

# The Relationship between *i-Ready Diagnostic* and the 2023 South Carolina College- and Career-Ready Assessments (SC READY)

Curriculum Associates Research Brief | December 2023

#### **Research Overview**

*i-Ready Diagnostic* and the 2023 SC READY are highly correlated—with an average spring correlation of .84 for both English Language Arts (ELA) and Mathematics.

## About the Students Included in the Study

Curriculum Associates conducted a large-scale study on the relationship between the *i-Ready Diagnostic* and the 2023 SC READY for Grades 3–8 in ELA and Mathematics, the primary grades in which *i-Ready* is used in South Carolina for which there is a state summative assessment in place. Students came from a total of 47 school districts, eleven of which are charter agencies (see Table 1). The school districts were selected for participation in the study specifically to be representative of the state in terms of factors such as urbanicity, race/ethnicity, and socioeconomic status (using National School Lunch Program as a proxy). See the appendix for more information on the sample.

Table 1. Demographic Information for South Carolina Districts in Study

District	Schools Participating	Location	Total Enrollment % National School Lunch Program		% English Language Learners <sup>1</sup>
1	36	Suburb (19), Rural (16), City (1)	25,000–29,999	60%	10%
2	47	City (29), Suburb (10), Rural (8)	20,000–24,999	55%	5%
3	25	Suburb (17), Rural (8)	15,000–19,999	35%	5%
4	24	City (9), Town (8), Rural (7)	10,000–14,999	60%	15%
5	15	Suburb (7), Rural (5), City (3)	10,000–14,999	45%	5%
6	22	Rural (15), Town (7)	7,500–7,999	100%	<5%
7	12	Suburb (8), City (2), Rural (2)	7,500–7,999	75%	10%
8	12	Rural (6), Suburb (5), Town (1)	7,000–7,499	45%	5%
9	10	Suburb (6), Rural (4)	6,500–6,999	50%	5%
10	9	Rural (7), Town (2)	6,000–6,499	25%	<5%
11	15	Rural (9), Town (6)	5,500–5,999	90%	5%
12	11	Rural (7), Town (4)	5,000–5,499	90%	5%
13	8	City (7), Suburb (1)	4,500–4,999	80%	5%
14	1	Suburb (1)	4,000–4,499	45%	<5%
15	6	Suburb (4), City (1), Rural (1)	4,000–4,499	75%	10%
16	10	Rural (8), Town (2)	4,000–4,499	85%	10%
17	8	Suburb (3), Rural (3), Town (2)	3,500–3,999	60%	5%
18	6	Rural (5), Town (1)	3,000–3,499	100%	5%
19	4	Rural (4)	2,500–2,999	100%	30%
20	3	Suburb (2), Rural (1)	2,500–2,999	30%	5%
21	7	Rural (4), Town (3)	2,000–2,499	100%	<5%
22	6	Rural (3), Town (3)	2,000–2,499	100%	5%
23	5	Rural (3), Town (2)	1,500–1,999	70%	<5%
24	8	Rural (6), Town (2)	1,500–1,999	100%	*
25	3	Rural (2), Suburb (1)	1,500–1,999	100%	15%

Table 1 (continued).

District	Schools Participating	Location	Total Enrollment % National School Lunch Program		% English Language Learners1	
26	2	Suburb (1), Rural (1)	1,000–1,499	40%	<5%	
27	4	Suburb (3), Rural (1)	1,000–1,499	100%	5%	
28	1	City (1)	1,000–1,499	10%	5%	
29	2	Rural (2)	1,000–1,499	70%	<5%	
30	5	Rural (4), Town (1)	1,000–1,499	100%	<5%	
31	3	Rural (3)	800–899	100%	<5%	
32	2	Rural (2)	700–799	60%	5%	
33	1	Rural (1)	700–799	100%	5%	
34	2	Rural (2)	700–699	100%	<5%	
35	1	Town (1)	600–699	15%	15%	
36	2	Rural (2)	600–699	45%	<5%	
37	1	Rural (1)	600–699	70%	<5%	
38	1	Rural (1)	300–399	100%	<5%	
39	1	Rural (1)	300–399	100%	<5%	
40	1	Town (1)	300–399	100%	5%	
41	1	City (1)	300–399	5%	5%	
42	1	City (1)	300–399	90%	<5%	
43	1	Rural (1)	200–299	100%	5%	
44	1	Town (1)	200–299	100%	5%	
45	1	Rural (1)	200–199	100%	5%	
46	1	Suburb (1)	*	*	5%	
47	1	Suburb (1)	*	*	5%	
Average of Pa	rticipating Districts <sup>2</sup>	62%	6%			
Average acros	s All Districts in the State <sup>2</sup>	62%	6%			

Note: Demographic data are available at the school and district level and may not precisely describe the study sample. District-specific statistics are provided as ranges or rounded to the nearest five percent in order to ensure the anonymity of participating districts.

Data from U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Local Education Agency (School District) Universe Survey", 2021–2022 v.1a. (obtained from <a href="https://nces.ed.gov/ccd/pubagency.asp">https://nces.ed.gov/ccd/pubagency.asp</a>), represent 2021–2022 data, which was the most recent full dataset available from NCES at the time of the study. An asterisk (\*) signifies that NCES has recorded the data as missing, not available, or not reported data items.

<sup>&</sup>lt;sup>1</sup>Data on English language learners is only available at the district level. Data from U.S. Department of Education, National Center for Education Statistics, EDFacts file 141, Data Group 678, 2020–2021, extracted May 10, 2023.

<sup>&</sup>lt;sup>2</sup>Weighted averages.

#### **Correlation Results**

Across all grades and in both subjects, results provide evidence for the strong correlation between *i-Ready Diagnostic* and the SC READY (see Figure 1). Specifically, spring correlations for ELA ranged from .82 for Grades 7 and 8 to .88 for Grade 3, and spring correlations for Mathematics ranged from .79 for Grade 8 to .87 for Grade 4. These correlations, all surpassing the .70 standard generally considered to be strong in education research, provide evidence of a substantial relationship between *i-Ready Diagnostic* and the SC READY.

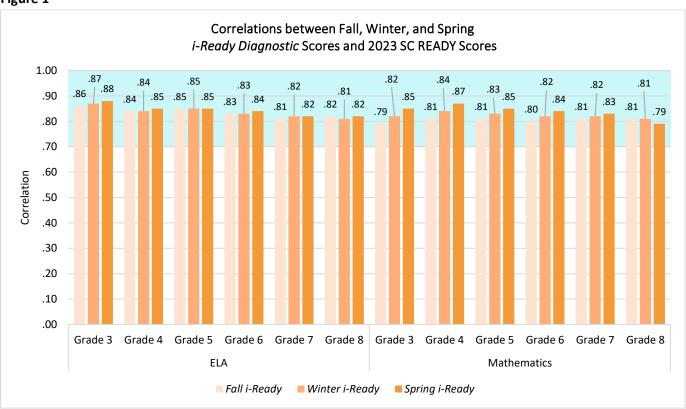


Figure 1

# Why Correlations Matter

Correlations are one of the most commonly used and widely accepted forms of validity evidence. Correlations demonstrate that when students score high on one assessment, they also tend to score high on the other, and similarly, when students score low on one assessment, they also tend to score low on the other. A high correlation between two assessments provides evidence that the two assessments are measuring related constructs.

### **Appendix**

The sample included more than 125,000 students, with between 14,960 and 19,780 students per grade for ELA for the spring *i-Ready* assessment and between 18,956 and 19,833 students per grade for Mathematics for the spring *i-Ready* assessment (see Table 2). These students took both the *i-Ready Diagnostic* and the SC READY during the 2022–2023 school year.

**Table 2. Sample Sizes for Correlations** 

	ELA			Mathematics			
	Fall	Winter	Spring	Fall	Winter	Spring	
Grade 3	18,660	19,309	19,241	18,600	18,897	19,051	
Grade 4	18,869	19,409	19,546	18,806	18,964	19,344	
Grade 5	19,064	19,749	19,780	19,055	19,491	19,530	
Grade 6	15,317	15,257	15,436	18,661	18,896	19,060	
Grade 7	14,628	14,819	14,960	18,686	18,809	18,956	
Grade 8	15,431	15,672	15,711	19,542	19,592	19,833	

Table 3 shows the percentage of students in each race/ethnicity group from the study samples. In both the ELA and Mathematics samples, we have strong representation from students of different racial/ethnic groups.

Table 3. Race/Ethnicity Information for Sample of South Carolina Students in this Study

	American Indian or Alaska Native	Asian	Black	Hawaiian or Pacific Islander	Hispanic	Two or More Races	White
ELA	.2%	1.6%	29.8%	.1%	12.6%	5.8%	49.9%
Mathematics	.3%	1.5%	28.0%	.1%	12.8%	6.0%	51.4%