency* cut score demarks the minimum level of achievement considered to be proficient. 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 100–350.

E.2. Linking Methods

Based on scores from the Spring 2019 test administration, the equipercentile linking method was used to identify the spring MAP Growth scores that correspond to the spring ILEARN performance level cut scores. MAP Growth spring cut scores for grade 2 were then derived from the spring cuts for grade 3 and the growth norms for the adjacent grade (i.e., grades 2 to 3). Similarly, the MAP Growth cut scores for the fall and winter administrations of all grades were derived from the spring administration cuts and the growth norms for either fall to spring or winter to spring, respectively. The spring cuts[1] for mathematics were adjusted for score alignment before deriving the cuts for grade 2 spring and for all grades' fall and winter administrations.

E.3. Student Sample

Only students who took both the MAP Growth and ILEARN assessments in Spring 2019 were included in the study sample. Table E.2 presents the weighted numbers of Indiana students from 199 districts and 869 schools who were included in the linking study. The linking study sample is voluntary, so the data can only include student scores from partners who share their data. Also, not all students in a state take MAP Growth. The sample may therefore not represent the general student population as well as it should. To ensure that the linking study sample represents the state student population in terms of race, sex, and performance level, weighting (i.e., a statistical method that matches the distributions of the variables of interest to those of the target population) was applied to the sample. As a result, the RIT cuts derived from the study sample can be generalized to any student from the target population. All analyses in this study for grades 3–8 were conducted based on the weighted sample.

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[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.2. Linking Study Sample

Grade	# Students		
	ELA/Reading	Mathematics	Science
3	40,699	40,103	–
4	41,109	40,457	1,112
5	41,928	41,410	–
6	41,224	40,638	2,808
7	40,209	40,047	–
8	38,868	38,438	–

E.4. Test Score Relationships

Correlations between MAP Growth RIT scores and ILEARN scores range from 0.79 to 0.91 across all content areas, as shown in Figure E.1. These values indicate a strong relationship among the scores, which is important validity evidence for the claim that MAP Growth scores are good predictors of performance on the ILEARN assessments.

Figure E.1. Correlations Between MAP Growth and ILEARN
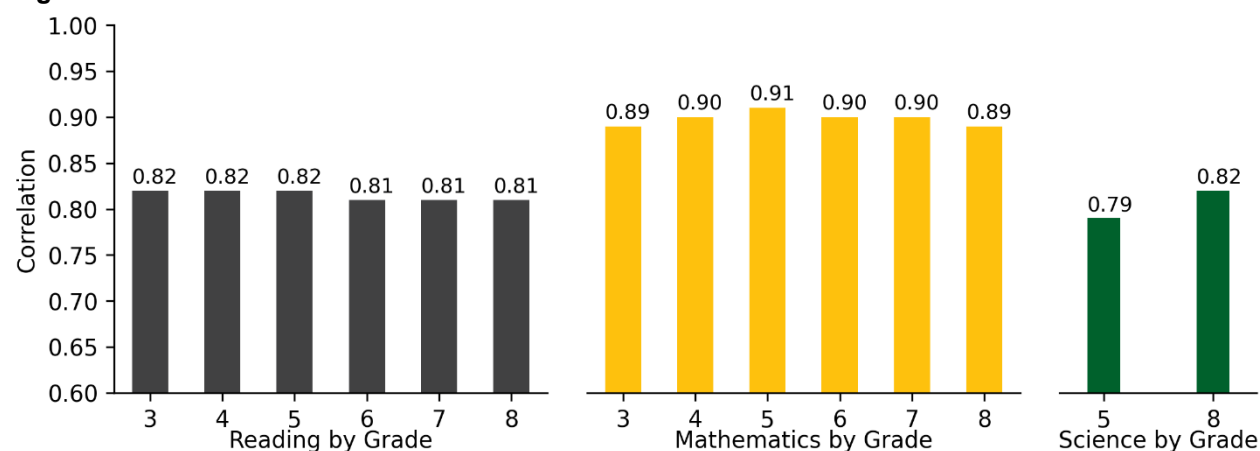
E.5. Accuracy of MAP Growth Classifications

Figure E.2 presents the classification accuracy statistics that show the proportion of students correctly classified by their RIT scores as proficient or not proficient on the ILEARN tests.[2] For example, the MAP Growth reading grade 3 *At Proficiency* cut score has a 0.83 accuracy rate, meaning it accurately classified student achievement on the state test for 83% of the sample. The results range from 0.80 to 0.89 across all content areas, indicating that RIT scores have a high accuracy rate of identifying student proficiency on the ILEARN tests.

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[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
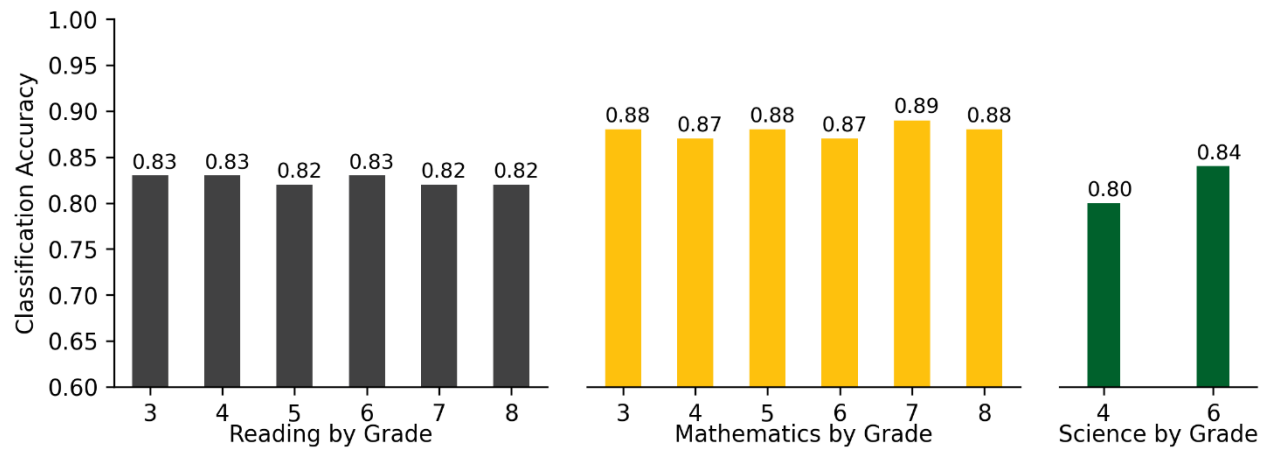
1. Introduction

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 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 report presents results from a linking study conducted by NWEA in July 2020 to statistically connect the scores of the Indiana Learning Evaluation Readiness Network (ILEARN) assessments in grades 3–8 English language arts (ELA) and mathematics and grades 4 and 6 science with Rasch Unit (RIT) scores from the MAP Growth assessments taken during the Spring 2019 term. The linking study has been updated since the previous version to incorporate the most recent 2025 NWEA MAP Growth norms (NWEA, 2025). In this updated study, MAP Growth cut scores are also included for grade 2 so that educators can track early learners' progress toward proficiency on the ILEARN test by grade 3. This report presents the following results:

1. Student sample demographics
2. Descriptive statistics of test scores
3. MAP Growth cut scores that correspond to the ILEARN performance levels using the equipercentile linking procedure for the spring results and the 2025 norms for the fall and winter results
4. Classification accuracy statistics to determine the degree to which MAP Growth accurately predicts student proficiency status on the ILEARN tests
5. The probability of achieving grade-level proficiency on the ILEARN assessment based on MAP Growth RIT scores from fall, winter, and spring using the 2025 norms

1.2. Assessment Overview

The ILEARN grades 3–8 ELA and mathematics and grades 4 and 6 science summative assessments are aligned to the Indiana Academic Standards. Each assessment has three cut scores (i.e., the minimum score a student must get on a test to be placed in a certain performance level) that distinguish between the following performance levels: *Below Proficiency*, *Approaching Proficiency*, *At Proficiency*, and *Above Proficiency.* The *At Proficiency* cut score demarks the minimum level of performance considered to be proficient for accountability purposes.

MAP Growth interim assessments from NWEA are computer adaptive and aligned to state-specific content standards. Scores are reported on the RIT vertical scale with a range of 100–350. Each content area has its own scale. To aid the interpretation of scores, NWEA periodically conducts norming studies of student and school performance on MAP Growth. Achievement status norms show how well a student performed on the MAP Growth test compared with students in the norming group by associating the student's performance on the MAP Growth test, expressed as a RIT score, with a percentile ranking. Growth norms provide expected score gains across test administrations (e.g., the relative evaluation of a student's growth from fall to spring). 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 2019 administrations of the MAP Growth and ILEARN assessments. NWEA requested that Indiana districts recruited to participate in the study share their student and score data for the target term. Districts also permitted NWEA to access students' associated MAP Growth scores from the NWEA in-house database. Once Indiana state score information was available to NWEA, 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 ILEARN assessments in Spring 2019 were included in the study sample.

2.2. Post-Stratification Weighting

Post-stratification weights were applied to the calculations to ensure that the linking study sample represented the state population in terms of race, sex, and performance level. These variables were selected because they are correlated with the student's academic achievement within this study and are often provided in the data for the state population. The weighted sample matches the target population as closely as possible for 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:

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

2.3. MAP Growth Cut Scores

The equipercentile linking method (Kolen & Brennan, 2004) was used to identify the spring MAP Growth RIT scores that correspond to the spring ILEARN performance level cut scores. Spring cuts for grade 2 were derived based on the cuts for grade 3 and the 2025 NWEA growth norms. RIT fall and winter cut scores that predict proficiency on the spring ILEARN test were then projected using the 2025 growth norms. Percentile ranks are also provided that show how a nationally representative sample of students in the same grade scored on MAP Growth for each administration, which is an important interpretation of RIT test scores. This is useful for understanding (1) how student scores compare with peers nationwide and (2) the relative rigor of a state's performance level designations for its summative assessment.

The MAP Growth spring cut scores for grades 3–8 could be calculated using the equipercentile linking method because that data are directly connected to the ILEARN 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). For example, let x represent a score on Test X (e.g., ILEARN). 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 ILEARN tests on the scale of MAP Growth, $P(x)$ is the percentile rank of a given score on the ILEARN 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 or winter to spring within the same grade or from spring of a lower grade to the spring of the adjacent higher grade. This information can be used to calculate the fall and winter cut scores for grades 3–8 and the fall, winter, and spring cut scores for grade 2. The equation below was used to determine the previous term's or grade's MAP Growth score needed to reach the spring cut score, considering the expected growth associated with the previous RIT score:

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

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

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 grade 2 to spring 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 grade 2.

2.4. Classification Accuracy

The degree to which MAP Growth predicts student proficiency status on the ILEARN tests can be described using classification accuracy statistics based on the MAP Growth spring cut scores that show the proportion of students correctly classified by their RIT scores as proficient (*At Proficiency* or *Above Proficiency*) or not proficient (*Below Proficiency* or *Approaching Proficiency*). Table 2.1 describes the classification accuracy statistics provided in this report (Pommerich et al., 2004). The results are based on the Spring 2019 MAP Growth and ILEARN data for the *At Proficiency* cut score.

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

Statistic	Description	Interpretation
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.

2.5. Proficiency Projections

Given that all test scores contain measurement errors, reaching the *At Proficiency* 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 ILEARN test based on a student's RIT scores from fall, winter, and spring. The equation below was used to calculate the probability of a student achieving *At Proficiency* on the ILEARN test based on their fall or winter RIT score:

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

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 the previous RIT (e.g., fall or winter) to the spring RIT,
- $RIT_{SpringCut}$ is the MAP Growth *At Proficiency* 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 *At Proficiency* on the ILEARN test based on their spring RIT score (RIT_{Spring}):

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

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

3. Results

3.1. Study Sample

Only students who took both the MAP Growth and ILEARN assessments in Spring 2019 were included in the study sample. Data used in this study were collected from 199 districts and 869 schools in ILEARN. Table 3.1 presents the demographic distributions of race, sex, and performance level in the original unweighted study sample. Table 3.2 presents the distributions of the student population who took the Spring 2019 ILEARN tests (IDOE, 2019). Since the unweighted data are different from the general ILEARN population, post-stratification weights were applied to the linking study sample to improve its representativeness. Table 3.3 presents the demographic distributions of the sample after weighting, which are almost identical to the ILEARN student population distributions. The analyses in this study were therefore conducted based on the weighted sample.

Table 3.1. Linking Study Sample Demographics (Unweighted)

Demographic Subgroup			% Students by Grade					
			3	4	5	6	7	8
ELA/Reading								
		Total N	40,699	41,109	41,928	41,224	40,209	38,868
Race		Asian	1.9	1.7	1.7	1.5	1.8	1.6
		Black	12.7	12.5	12.5	12.2	12.4	12.0
		Hispanic	14.0	14.2	14.6	14.5	14.0	13.8
		Multiracial	5.2	5.0	5.1	4.8	4.8	4.5
		Other	0.3	0.3	0.2	0.2	0.2	0.3
		White	65.9	66.3	65.9	66.8	66.8	67.8
Sex		Female	48.2	49.3	49.1	48.9	49.0	48.9
		Male	51.8	50.7	50.9	51.1	51.0	51.1
Performance Level		*Below Proficiency*	32.7	32.2	31.1	28.5	25.6	21.5
		Approaching Proficiency	23.1	24.5	24.6	26.0	27.0	29.7
		At Proficiency	27.2	25.0	30.6	29.1	28.3	28.5
		Above Proficiency	17.0	18.4	13.7	16.4	19.0	20.3
Mathematics								
		Total N	40,103	40,457	41,410	40,638	40,047	38,438
Race		Asian	1.9	1.8	1.8	1.5	1.8	1.6
		Black	12.8	12.6	12.7	12.2	12.5	12.2
		Hispanic	14.1	14.3	14.7	14.6	14.1	14.0
		Multiracial	5.2	5.0	5.1	4.8	4.8	4.5
		Other	0.3	0.3	0.2	0.3	0.2	0.3
		White	65.6	66.0	65.5	66.6	66.7	67.5
Sex		Female	48.2	49.2	49.0	48.9	49.0	48.7
		Male	51.8	50.8	51.0	51.1	51.0	51.3
Performance Level		*Below Proficiency*	24.3	26.6	29.0	31.8	32.6	35.0
		Approaching Proficiency	18.7	20.9	25.4	24.2	27.1	28.4
		At Proficiency	32.1	32.2	24.4	24.9	22.8	19.1
		Above Proficiency	25.0	20.3	21.2	19.2	17.5	17.5
Science								

Demographic Subgroup			% Students by Grade					
			3	4	5	6	7	8
		Total N	–	1,112	–	2,808	–	–
Race		Asian	–	0.4	–	1.2	–	–
		Black	–	2.4	–	3.8	–	–
		Hispanic	–	12.1	–	13.0	–	–
		Multiracial	–	5.8	–	4.4	–	–
		Other	–	0.1	–	0.2	–	–
		White	–	79.1	–	77.3	–	–
Sex		Female	–	46.1	–	49.7	–	–
		Male	–	53.9	–	50.3	–	–
Performance Level		*Below Proficiency*	–	23.8	–	21.8	–	–
		Approaching Proficiency	–	19.7	–	24.8	–	–
		At Proficiency	–	25.3	–	31.7	–	–
		Above Proficiency	–	31.2	–	21.7	–	–

Table 3.2. Spring 2019 ILEARN Student Population Demographics

Demographic Subgroup			% Students by Grade					
			3	4	5	6	7	8
ELA/Reading								
		Total N	83,072	84,147	86,381	85,832	84,590	82,991
Race		Asian	2.8	2.6	2.5	2.3	2.5	2.3
		Black	12.6	12.5	12.5	12.2	12.1	11.7
		Hispanic	13.1	13.3	13.3	13.3	12.8	12.4
		Multiracial	5.4	5.2	5.2	5.0	4.9	4.7
		Other	0.2	0.2	0.2	0.3	0.3	0.3
		White	65.9	66.1	66.3	66.9	67.5	68.6
Sex		Female	48.7	49.2	49.1	49.1	48.8	48.9
		Male	51.3	50.8	50.9	50.9	51.2	51.1
Performance Level		*Below Proficiency*	31.0	30.5	29.0	27.0	24.7	21.2
		Approaching Proficiency	23.2	24.1	24.0	25.6	26.2	28.7
		At Proficiency	27.9	25.6	31.8	29.8	28.8	28.6
		Above Proficiency	17.9	19.7	15.2	17.5	20.2	21.5
Mathematics								
		Total N	83,079	84,144	86,368	85,812	84,578	82,990
Race		Asian	2.8	2.6	2.5	2.3	2.5	2.3
		Black	12.6	12.5	12.6	12.2	12.0	11.7
		Hispanic	13.1	13.3	13.3	13.3	12.8	12.4
		Multiracial	5.4	5.2	5.1	5.0	4.9	4.7
		Other	0.2	0.2	0.2	0.3	0.3	0.3
		White	65.9	66.1	66.3	66.9	67.5	68.6

Demographic Subgroup		% Students by Grade					
		3	4	5	6	7	8
Sex	Female	48.7	49.2	49.1	49.1	48.8	48.9
	Male	51.3	50.8	50.9	50.9	51.2	51.1
Performance Level	*Below Proficiency*	23.2	25.8	27.3	30.3	31.9	34.8
	Approaching Proficiency	18.7	20.7	25.3	23.9	26.7	27.8
	At Proficiency	32.6	32.8	25.3	25.6	22.9	19.1
	Above Proficiency	25.5	20.6	22.1	20.2	18.4	18.3
Science							
	Total N	–	84,064	–	85,653	–	–
Race	Asian	–	2.6	–	2.3	–	–
	Black	–	12.5	–	12.2	–	–
	Hispanic	–	13.3	–	13.3	–	–
	Multiracial	–	5.2	–	5.0	–	–
	Other	–	0.2	–	0.3	–	–
	White	–	66.1	–	67.0	–	–
Sex	Female	–	49.2	–	49.1	–	–
	Male	–	50.8	–	50.9	–	–
Performance Level	*Below Proficiency*	–	34.9	–	26.5	–	–
	Approaching Proficiency	–	19.3	–	25.4	–	–
	At Proficiency	–	21.7	–	28.8	–	–
	Above Proficiency	–	24.1	–	19.3	–	–

Table 3.3. Linking Study Sample Demographics (Weighted)

Demographic Subgroup		% Students by Grade					
		3	4	5	6	7	8
ELA/Reading							
	Total N	40,699	41,109	41,928	41,224	40,209	38,868
Race	Asian	2.8	2.6	2.5	2.3	2.5	2.3
	Black	12.6	12.5	12.5	12.2	12.1	11.7
	Hispanic	13.1	13.3	13.3	13.3	12.8	12.4
	Multiracial	5.4	5.2	5.2	5.0	4.9	4.7
	Other	0.2	0.2	0.2	0.3	0.3	0.3
	White	65.9	66.1	66.3	66.9	67.5	68.6
Sex	Female	48.7	49.2	49.1	49.1	48.8	48.9
	Male	51.3	50.8	50.9	50.9	51.2	51.1
Performance Level	*Below Proficiency*	31.0	30.5	29.0	27.0	24.7	21.2
	Approaching Proficiency	23.2	24.1	24.0	25.6	26.2	28.7
	At Proficiency	27.9	25.6	31.8	29.8	28.8	28.6
	Above Proficiency	17.9	19.7	15.2	17.5	20.2	21.5

		% Students by Grade					
Demographic Subgroup		**3**	**4**	**5**	**6**	**7**	**8**
Mathematics							
	Total N	40,103	40,457	41,410	40,638	40,047	38,438
Race	Asian	2.8	2.6	2.5	2.3	2.5	2.3
	Black	12.6	12.5	12.6	12.2	12.0	11.7
	Hispanic	13.1	13.3	13.3	13.3	12.8	12.4
	Multiracial	5.4	5.2	5.1	5.0	4.9	4.7
	Other	0.2	0.2	0.2	0.3	0.3	0.3
	White	65.9	66.1	66.3	66.9	67.6	68.6
Sex	Female	48.7	49.2	49.1	49.1	48.8	48.9
	Male	51.3	50.8	50.9	50.9	51.2	51.1
Performance Level	*Below Proficiency*	23.2	25.8	27.3	30.3	31.9	34.8
	Approaching Proficiency	18.7	20.7	25.3	23.9	26.7	27.8
	At Proficiency	32.6	32.8	25.3	25.6	22.9	19.1
	Above Proficiency	25.5	20.6	22.1	20.2	18.4	18.3
Science							
	Total N	–	1,112	–	2,808	–	–
Race	Asian	–	2.6	–	2.3	–	–
	Black	–	12.5	–	12.2	–	–
	Hispanic	–	13.3	–	13.3	–	–
	Multiracial	–	5.2	–	5.0	–	–
	Other	–	0.2	–	0.3	–	–
	White	–	66.1	–	67.0	–	–
Sex	Female	–	49.2	–	49.1	–	–
	Male	–	50.8	–	50.9	–	–
Performance Level	*Below Proficiency*	–	34.9	–	26.5	–	–
	Approaching Proficiency	–	19.3	–	25.4	–	–
	At Proficiency	–	21.7	–	28.8	–	–
	Above Proficiency	–	24.1	–	19.3	–	–

3.2. Descriptive Statistics

Table 3.4 presents descriptive statistics of the MAP Growth and ILEARN test scores from Spring 2019, including the correlation coefficients (*r*) between them. The correlation coefficients between the scores range from 0.81 to 0.82 for ELA/reading, 0.89 to 0.91 for mathematics, and 0.79 to 0.82 for science. These values indicate a strong relationship among the scores, which is important validity evidence for the claim that MAP Growth scores are good predictors of performance on the ILEARN assessments.

Table 3.4. Descriptive Statistics of Test Scores

Grade	N	r	ILEARN				MAP Growth			
			Mean	SD	Min.	Max.	Mean	SD	Min.	Max.
ELA/Reading										
3	40,699	0.82	5449.4	69.0	5087	5750	199.6	15.6	138	244
4	41,109	0.82	5480.9	75.3	5090	5810	206.5	15.3	140	253
5	41,928	0.82	5512.8	79.6	5110	5825	211.5	15.1	139	256
6	41,224	0.81	5534.2	73.2	5130	5865	215.8	15.1	152	261
7	40,209	0.81	5560.1	81.6	5130	5890	219.3	15.2	149	263
8	38,868	0.81	5572.9	78.5	5150	5902	222.3	15.4	151	271
Mathematics										
3	40,103	0.89	6437.2	76.0	6104	6730	203.1	13.7	131	270
4	40,457	0.90	6476.8	78.0	6100	6800	213.1	15.2	138	287
5	41,410	0.91	6500.9	84.8	6110	6850	222.0	17.5	135	294
6	40,638	0.90	6527.0	93.1	6110	6870	225.8	16.8	141	311
7	40,047	0.90	6535.9	96.7	6120	6920	231.2	18.0	142	300
8	38,438	0.89	6550.5	107.1	6120	6950	235.7	19.1	142	313
Science										
5	1,112	0.79	7501.5	43.8	7358	7650	201.9	11.1	161	236
8	2,808	0.82	7500.8	51.1	7371	7650	210.0	11.2	171	244

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

3.3. MAP Growth Cut Scores

Table 3.5 to Table 3.7 present the ILEARN scale score ranges 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 performance level on the ILEARN spring assessment 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 195 in the fall is likely to reach *At Proficiency* on the ILEARN ELA test. A grade 3 student who obtained a MAP Growth reading RIT score of 200 in the winter is also likely to reach *At Proficiency* on the ILEARN. 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 from the default ones, a student's projected performance level could be different from the generic projection presented in this document. Partners are therefore encouraged to use the projected performance level in students' profile, classroom, and grade reports in the NWEA reporting system since they reflect the specific instructional weeks set by partners.

Table 3.5. MAP Growth Cut Scores—ELA/Reading

Grade	Below Proficiency	Approaching Proficiency	At Proficiency	Above Proficiency
ILEARN ELA				
3	5060–5415	5416–5459	**5460**–5514	5515–5760
4	5090–5443	5444–5492	**5493**–5546	5547–5810
5	5110–5471	5472–5523	**5524**–5594	5595–5850
6	5130–5491	5492–5543	**5544**–5603	5604–5870
7	5130–5506	5507–5567	**5568**–5628	5629–5890
8	5150–5510	5511–5576	**5577**–5637	5638–5920

MAP Growth Reading

Grade	Below Proficiency		Approaching Proficiency		At Proficiency		Above Proficiency	
	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile
Fall								
2	100–168	1–47	169–181	48–75	**182**–197	76–94	198–350	95–99
3	100–184	1–50	185–194	51–70	**195**–207	71–89	208–350	90–99
4	100–194	1–47	195–204	48–68	**205**–214	69–85	215–350	86–99
5	100–199	1–41	200–209	42–63	**210**–223	64–87	224–350	88–99
6	100–203	1–37	204–216	38–67	**217**–227	68–86	228–350	87–99
7	100–207	1–39	208–218	40–64	**219**–229	65–84	230–350	85–99
8	100–208	1–34	209–221	35–63	**222**–232	64–83	233–350	84–99
Winter								
2	100–175	1–47	176–187	48–74	**188**–203	75–93	204–350	94–99
3	100–189	1–49	190–199	50–70	**200**–212	71–89	213–350	90–99
4	100–197	1–46	198–207	47–67	**208**–217	68–84	218–350	85–99
5	100–201	1–39	202–212	40–64	**213**–224	65–85	225–350	86–99
6	100–205	1–38	206–217	39–66	**218**–228	67–85	229–350	86–99
7	100–208	1–38	209–219	39–63	**220**–230	64–84	231–350	85–99
8	100–209	1–33	210–222	34–63	**223**–233	64–83	234–350	84–99
Spring								
2	100–180	1–47	181–191	48–71	**192**–205	72–91	206–350	92–99
3	100–193	1–49	194–202	50–68	**203**–213	69–86	214–350	87–99
4	100–200	1–47	201–209	48–66	**210**–218	67–82	219–350	83–99
5	100–204	1–41	205–213	42–62	**214**–225	63–84	226–350	85–99
6	100–207	1–39	208–218	40–65	**219**–229	66–85	230–350	86–99
7	100–210	1–40	211–220	41–63	**221**–231	64–83	232–350	84–99
8	100–211	1–36	212–223	37–63	**224**–234	64–83	235–350	84–99

Note. Cut scores for fall and winter are derived from the spring cuts and growth scores based on the typical instructional weeks. Spring cut scores for grade 2 were derived from the grade 3 cuts using the 2025 MAP Growth conditional growth norms. Bold numbers indicate the cut scores considered to be at least proficient for accountability purposes.

Table 3.6. MAP Growth Cut Scores—Mathematics

ILEARN Mathematics			
Grade	*Below Proficiency*	*Approaching Proficiency*	*At Proficiency*	*Above Proficiency*

Grade	*Below Proficiency*	*Approaching Proficiency*	*At Proficiency*	*Above Proficiency*
3	6080–6381	6382–6424	**6425**–6487	6488–6730
4	6100–6428	6429–6473	**6474**–6540	6541–6800
5	6110–6452	6453–6509	**6510**–6565	6566–6850
6	6110–6487	6488–6544	**6545**–6604	6605–6870
7	6120–6492	6493–6561	**6562**–6624	6625–6920
8	6120–6508	6509–6589	**6590**–6650	6651–6950

MAP Growth Mathematics								
Grade	*Below Proficiency*		*Approaching Proficiency*		*At Proficiency*		*Above Proficiency*	
	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile
Fall								
2	100–167	1–37	168–177	38–62	**178**–191	63–88	192–350	89–99
3	100–180	1–41	181–188	42–61	**189**–199	62–84	200–350	85–99
4	100–194	1–44	195–204	45–68	**205**–218	69–91	219–350	92–99
5	100–204	1–46	205–216	47–74	**217**–228	75–91	229–350	92–99
6	100–211	1–53	212–220	54–74	**221**–232	75–91	233–350	92–99
7	100–218	1–53	219–230	54–78	**231**–243	79–93	244–350	94–99
8	100–225	1–58	226–239	59–83	**240**–249	84–93	250–350	94–99
Winter								
2	100–175	1–36	176–185	37–61	**186**–200	62–89	201–350	90–99
3	100–188	1–40	189–197	41–62	**198**–208	63–83	209–350	84–99
4	100–201	1–43	202–212	44–68	**213**–226	69–90	227–350	91–99
5	100–210	1–47	211–222	48–73	**223**–234	74–90	235–350	91–99
6	100–217	1–54	218–227	55–75	**228**–239	76–91	240–350	92–99
7	100–222	1–53	223–235	54–78	**236**–248	79–93	249–350	94–99
8	100–229	1–57	230–244	58–83	**245**–254	84–92	255–350	93–99
Spring								
2	100–182	1–38	183–191	39–60	**192**–204	61–85	205–350	86–99
3	100–195	1–42	196–203	43–60	**204**–214	61–81	215–350	82–99
4	100–207	1–44	208–217	45–66	**218**–231	67–88	232–350	89–99
5	103–214	1–47	215–226	48–71	**227**–238	72–88	239–350	89–99
6	102–221	1–53	222–231	54–73	**232**–243	74–89	244–350	90–99
7	105–225	1–53	226–237	54–76	**238**–250	77–91	251–350	92–99
8	105–232	1–57	233–246	58–81	**247**–256	82–91	257–350	92–99

Note. Cut scores for fall and winter are derived from the spring cuts and growth scores based on the typical instructional weeks. Spring cut scores for grade 2 were derived from the grade 3 cuts using the 2025 MAP Growth conditional growth norms. Bold numbers indicate the cut scores considered to be at least proficient for accountability purposes.

Table 3.7. MAP Growth Cut Scores—Science

	ILEARN Science			
Grade	*Below Proficiency*	*Approaching Proficiency*	*At Proficiency*	*Above Proficiency*
4	7350–7481	7482–7505	**7506**–7534	7535–7650
6	7350–7465	7466–7503	**7504**–7544	7545–7650

	MAP Growth Science							
Grade	*Below Proficiency*		*Approaching Proficiency*		*At Proficiency*		*Above Proficiency*	
	RIT	Percentile	RIT	Percentile	RIT	Percentile	RIT	Percentile
Fall								
4	100–191	1–40	192–198	41–62	**199**–206	63–82	207–350	83–99
6	100–198	1–34	199–208	35–64	**209**–217	65–85	218–350	86–99
Winter								
4	100–194	1–40	195–201	41–61	**202**–209	62–81	210–350	82–99
6	100–200	1–35	201–210	36–64	**211**–218	65–83	219–350	84–99
Spring								
4	100–197	1–42	198–203	43–60	**204**–210	61–78	211–350	79–99
6	100–202	1–37	203–211	38–63	**212**–219	64–82	220–350	83–99

Note. Cut scores for fall and winter are derived from the spring cuts and growth scores based on the typical instructional weeks. Spring cut scores for grade 2 were derived from the grade 3 cuts using the 2025 MAP Growth conditional growth norms. 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 ILEARN tests, providing insight into the predictive validity of MAP Growth. The overall classification accuracy rates range from 0.82 to 0.83 for ELA/reading, 0.87 to 0.89 for mathematics, and 0.80 to 0.84 for science. These values suggest that the RIT cut scores are good at classifying students as proficient or not proficient on the ILEARN assessment.

Although the results show that MAP Growth scores can be used to accurately classify students as likely to be proficient on the ILEARN tests, there is a notable limitation to how these results should be used and interpreted. ILEARN and MAP Growth assessments are designed for different purposes and measure slightly different constructs even within the same content area. Therefore, scores on the two tests cannot be assumed to be interchangeable. 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	ILEARN		FP	FN				
ELA/Reading										
3	40,699	203	5460	0.83	0.17	0.16	0.84	0.83	0.81	0.92
4	41,109	210	5493	0.83	0.17	0.17	0.83	0.83	0.80	0.92
5	41,928	214	5524	0.82	0.19	0.15	0.85	0.81	0.79	0.91
6	41,224	219	5544	0.83	0.16	0.18	0.82	0.84	0.82	0.91
7	40,209	221	5568	0.82	0.20	0.16	0.84	0.80	0.80	0.91
8	38,868	224	5577	0.82	0.19	0.17	0.83	0.81	0.81	0.91
Mathematics										
3	40,103	202	6425	0.88	0.17	0.09	0.91	0.83	0.88	0.95
4	40,457	213	6474	0.87	0.15	0.11	0.89	0.85	0.87	0.95
5	41,410	224	6510	0.88	0.12	0.12	0.88	0.88	0.87	0.96
6	40,638	229	6545	0.87	0.13	0.13	0.87	0.87	0.85	0.95
7	40,047	236	6562	0.89	0.11	0.11	0.89	0.89	0.85	0.96
8	38,438	243	6590	0.88	0.10	0.15	0.85	0.90	0.84	0.96
Science										
4	1,112	204	7506	0.80	0.18	0.23	0.77	0.82	0.78	0.89
6	2,808	212	7504	0.84	0.13	0.19	0.81	0.87	0.85	0.92

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 *At Proficiency* performance on the ILEARN test based on RIT scores from fall, winter, or spring. For example, a grade 3 student who obtained a MAP Growth reading score of 200 in the fall has a 67% chance of reaching *At Proficiency* or higher on the ILEARN test. "Prob." indicates the probability of obtaining proficient status on the ILEARN test in the spring.

Table 3.9. Proficiency Projection Based on RIT Scores—ELA/Reading

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
				Fall			**Winter**			**Spring**	
			Fall RIT	**Projected Proficiency**		Winter RIT	**Projected Proficiency**		Spring RIT	**Projected Proficiency**	
				At Proficiency	Prob.		*At Proficiency*	Prob.		*At Proficiency*	Prob.
2	5	192	142	No	<0.01	149	No	<0.01	153	No	<0.01
	10	192	148	No	<0.01	155	No	<0.01	159	No	<0.01
	15	192	152	No	<0.01	159	No	<0.01	164	No	<0.01
	20	192	156	No	0.01	162	No	<0.01	167	No	<0.01
	25	192	159	No	0.01	165	No	0.01	170	No	<0.01
	30	192	161	No	0.02	168	No	0.02	173	No	<0.01
	35	192	163	No	0.04	170	No	0.03	175	No	<0.01
	40	192	166	No	0.06	172	No	0.05	177	No	<0.01
	45	192	168	No	0.09	175	No	0.07	180	No	<0.01
	50	192	170	No	0.13	177	No	0.11	182	No	<0.01
	55	192	172	No	0.16	179	No	0.17	184	No	0.01
	60	192	174	No	0.22	181	No	0.2	186	No	0.04
	65	192	177	No	0.33	183	No	0.27	188	No	0.13
	70	192	179	No	0.37	186	No	0.41	191	No	0.39
	75	192	182	Yes	0.5	188	Yes	0.5	193	Yes	0.61
	80	192	184	Yes	0.59	191	Yes	0.59	196	Yes	0.87
	85	192	188	Yes	0.71	194	Yes	0.73	200	Yes	0.99
	90	192	192	Yes	0.84	199	Yes	0.86	204	Yes	>0.99
	95	192	198	Yes	0.94	205	Yes	0.96	210	Yes	>0.99
3	5	203	155	No	<0.01	160	No	<0.01	164	No	<0.01
	10	203	161	No	<0.01	167	No	<0.01	171	No	<0.01
	15	203	166	No	<0.01	171	No	<0.01	175	No	<0.01
	20	203	169	No	<0.01	175	No	<0.01	179	No	<0.01
	25	203	172	No	0.01	178	No	0.01	182	No	<0.01
	30	203	175	No	0.02	180	No	0.02	184	No	<0.01
	35	203	178	No	0.05	183	No	0.04	187	No	<0.01
	40	203	180	No	0.07	185	No	0.05	189	No	<0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
				Projected Proficiency			**Projected Proficiency**			**Projected Proficiency**	
			Fall RIT	*At Proficiency*	**Prob.**	**Winter RIT**	*At Proficiency*	**Prob.**	**Spring RIT**	*At Proficiency*	**Prob.**
	45	203	182	No	0.09	188	No	0.09	192	No	<0.01
	50	203	185	No	0.16	190	No	0.14	194	No	0.01
	55	203	187	No	0.22	192	No	0.2	196	No	0.02
	60	203	189	No	0.29	194	No	0.24	198	No	0.08
	65	203	192	No	0.37	197	No	0.36	201	No	0.28
	70	203	194	No	0.46	199	No	0.45	203	Yes	0.5
	75	203	197	Yes	0.54	202	Yes	0.59	206	Yes	0.8
	80	203	200	Yes	0.67	205	Yes	0.68	209	Yes	0.96
	85	203	204	Yes	0.78	209	Yes	0.83	213	Yes	>0.99
	90	203	208	Yes	0.89	213	Yes	0.91	217	Yes	>0.99
	95	203	215	Yes	0.97	220	Yes	0.98	224	Yes	>0.99
	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
4	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
	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

Grade	Start Percentile	Spring Cut	Fall	Fall Projected Proficiency		Winter RIT	Winter Projected Proficiency		Spring RIT	Spring Projected Proficiency	
			Fall RIT	At Proficiency	Prob.	Winter RIT	At Proficiency	Prob.	Spring RIT	At Proficiency	Prob.
	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	214	175	No	<0.01	178	No	<0.01	180	No	<0.01
	10	214	181	No	<0.01	184	No	<0.01	186	No	<0.01
	15	214	186	No	0.01	189	No	<0.01	191	No	<0.01
	20	214	189	No	0.01	192	No	0.01	194	No	<0.01
	25	214	192	No	0.03	195	No	0.02	197	No	<0.01
	30	214	195	No	0.06	197	No	0.04	199	No	<0.01
	35	214	197	No	0.09	200	No	0.08	202	No	<0.01
	40	214	199	No	0.11	202	No	0.12	204	No	<0.01
	45	214	201	No	0.16	204	No	0.15	206	No	0.01
	50	214	204	No	0.27	206	No	0.22	208	No	0.04
	55	214	206	No	0.31	209	No	0.35	211	No	0.2
	60	214	208	No	0.4	211	No	0.4	213	No	0.39
	65	214	210	Yes	0.5	213	Yes	0.5	215	Yes	0.61
	70	214	213	Yes	0.6	215	Yes	0.6	217	Yes	0.8
	75	214	215	Yes	0.69	218	Yes	0.74	220	Yes	0.96
	80	214	218	Yes	0.8	221	Yes	0.85	223	Yes	0.99
	85	214	222	Yes	0.89	224	Yes	0.92	226	Yes	>0.99
	90	214	226	Yes	0.96	228	Yes	0.97	230	Yes	>0.99
	95	214	232	Yes	0.99	235	Yes	>0.99	237	Yes	>0.99
6	5	219	181	No	<0.01	183	No	<0.01	185	No	<0.01
	10	219	187	No	<0.01	189	No	<0.01	191	No	<0.01
	15	219	191	No	<0.01	193	No	<0.01	195	No	<0.01
	20	219	195	No	0.01	197	No	0.01	198	No	<0.01
	25	219	198	No	0.03	199	No	0.02	201	No	<0.01
	30	219	200	No	0.03	202	No	0.03	203	No	<0.01
	35	219	202	No	0.06	204	No	0.05	206	No	<0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
				Fall			**Winter**			**Spring**	
			Fall RIT	**Projected Proficiency**		Winter RIT	**Projected Proficiency**		Spring RIT	**Projected Proficiency**	
				At Proficiency	Prob.		*At Proficiency*	Prob.		*At Proficiency*	Prob.
	40	219	205	No	0.11	206	No	0.08	208	No	<0.01
	45	219	207	No	0.14	209	No	0.16	210	No	0.01
	50	219	209	No	0.2	211	No	0.19	212	No	0.02
	55	219	211	No	0.27	213	No	0.26	214	No	0.08
	60	219	213	No	0.36	215	No	0.35	216	No	0.2
	65	219	215	No	0.4	217	No	0.45	218	No	0.39
	70	219	218	Yes	0.55	219	Yes	0.55	221	Yes	0.72
	75	219	220	Yes	0.64	222	Yes	0.69	223	Yes	0.87
	80	219	223	Yes	0.77	225	Yes	0.81	226	Yes	0.98
	85	219	226	Yes	0.86	228	Yes	0.9	229	Yes	>0.99
	90	219	231	Yes	0.96	232	Yes	0.96	233	Yes	>0.99
	95	219	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
	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

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
				Fall			**Winter**			**Spring**	
			Fall RIT	**Projected Proficiency**		Winter RIT	**Projected Proficiency**		Spring RIT	**Projected Proficiency**	
				At Proficiency	Prob.		*At Proficiency*	Prob.		*At Proficiency*	Prob.
	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
	5	224	188	No	<0.01	189	No	<0.01	190	No	<0.01
	10	224	194	No	<0.01	195	No	<0.01	196	No	<0.01
	15	224	198	No	0.01	199	No	<0.01	200	No	<0.01
	20	224	201	No	0.02	203	No	0.02	203	No	<0.01
	25	224	204	No	0.04	205	No	0.02	206	No	<0.01
	30	224	207	No	0.06	208	No	0.05	209	No	<0.01
	35	224	209	No	0.09	210	No	0.08	211	No	<0.01
	40	224	211	No	0.13	213	No	0.12	213	No	<0.01
	45	224	214	No	0.18	215	No	0.17	216	No	0.01
8	50	224	216	No	0.25	217	No	0.24	218	No	0.04
	55	224	218	No	0.33	219	No	0.32	220	No	0.13
	60	224	220	No	0.41	221	No	0.41	222	No	0.28
	65	224	222	Yes	0.5	223	Yes	0.5	224	Yes	0.5
	70	224	225	Yes	0.63	226	Yes	0.64	227	Yes	0.8
	75	224	227	Yes	0.71	228	Yes	0.72	229	Yes	0.92
	80	224	230	Yes	0.82	231	Yes	0.83	232	Yes	0.99
	85	224	233	Yes	0.89	235	Yes	0.92	236	Yes	>0.99
	90	224	238	Yes	0.96	239	Yes	0.97	240	Yes	>0.99
	95	224	244	Yes	0.99	245	Yes	>0.99	246	Yes	>0.99

Table 3.10. Proficiency Projection Based on RIT Scores—Mathematics

Grade	Start Percentile	Spring Cut	Fall RIT	At Proficiency	Prob.	Winter RIT	At Proficiency	Prob.	Spring RIT	At Proficiency	Prob.
				Fall Projected Proficiency			**Winter** Projected Proficiency			**Spring** Projected Proficiency	
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
	40	204	180	No	0.13	189	No	0.13	195	No	0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
				Fall			**Winter**			**Spring**	
			Fall RIT	**Projected Proficiency**		**Winter RIT**	**Projected Proficiency**		**Spring RIT**	**Projected Proficiency**	
				At Proficiency	*Prob.*		*At Proficiency*	*Prob.*		*At Proficiency*	*Prob.*
	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
	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
4	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
	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

Grade	Start Percentile	Spring Cut	Fall RIT	Fall Projected Proficiency		Winter RIT	Winter Projected Proficiency		Spring RIT	Spring Projected Proficiency	
				At Proficiency	Prob.		At Proficiency	Prob.		At Proficiency	Prob.
	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	227	180	No	<0.01	183	No	<0.01	186	No	<0.01
	10	227	185	No	<0.01	189	No	<0.01	192	No	<0.01
	15	227	189	No	<0.01	194	No	<0.01	197	No	<0.01
	20	227	193	No	<0.01	197	No	<0.01	200	No	<0.01
	25	227	195	No	<0.01	200	No	<0.01	204	No	<0.01
	30	227	198	No	0.01	203	No	<0.01	206	No	<0.01
	35	227	200	No	0.01	205	No	0.01	209	No	<0.01
	40	227	202	No	0.03	207	No	0.01	211	No	<0.01
	45	227	204	No	0.05	210	No	0.03	214	No	<0.01
	50	227	206	No	0.08	212	No	0.06	216	No	<0.01
	55	227	208	No	0.12	214	No	0.1	218	No	0.01
	60	227	210	No	0.19	216	No	0.16	221	No	0.04
	65	227	212	No	0.26	219	No	0.28	223	No	0.13
	70	227	215	No	0.4	221	No	0.39	226	No	0.39
	75	227	217	Yes	0.5	224	Yes	0.56	228	Yes	0.61
	80	227	220	Yes	0.65	226	Yes	0.67	232	Yes	0.92
	85	227	223	Yes	0.78	230	Yes	0.84	235	Yes	0.99
	90	227	227	Yes	0.9	234	Yes	0.94	240	Yes	>0.99
	95	227	233	Yes	0.99	240	Yes	0.99	246	Yes	>0.99
6	5	232	184	No	<0.01	187	No	<0.01	190	No	<0.01
	10	232	190	No	<0.01	194	No	<0.01	197	No	<0.01
	15	232	194	No	<0.01	198	No	<0.01	201	No	<0.01
	20	232	197	No	<0.01	201	No	<0.01	205	No	<0.01
	25	232	199	No	<0.01	204	No	<0.01	208	No	<0.01
	30	232	202	No	0.01	207	No	<0.01	211	No	<0.01
	35	232	204	No	0.01	209	No	<0.01	213	No	<0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
			Fall RIT	**Projected Proficiency**		Winter RIT	**Projected Proficiency**		Spring RIT	**Projected Proficiency**	
				At Proficiency	*Prob.*		*At Proficiency*	*Prob.*		*At Proficiency*	*Prob.*
	40	232	206	No	0.02	212	No	0.01	216	No	<0.01
	45	232	208	No	0.04	214	No	0.03	218	No	<0.01
	50	232	210	No	0.07	216	No	0.05	220	No	<0.01
	55	232	212	No	0.11	218	No	0.09	223	No	0.01
	60	232	214	No	0.16	220	No	0.14	225	No	0.02
	65	232	216	No	0.23	223	No	0.25	227	No	0.08
	70	232	219	No	0.36	225	No	0.34	230	No	0.28
	75	232	221	Yes	0.5	228	Yes	0.5	233	Yes	0.61
	80	232	224	Yes	0.64	231	Yes	0.66	236	Yes	0.87
	85	232	227	Yes	0.77	234	Yes	0.79	239	Yes	0.98
	90	232	231	Yes	0.89	238	Yes	0.91	244	Yes	>0.99
	95	232	237	Yes	0.98	245	Yes	0.99	251	Yes	>0.99
7	5	238	189	No	<0.01	191	No	<0.01	192	No	<0.01
	10	238	195	No	<0.01	197	No	<0.01	199	No	<0.01
	15	238	199	No	<0.01	202	No	<0.01	204	No	<0.01
	20	238	203	No	<0.01	206	No	<0.01	208	No	<0.01
	25	238	206	No	<0.01	209	No	<0.01	211	No	<0.01
	30	238	208	No	<0.01	211	No	<0.01	214	No	<0.01
	35	238	211	No	0.01	214	No	<0.01	216	No	<0.01
	40	238	213	No	0.01	216	No	0.01	219	No	<0.01
	45	238	215	No	0.03	219	No	0.02	221	No	<0.01
	50	238	217	No	0.04	221	No	0.03	224	No	<0.01
	55	238	219	No	0.07	223	No	0.06	226	No	<0.01
	60	238	222	No	0.14	226	No	0.12	229	No	0.01
	65	238	224	No	0.2	228	No	0.18	231	No	0.02
	70	238	226	No	0.27	231	No	0.26	234	No	0.13
	75	238	229	No	0.4	233	No	0.35	237	No	0.39
	80	238	232	Yes	0.55	236	Yes	0.5	240	Yes	0.72

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
				Fall			**Winter**			**Spring**	
				Projected Proficiency			**Projected Proficiency**			**Projected Proficiency**	
			Fall RIT	*At Proficiency*	Prob.	**Winter RIT**	*At Proficiency*	Prob.	**Spring RIT**	*At Proficiency*	Prob.
	85	238	235	Yes	0.69	240	Yes	0.7	244	Yes	0.96
	90	238	239	Yes	0.83	245	Yes	0.88	249	Yes	>0.99
	95	238	246	Yes	0.97	251	Yes	0.98	256	Yes	>0.99
	5	247	192	No	<0.01	194	No	<0.01	196	No	<0.01
	10	247	199	No	<0.01	201	No	<0.01	203	No	<0.01
	15	247	203	No	<0.01	206	No	<0.01	208	No	<0.01
	20	247	207	No	<0.01	210	No	<0.01	212	No	<0.01
	25	247	210	No	<0.01	213	No	<0.01	215	No	<0.01
	30	247	212	No	<0.01	216	No	<0.01	218	No	<0.01
	35	247	215	No	<0.01	219	No	<0.01	221	No	<0.01
	40	247	217	No	<0.01	221	No	<0.01	224	No	<0.01
	45	247	220	No	0.01	224	No	0.01	226	No	<0.01
8	50	247	222	No	0.02	226	No	0.01	229	No	<0.01
	55	247	224	No	0.03	228	No	0.02	231	No	<0.01
	60	247	227	No	0.07	231	No	0.05	234	No	<0.01
	65	247	229	No	0.1	233	No	0.08	237	No	<0.01
	70	247	232	No	0.18	236	No	0.16	239	No	0.01
	75	247	234	No	0.25	239	No	0.23	242	No	0.08
	80	247	237	No	0.37	242	No	0.35	246	No	0.39
	85	247	241	Yes	0.55	246	Yes	0.55	250	Yes	0.8
	90	247	246	Yes	0.75	251	Yes	0.77	255	Yes	0.99
	95	247	252	Yes	0.92	258	Yes	0.95	262	Yes	>0.99

Table 3.11. Proficiency Projection Based on RIT Scores—Science

Grade	Start Percentile	Spring Cut	Fall RIT	Fall Projected Proficiency At Proficiency	Fall Projected Proficiency Prob.	Winter RIT	Winter Projected Proficiency At Proficiency	Winter Projected Proficiency Prob.	Spring RIT	Spring Projected Proficiency At Proficiency	Spring Projected Proficiency Prob.
	5	204	174	No	<0.01	177	No	<0.01	179	No	<0.01
	10	204	178	No	<0.01	181	No	<0.01	183	No	<0.01
	15	204	181	No	0.01	184	No	0.01	187	No	<0.01
	20	204	184	No	0.03	187	No	0.03	189	No	<0.01
	25	204	186	No	0.06	189	No	0.04	191	No	<0.01
	30	204	188	No	0.08	191	No	0.07	193	No	<0.01
	35	204	190	No	0.12	193	No	0.11	195	No	0.01
	40	204	192	No	0.19	195	No	0.18	197	No	0.02
	45	204	193	No	0.24	196	No	0.23	199	No	0.08
4	50	204	195	No	0.28	198	No	0.27	200	No	0.13
	55	204	197	No	0.39	200	No	0.38	202	No	0.28
	60	204	198	No	0.44	201	No	0.44	204	Yes	0.5
	65	204	200	Yes	0.56	203	Yes	0.56	205	Yes	0.61
	70	204	202	Yes	0.61	205	Yes	0.62	207	Yes	0.8
	75	204	204	Yes	0.72	207	Yes	0.73	209	Yes	0.92
	80	204	206	Yes	0.81	209	Yes	0.82	211	Yes	0.98
	85	204	208	Yes	0.88	211	Yes	0.89	214	Yes	>0.99
	90	204	211	Yes	0.92	215	Yes	0.96	217	Yes	>0.99
	95	204	216	Yes	0.98	219	Yes	0.99	222	Yes	>0.99
	5	212	183	No	<0.01	184	No	<0.01	185	No	<0.01
	10	212	187	No	<0.01	189	No	<0.01	190	No	<0.01
	15	212	191	No	0.01	192	No	0.01	193	No	<0.01
	20	212	193	No	0.02	195	No	0.02	196	No	<0.01
6	25	212	195	No	0.03	197	No	0.03	198	No	<0.01
	30	212	197	No	0.06	199	No	0.05	200	No	<0.01
	35	212	199	No	0.1	201	No	0.1	202	No	<0.01
	40	212	201	No	0.16	202	No	0.12	204	No	0.01

Grade	Start Percentile	Spring Cut	Fall			Winter			Spring		
				Fall			**Winter**			**Spring**	
			Fall RIT	**Projected Proficiency**		Winter RIT	**Projected Proficiency**		Spring RIT	**Projected Proficiency**	
				At Proficiency	Prob.		*At Proficiency*	Prob.		*At Proficiency*	Prob.
	45	212	202	No	0.16	204	No	0.19	206	No	0.04
	50	212	204	No	0.24	206	No	0.23	207	No	0.08
	55	212	206	No	0.34	208	No	0.33	209	No	0.2
	60	212	207	No	0.39	209	No	0.39	211	No	0.39
	65	212	209	Yes	0.5	211	Yes	0.5	212	Yes	0.5
	70	212	211	Yes	0.56	213	Yes	0.61	214	Yes	0.72
	75	212	213	Yes	0.66	215	Yes	0.72	216	Yes	0.87
	80	212	215	Yes	0.76	217	Yes	0.81	219	Yes	0.98
	85	212	218	Yes	0.87	220	Yes	0.9	221	Yes	0.99
	90	212	221	Yes	0.94	223	Yes	0.96	225	Yes	>0.99
	95	212	226	Yes	0.99	228	Yes	0.99	230	Yes	>0.99

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