

The Relationship between *i-Ready Diagnostic* and the 2021 Rhode Island Comprehensive Assessment System (RICAS)

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Research Overview

i-Ready Diagnostic and the 2021 RICAS are highly correlated—with an average spring correlation of **.82** for English Language Arts (ELA) and **.86** for 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 2021 RICAS for Grades 3–8 in ELA and Mathematics, the primary grades in which *i-Ready* is used in Rhode Island for which there is a state summative assessment in place. Students came from a total of 13 school districts, three 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 Rhode Island Districts in Study

District	Schools Participating	Location	Total Enrollment	% National School Lunch Program	% English Language Learners ¹
1	13	Suburb (13)	6,500–6,999	70%	15%
2	15	City (15)	5,500–5,999	35%	<5%
3	9	Suburb (9)	3,000–3,499	45%	5%
4	5	Suburb (5)	2,000–2,499	30%	<5%
5	5	Suburb (5)	2,000–2,499	30%	<5%
6	2	Rural (2)	800–899	15%	<5%
7	2	Suburb (2)	800–899	20%	<5%
8	2	Suburb (2)	400–499	5%	*
9	1	Rural (1)	200–299	25%	*
10	1	Rural (1)	200–299	15%	*
11	1	City (1)	200–299	50%	15%
12	1	Rural (1)	100–199	10%	*
13	1	City (1)	100–199	85%	10%
Average of Participating Districts²				44%	5%
Average Across All Districts in the State²				47%	9%

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.

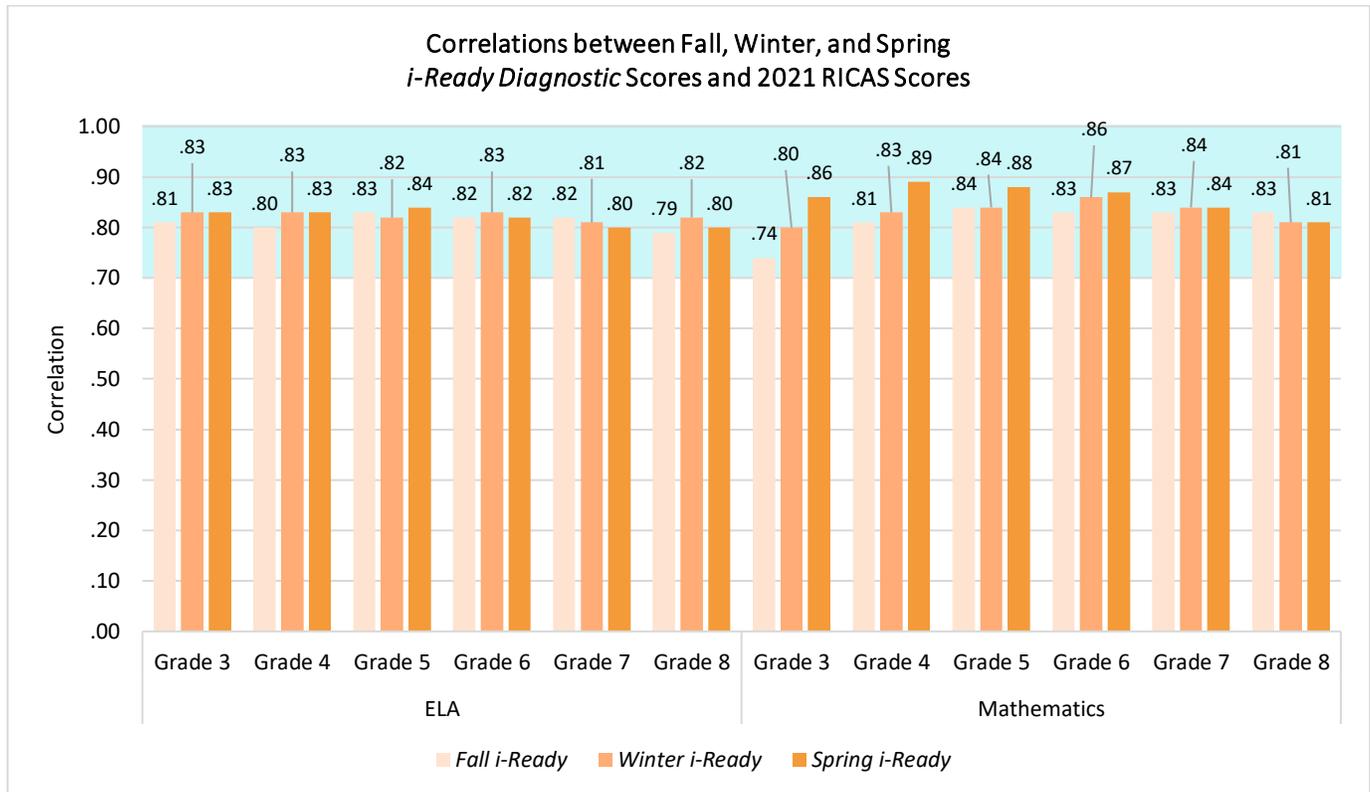
¹Data on English language learners is only available at the district level. ²Weighted averages.

Data from U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), “Local Education Agency (School District) Universe Survey”, 2019–2020 v.1a. (obtained from <https://nces.ed.gov/ccd/pubagency.asp>), represent 2019–2020 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.

Correlation Results

Across all grades and in both subjects, results provide evidence for the strong correlation between *i-Ready Diagnostic* and the RICAS (see Figure 1). Specifically, spring correlations for ELA ranged from .80 for Grades 7 and 8 to .84 for Grade 5, and spring correlations for Mathematics ranged from .81 for Grade 8 to .89 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 RICAS.

Figure 1



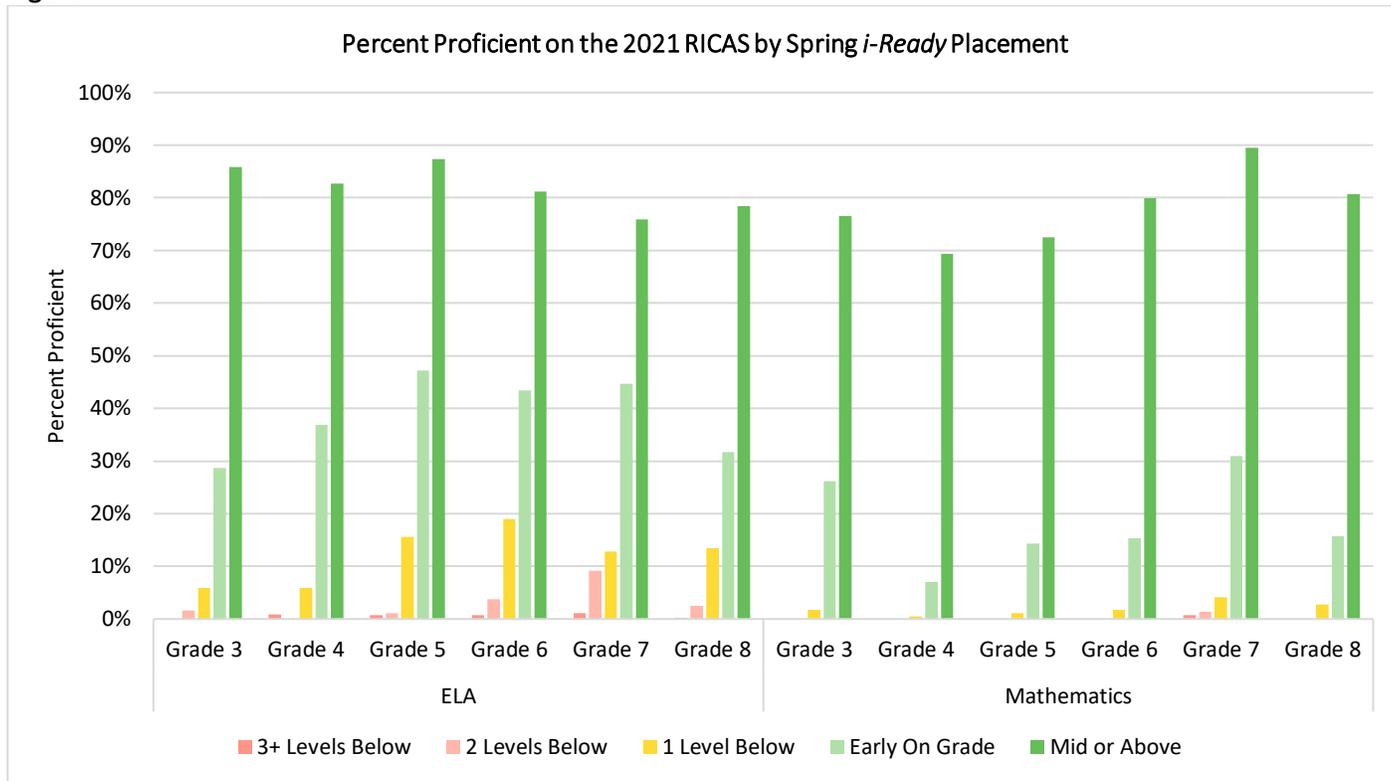
Why Correlations Matter

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.

Percent Proficient by *i-Ready* Placement Results

Across all grades and in both subjects, students who scored Mid On Grade Level or above in *i-Ready* had a high probability of scoring proficient on the RICAS. Specifically, the percentage of students who scored proficient on the RICAS, out of those who placed Mid On Grade Level or above in *i-Ready*, ranged from 69 percent in Grade 4 Mathematics to 90 percent in Grade 7 Mathematics, with an average of 82 percent in ELA and 78 percent in Mathematics.

Figure 2



These results may help Rhode Island educators understand *i-Ready* placement levels in a state-specific context. Rhode Island students who score Mid On Grade Level or above in *i-Ready* have a high probability of scoring proficient on the RICAS. Additionally, students who score Early On Grade Level or even below grade level in *i-Ready* sometimes score proficient on the RICAS but at much lower rates than those who score Mid On Grade Level or above.

Appendix

The sample included more than 10,000 students, with between 1,123 and 1,690 students per grade for ELA for the spring *i-Ready* assessment and between 1,066 and 1,714 students per grade for Mathematics for the spring *i-Ready* assessment (see Table 2). These students took both the *i-Ready Diagnostic* and the RICAS during the 2020–2021 school year. For the purposes of this study, *i-Ready Diagnostic* scores were included only if the student indicated that the test was taken completely in school. As such, the sample sizes tended to increase from fall to winter to spring as more students returned to in-school testing.

Table 2. Sample Sizes for Correlations

	ELA			Mathematics		
	Fall	Winter	Spring	Fall	Winter	Spring
Grade 3	614	789	1,611	642	770	1,585
Grade 4	649	698	1,634	660	730	1,539
Grade 5	608	777	1,690	630	795	1,714
Grade 6	515	394	1,378	578	456	1,463
Grade 7	357	389	1,123	401	295	1,285
Grade 8	373	220	1,242	399	313	1,066

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. Specifically, Black, Hispanic, and White students each made up more than 9 percent of the samples in both ELA and Mathematics.

Table 3. Race/Ethnicity Information for Sample of Rhode Island Students in this Study

	American Indian or Alaska Native	Asian	Black	Hawaiian or Pacific Islander	Hispanic	Two or More Races	White
ELA	.5%	1.7%	9.7%	.2%	13.7%	5.0%	69.3%
Mathematics	.4%	1.7%	10.1%	.2%	14.0%	5.0%	68.6%