education analytics

LINKING STUDY BETWEEN SOUTH CAROLINA COLLEGE- AND CAREER READY ASSESSMENT (SC READY) AND I-READY ASSESSMENT, GRADES 3-8

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INTRODUCTION

In the spring of 2023, the South Carolina Education Oversight Committee (SC EOC), in collaboration with the South Carolina Department of Education (SCDE), partnered with Education Analytics (EA) to complete a level-linking study between the South Carolina Collegeand Career-Ready Assessment (SC READY) in Mathematics and English Language Arts (ELA) and Curriculum Associates' i-Ready assessments in Mathematics and Reading, respectively. This report outlines the methodology used by EA and the outcomes of the linking study. The goal of this report is to statistically connect the SC Ready and i-Ready assessments' scale scores in grades 3-8 to facilitate further comparisons of proficiency status on these two assessments.

METHODS

Data

This linking study used data from the SC READY and i-Ready Mathematics and ELA/Reading assessments administered in Spring 2023.¹ Students were matched through their state IDs or district IDs. Only matched students who took the i-Ready assessments within 30 days of SC READY² in Spring 2023 were included in this study.

Post-Stratification Weighting

To increase the generalizability of the linking results based on the matched student sample to South Carolina's student population, EA applied post-stratification weights to the calculations. The variables used in the weighting process include gender, race/ethnicity, English learner (EL) status, poverty status, disability status, and whether a student met or exceeded standards on the same subject SC READY assessment. Through post-stratification weighting, the weighted study sample provides a closer match with South Carolina state population on these key demographic and academic performance variables than the original sample.

Raking was used to calculate the post-stratification weights. Raking involves an iterative proportional fitting procedure, which introduces each demographic and academic variable in a sequence so that it ensures the sample accurately represents the population of all variables

¹ EA also explored data from Spring 2021 and Spring 2022 but agrees with SC EOC and SCDE that linking results from Spring 2023 are preferred given they are the furthest from COVID impacts and the most recently available data. The research sample sizes from 2023 are sufficient and the model diagnostics are good; therefore, linking results from Spring 2023 are reported.

² The SC READY data do not include the actual test administration dates, so this is an approximation based on <u>SCDE's 2022–23 Assessment Schedule</u>.

under consideration. The variables are introduced one at a time, which allows for the incorporation of more variables in the weighting procedure. The raking procedure includes the following steps:

- 1. Collect marginal distributions of each weighting variable from South Carolina's student population.
- 2. Calculate marginal distributions of each weighting variable from the matched sample.
- 3. Calibrate post-stratification weights using the raking procedure.
- 4. Trim the weight to be within the range of 0.3 and 3. This is done to minimize the impact of outlier cases which may carry extremely large or small weights.
- 5. Apply the weights to the matched sample before conducting the linking analyses.

Equipercentile Linking

The linking analyses between SC READY and i-Ready assessments were conducted using the equipercentile linking method (Kolen & Brennan, 2004). The equipercentile linking function is determined by the cumulative distribution functions of the two assessments. In the linking process, the cumulative distribution function of scores on the spring i-Ready assessment converted to the SC READY score scale is aligned to the cumulative distribution function of scores on SC READY. More specifically, this process utilizes percentile ranks, which indicates the percentage of scores in the frequency distribution that fall below a particular score. Equipercentile linking then establishes the relationship between the two sets of test scores by identifying corresponding percentile ranks of the test scores. Thus, we can establish scores on the spring i-Ready assessment that are aligned to the three SC READY achievement level cut scores (i.e., cut score between Does Not Meet Expectations and Approaches Expectations, cut score between Approaches Expectations and Meets Expectations, and cut score between Meets Expectations and Standard Expectations) at grades 3-8. The linking function can be written as:

$$e_Y(x) = G^{-1}[F(x)]$$

where x represent a score on test X (e.g., SC READY ELA), $e_Y(x)$ is its corresponding score on test Y (e.g., i-Ready Reading), F(x) is the cumulative distribution function of a given score on SC READY, and G^{-1} is the inverse of the cumulative distribution function for i-Ready, which indicates the i-Ready scale score corresponding to a given percentile in the distribution.

Prior to the equipercentile linking, the polynomial log-linear pre-smoothing method is applied to reduce irregularities of the test score distributions. This method fits polynomial functions to the log of the sample density to smooth the distributions of the assessments (Holland & Thayer, 1987, 2000; Rosenbaum & Thayer, 1987).

Extending from Spring to Fall and Winter

To support the needs of SC EOC and SCDE to extend linked i-Ready test scores from spring to the fall and winter terms, EA also estimated scores needed to meet expectations of the SC READY test in the fall and winter terms prior to the spring term in grades 3-8. This was done by calculating the mean i-Ready scores in each term, subject, and grade in 2022-23 among all SC students who took the i-Ready test. The average change in scores between fall and spring, and winter and spring were subtracted from the spring cut scores determined by the linking analyses. These fall and winter cut scores are reported along with spring cut scores in the results section.

Classification Accuracy

Classification accuracy statistics are used to evaluate the degree to which the equivalent scores on the spring i-Ready assessment to the SC READY achievement level cut scores can be used to accurately classify students' proficiency status. In this report, we summarize seven types of commonly used classification accuracy statistics (see Table 1) based on the cut score between Approaches Expectations (i.e., not proficient) and Meets Expectations (i.e., proficient).

To facilitate appropriate interpretations of the linking results, a bootstrap analysis was also conducted whereby each linking analysis was replicated 1000 times through iterative resampling of each study sample with replacement. The bootstrap standard errors help us understand the amount of error associated with the estimates. The bootstrap standard errors associated with the test cut scores are reported in Table 10.

Statistic	Description
Overall Classification Accuracy	Proportion of the study sample with correct proficiency classifications on SC READY based on i-Ready cut scores. Calculated as (TP+TN)/Total Sample Size
False Positive (FP) Rate	Proportion of proficient students based on i-Ready cut scores among those observed as not proficient on the SC READY test. Calculated as FP/(FP+TN)
False Negative (FN) Rate	Proportion of students who were not proficient based on i-Ready cut scores among those observed as proficient on the SC READY test. Calculated as FN/(FN+TP)
Sensitivity	Proportion of proficient students based on i-Ready cut scores among those observed as proficient on the SC READY test. Calculated as TP/(TP+FN)
Specificity	Proportion of students who were not proficient based on i-Ready cut scores among those observed as not proficient on the SC READY test. Calculated as TN/(TN+FP)
Precision	Proportion of observed proficient students on the SC READY test among those classified as proficient based on i-Ready cut scores. Calculated as TP/(TP+FP)
Area Under the Curve (AUC)	An overall indication of the diagnostic accuracy of a Receiver Operating Characteristic (ROC) curve. AUC tells us how well the i- Ready cut score separates the study sample as proficient and not proficient in accordance with the SC READY ELA test cut score. An AUC above 0.80 is considered "convincing evidence" of classification accuracy.

Table 1. Description of Classification Accuracy Summary Statistics

Note: TP = true positive; TN = true negative; FP = false positive; FN = false negative.

Figure 1 is a scatterplot of the SC READY ELA and i-Ready Reading scores from grade 8 in Spring 2023. The best-fitting curve (i.e., the black dashed line) shows the i-Ready Reading scores that correspond to the SC READY ELA scores through the linking estimation. For example, the SC READY ELA score of 642 is the cut score for "Meets Expectations" at grade 8. This score corresponds to the i-Ready Reading score of 605 with a standard error of 1.34 in the linking results. The narrow black bands plotted around the dashed curve shows the 95% confidence interval. The small standard errors provide evidence of the accuracy of the linking model. However, the SC READY ELA score of 642 and the i-Ready Reading score of 605 should not be used interchangeably. As shown in Figure 1, not all students who scored 605 and above on the i-Ready Reading test also scored 642 or higher on the SC READY ELA test in Spring 2023. Specifically, students in Quadrant IV scored lower than 642. Similarly, students who met or exceeded expectations (i.e., scored 642 or above) on the SC READY ELA test, had a wide range of scores on the i-Ready Reading test, some of which were below 605 (i.e., students in Quadrant II). We recommend users examine the scatterplot of observed test scores and bootstrap standard errors to gain a more complete understanding of the linking results and associated limitations.

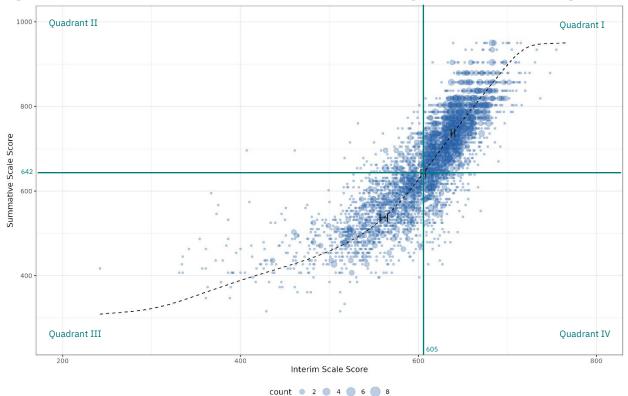


Figure 1. Scatterplot of the SC READY ELA and i-Ready Reading Scores, Grade 8, Spring 2023

RESULTS

Study Sample

The linking study sample includes students who took both the SC READY and i-Ready Mathematics and ELA/Reading assessments within 30 days in Spring 2023 from 25 school districts in South Carolina. Tables 2 and 3 summarize the sample characteristics, including student demographic subgroups (i.e., gender, race/ethnicity, poverty, EL, and disability status) and percent of students who met or exceeded standards on the SC READY Mathematics and ELA assessments at each grade in the original sample before post-stratification weighting.

Cubana	Percent of Students by Grade						
Subgroup	3	4	5	6	7	8	
Female	48.0	49.1	48.3	49.7	48.6	50.5	
Male	52.0	50.9	51.7	50.3	51.4	49.5	
Black	20.9	20.6	21.7	17.4	18.3	20.6	
Hispanic	9.2	8.4	10.4	9.6	9.1	8.5	
White	61.4	61.9	59.8	65.3	65.5	63.7	
Other	8.5	9.1	8.1	7.6	7.2	7.3	
Pupil in Poverty	55.3	55.2	56.6	52.5	50.2	53.9	
English Learner	8.8	6.7	7.7	7.1	6.6	6.1	
Student with Disabilities	15.1	14.3	14.4	13.2	12.5	12.3	
SC READY: Meets Expectations or Exceeds Expectations SC READY: Does Not Meet	58.1	51.4	48.2	46.6	37.7	34.7	
Expectations or Approaches Expectations	41.9	48.7	51.8	53.4	62.3	65.3	

Table 2. Unweighted Linking Study Sample Characteristics: Mathematics

Table 3. Unweighted Linking Study Sample Characteristics: ELA

Cubanan	Percent of Students by Grade						
Subgroup	3	4	5	6	7	8	
Female	48.7	48.9	47.7	49.2	48.8	50.5	
Male	51.3	51.1	52.3	50.8	51.2	49.5	
Black	15.4	15.0	15.7	17.6	18.3	22.0	
Hispanic	9.7	8.2	10.5	10.7	9.9	8.9	
White	66.0	67.4	65.3	64.5	64.7	62.1	
Other	8.9	9.3	8.6	7.3	7.1	7.0	
Pupil in Poverty	50.1	50.0	51.4	51.8	49.8	54.4	
English Learner	9.9	6.7	8.2	8.1	7.5	6.5	
Student with Disabilities	15.7	14.0	13.8	12.7	12.5	12.1	
SC READY: Meets Expectations or Exceeds Expectations	58.7	63.8	58.9	60.7	54.5	54.1	
SC READY: Does Not Meet Expectations or Approaches Expectations	41.3	36.2	41.1	39.3	45.5	46.0	

Distributions of the weighting variables in the South Carolina student population are listed in Table 4. After adjusting for post-stratification weights, the sample characteristics were recalculated. They are shown in Tables 5 and 6 at each grade level for mathematics and ELA, respectively. After weighting, the sample distributions are almost identical to the population distributions.

Carls days and	Percent of Students by Grade						
Subgroup -	3	4	5	6	7	8	
Female	48.8	49.1	49.1	48.9	49.2	49.4	
Male	51.2	50.9	50.9	51.1	50.8	50.6	
Black	30.3	30.7	31.0	31.4	32.0	32.0	
Hispanic	12.7	12.6	12.9	12.9	13.2	12.6	
White	48.3	48.1	47.9	47.7	47.2	48.0	
Others	8.7	8.6	8.3	7.9	7.7	7.4	
Pupil in Poverty	62.8	63.0	62.4	62.0	61.7	61.0	
English Learner	11.4	8.6	8.7	9.0	9.7	8.7	
Student with Disabilities	16.7	15.9	14.9	14.3	13.9	12.9	
SC READY Math: Meets							
Expectations or Exceeds	53.6	47.0	44.7	36.6	31.0	31.6	
Expectations							
SC READY Math: Does Not Meet							
Expectations or Approaches	46.4	53.0	55.3	63.4	69.0	68.4	
Expectations							
SC READY ELA: Meets Expectations	53.4	57.1	55.2	53.4	50.0	53.1	
or Exceeds Expectations	00.1	07.1	00.2	00.1	00.0	00.1	
SC READY ELA: Does Not Meet							
Expectations or Approaches	46.6	42.9	44.8	46.6	50.0	46.9	
Expectations							

Table 4. South Carolina Student Population Characteristics

Sources: <u>https://ed.sc.gov/data/test-scores/state-assessments/sc-ready/2023/state-scores-by-grade-level-and-demographic/?districtCode=9999&schoolCode=1001</u>

Note: Information in this table is based on students who took the 2023 SC READY Mathematics and ELA statewide tests. In the few cases where students' race/ethnicity and poverty status differ by 0.1%, numbers shown are the average of percentages from mathematics and ELA.

		Percent of Students by Grade					
Subgroup	3	4	5	6	7	8	
Female	48.8	49.1	49.1	48.9	49.2	49.4	
Male	51.2	50.9	50.9	51.1	50.8	50.6	
Black	30.3	30.7	31.0	31.4	32.0	32.0	
Hispanic	12.7	12.6	12.9	12.9	13.2	12.7	
White	48.3	48.1	47.9	47.7	47.2	47.9	
Other	8.7	8.6	8.3	7.9	7.7	7.4	
Pupil in Poverty	62.8	63.0	62.4	62.0	61.8	61.0	
English Learner	11.4	8.6	8.7	9.0	9.7	8.7	
Student with Disabilities	16.7	15.9	14.9	14.3	13.9	12.9	
SC READY: Meets Expectations or Exceeds Expectations SC READY: Does Not Meet	53.6	47.0	44.7	36.6	31.0	31.6	
Expectations or Approaches Expectations	46.4	53.0	55.3	63.4	69.0	68.4	

Table 5. Weighted Linking Study Sample Characteristics: Mathematics

Table 6. Weighted Linking Study Sample Characteristics: ELA

Cubanan	Percent of Students by Grade						
Subgroup	3	4	5	6	7	8	
Female	48.8	49.1	49.1	48.9	49.2	49.4	
Male	51.2	50.9	50.9	51.1	50.8	50.6	
Black	30.3	30.7	31.0	31.5	32.0	32.0	
Hispanic	12.7	12.6	12.9	12.9	13.2	12.7	
White	48.3	48.1	47.9	47.8	47.2	47.9	
Other	8.7	8.6	8.3	7.9	7.7	7.4	
Pupil in Poverty	62.9	63.1	62.4	62.0	61.7	61.0	
English Learner	11.4	8.6	8.7	9.0	9.7	8.7	
Student with Disabilities	16.7	15.9	14.9	14.3	13.9	12.9	
SC READY: Meets Expectations or Exceeds Expectations	53.4	57.1	55.2	53.4	50.0	53.1	
SC READY: Does Not Meet Expectations or Approaches Expectations	46.6	42.9	44.8	46.6	50.0	46.9	

Descriptive Statistics of Test Scores

Table 7 presents summary statistics of the SC READY and i-Ready Mathematics and ELA/Reading scores using the unweighted linking sample, which include the sample size, mean and standard deviation, and correlation (*r*) between the tests at each grade level. The correlations range from 0.80 (grade 8, Mathematics) to 0.87 (grade 4, Mathematics and grade 3, ELA) which indicate moderate to strong associations between the two tests. This provides a good foundation for conducting a linking study between the SC Ready and i-Ready Mathematics and ELA/Reading tests.

		Grade								
		3	4	5	6	7	8			
	Mathematics									
	Ν	4118	4183	4460	4225	4102	3565			
	r	0.85	0.87	0.86	0.85	0.83	0.80			
	Mean	471.7	500.8	542.5	544.6	563.1	583.4			
	S.D.	119.4	124.2	112.7	105.2	105.6	100.6			
SC READY	Min.	183.0	218.0	254.0	259.0	307.0	245.0			
	Max.	825.0	850.0	875.0	900.0	925.0	950.0			
	Mean	450.6	468.1	479.7	491.2	495.4	503.3			
: Deedu	S.D.	29.9	32.1	34.3	35.3	37.2	38.8			
i-Ready	Min.	293.0	311.0	327.0	306.0	297.0	319.0			
	Max.	533.0	558.0	579.0	585.0	611.0	708.0			
			ELA							
	Ν	3717	3633	3643	4332	4096	3578			
	r	0.87	0.85	0.85	0.84	0.81	0.81			
	Mean	476.3	551.3	587.0	604.8	632.4	654.6			
SC READY	S.D.	131.6	120.2	124.5	124.4	121.0	120.3			
JC NEAD I	Min.	139.0	261.0	250.0	248.0	303.0	316.0			
	Max.	825.0	850.0	875.0	900.0	925.0	950.0			
	Mean	528.6	557.0	574.8	584.7	593.3	603.1			
i-Ready	S.D.	53.7	51.3	53.6	57.0	57.7	56.4			
rreauy	Min.	286.0	336.0	324.0	282.0	288.0	242.0			
	Max.	678.0	714.0	721.0	710.0	749.0	755.0			

Table 7. Descriptive Statistics of SC READY and i-Ready Mathematics and ELA/Reading Scores

SC READY and i-Ready Cut-Score Equivalents

Tables 8 and 9 present the linking results between SC READY and i-Ready spring tests for mathematics and ELA, respectively. The top panel shows the ranges of SC READY scale scores at each proficiency level and grade level in 2022-23. The bottom panel shows the corresponding i-Ready scores.

	SC READY						
Grade	Does Not Meet	Approaches	Meets	Exceeds			
	Expectations	Expectations	Expectations	Expectations			
3	100-359	360-437	438-542	543-825			
4	100-400	401-480	481-562	563-850			
5	100-447	448-534	535-621	622-875			
6	100-452	453-542	543-626	627-900			
7	100-487	488-576 577-648		649-925			
8	100-526	527-614 615-682		683-950			
		Curriculum Ass	ociates i-Ready				
	Does Not Meet	Approaches	Meets	Exceeds			
	Expectations	Expectations	Expectations	Expectations			
3	100-426	427-446	447-468	469-800			
4	100-447	448-468	469-485	486-800			
5	100-453	454-483	484-505	506-800			
6	100-464	465-497 498-519		520-800			
7	100-474	475-508 509-527 52		528-800			
8	100-486	487-520	521-540	541-800			

Table 8. SC READY and i-Ready Cut Score Equivalents (Spring): Mathematics

	SC READY						
Grade	Does Not Meet	Approaches	Meets	Exceeds			
	Expectations	Expectations	Expectations	Expectations			
3	100-358	359-451	452-539	540-825			
4	100-418	419-508	509-591	592-850			
5	100-448	449-556	557-652	653-875			
6	100-454	455-574	576-666	667-900			
7	100-511	-511 512-614 615		704-925			
8	100-536	100-536 537-641 642-736		737-950			
		Curriculum Ass	ociates i-Ready				
	Does Not Meet	Approaches	Meets	Exceeds			
	Expectations	Expectations	Expectations	Expectations			
3	100-488	489-525	526-555	556-800			
4	100-508	509-547	548-576	577-800			
5	100-527	528-569	570-602	603-800			
6	100-530	0 531-580 581-613		614-800			
7	100-548	8 549-595 596-627 62		628-800			
8	100-560	561-604	605-638	639-800			

The bootstrap standard errors of each equivalent i-Ready cut scores are listed in Tables 10 and 11 for Mathematics and ELA, respectively. They are relatively smalls across all linking studies conducted across grades 3-8, test subjects, and performance levels. This gives us evidence supporting the accuracy of the linking results. However, it is also important to keep in mind that linking is a statistical procedure to estimate the equivalence between two sets of test scores and, therefore, linking results contain estimation error.

	Curriculu	ım Associate	s i-Ready Scor	res Reaching	g Performance	Level
Grade	Approaches Expectations		proaches Expectations Meets Expectations			pectations
	Cut Score	S.E.	Cut Score	S.E.	Cut Score	S.E.
3	427	0.94	447	0.69	469	0.65
4	448	0.94	469	0.74	486	0.72
5	454	0.97	484	0.80	506	0.80
6	465	0.97	498	0.85	520	0.90
7	475	0.98	509	0.90	528	1.00
8	487	1.04	521	1.02	541	1.15

Table 10. Equivalent i-Ready Cut Score (Spring) Bootstrap Standard Errors: Mathematics

	g Performance	Level				
Grade	Approaches Expectations		Meets Expectations		Exceeds Expectations	
	Cut Score	S.E.	Cut Score	S.E.	Cut Score	S.E.
3	489	1.84	526	1.36	556	1.22
4	509	1.99	548	1.38	577	1.19
5	528	1.98	570	1.40	603	1.21
6	531	2.04	581	1.35	614	1.21
7	549	2.02	596	1.36	628	1.20
8	561	2.17	605	1.34	639	1.13

Table 11.	. Equivalent i-Re	adv Cut Score	e (Spring)	Bootstrap	Standard Erro	ors: ELA
10010 11	. Equivatorit i rit	aay out ooon		Doototiap	oranidaria Erre	// O. EE/ (

The section above summarizes the linking results from the spring term. Linked i-Ready test scores were also extended from the spring to the fall and winter terms for the scores reaching performance level "Meets Expectations." These scores are summarized in Table 12. Note that these linked scores were calculated based on the mean i-Ready scores within each term among all SC students who took the i-Ready test. Therefore, they reflect expected score equivalents on average among these students and thereby should not be interpreted as accurate estimations for every individual student. The estimation errors around the fall and the winter scores will be larger than those around the spring scores.

Grade -	Mathematics				ELA			
	Fall	Winter	Spring	Fall	Winter	Spring		
3	420	435	447	493	513	526		
4	447	458	469	522	537	548		
5	465	475	484	549	561	570		
6	483	491	498	567	575	581		
7	496	503	509	583	590	596		
8	507	514	521	590	598	605		

Table 12. i-Ready Cut Score Equivalents

Classification Accuracy

Table 13 summarizes results from the classification accuracy statistics described in Table 1. These are diagnostics used to evaluate the accuracy of using the Curriculum Associates i-Ready test scores to classify students as proficient (Meets Expectations and Exceeds Expectations) or not proficient (Does Not Meet Expectations and Approaches Expectations) on the SC READY Mathematics and ELA summative assessments. The overall classification accuracy statistics range from 0.85 to 0.88, and the AUC statistics are above 0.92 at all grade levels. These diagnostics provide convincing evidence of good classification accuracy for using the linked i-Ready scores to estimate students' proficiency status on the SC READY assessments at grades 3-8.

Grade	Overall Classification Accuracy	False Positive Rate	False Negative Rate	Sensitivity	Specificity	Precision	AUC		
Mathematics									
3	0.88	0.16	0.09	0.91	0.84	0.89	0.95		
4	0.88	0.17	0.09	0.91	0.83	0.85	0.95		
5	0.88	0.11	0.14	0.86	0.89	0.88	0.95		
6	0.88	0.13	0.12	0.88	0.87	0.86	0.95		
7	0.88	0.10	0.16	0.84	0.90	0.84	0.94		
8	0.86	0.10	0.23	0.77	0.90	0.81	0.92		
ELA									
3	0.88	0.14	0.11	0.89	0.86	0.90	0.95		
4	0.87	0.15	0.12	0.88	0.85	0.91	0.94		
5	0.86	0.18	0.11	0.89	0.82	0.88	0.94		
6	0.86	0.18	0.12	0.88	0.82	0.89	0.93		
7	0.85	0.18	0.13	0.87	0.82	0.85	0.92		
8	0.85	0.20	0.10	0.90	0.80	0.84	0.92		

Table 13. Classification Accuracy Results

CONCLUSIONS

It is important to note that equipercentile linking is a statistical procedure used to facilitate interpretation of scores on the SC READY Mathematics and ELA assessments and the Curriculum Associates i-Ready Mathematics and Reading assessments. Despite good classification accuracy results from this study, there are still important notes of caution to call out in interpreting and using the linked scores.

First, the two tests are constructed differently with regard to test content specifications, test design, and test purpose. For example, the i-Ready Diagnostic Reading test measures students' reading strategies and skills in the following domains – "High-Frequency Words, Phonics, Phonological Awareness, Reading Comprehension: Literature, Reading Comprehension: Informational Text, and Vocabulary" (Curriculum Associates, 2019, p.11). The SC READY ELA assessment is composed of two subtests – writing and reading, and measures student performance on Reading – Literary Text, Reading – Informational Text, Inquiry, and Writing (SCDE, 2022). The statistical adjustments in linking do not adjust for differences in content. Therefore, scores on the SC READY and Curriculum Associates i-Ready assessments

should not be used interchangeably. The linked scores facilitate comparisons of proficiency status between two assessments, but do not imply equivalence.

Second, while there is a high level of confidence associated with the models, the linked scores are based on a 50% likelihood estimation. This means that not all students who reach a proficiency cut score on i-Ready will necessarily reach the associated score on SC READY. For example, as we saw in Figure 1 above, while the SC READY 642 cut score for "Meets Expectations" in grade 8 corresponds to the i-Ready Reading score of 605 on average, there is a wide range of i-Ready scores among students who reached a 642 on SC READY. The interpretation of the estimated 605 i-Ready Reading score is that 8th grade students with this i-Ready score have a 50% probability of scoring 642 or higher (i.e., reaching "Meets Expectations") on the SC READY ELA test. The results are more accurate for students on average than as associated with individual students.

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