

# The Relationship between *i-Ready Diagnostic* and the 2023 State of Texas Assessments of Academic Readiness (STAAR®)

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## Research Overview

*i-Ready Diagnostic* and the 2023 STAAR are highly correlated—with an average spring correlation of **.78** for Reading Language Arts (RLA) and **.76** 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 2023 STAAR for Grades 3–8 in RLA and Mathematics, the primary grades in which *i-Ready* is used in Texas for which there is a state summative assessment in place. Students came from a total of 15 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 Texas Districts in Study**

District	Schools Participating	Location	Total Enrollment	% National School Lunch Program	% English Language Learners <sup>1</sup>
1	37	City (29), Suburb (8)	25,000–29,999	85%	45%
2	29	City (25), Rural (4)	15,000–19,999	75%	35%
3	21	City (20), Rural (1)	10,000–14,999	80%	20%
4	15	Suburb (12), City (3)	9,500–9,999	90%	35%
5	13	City (6), Suburb (5), Rural (2)	9,000–9,499	65%	15%
6	8	Rural (7), Town (1)	6,000–6,499	35%	<5%
7	11	Rural (7), Suburb (2), City (1), Town (1)	5,500–5,999	80%	40%
8	6	Suburb (5), Rural (1)	4,500–4,999	90%	40%
9	9	City (8), Rural (1)	4,000–4,499	75%	25%
10	4	City (4)	3,000–3,499	65%	5%
11	7	Town (6), Rural (1)	2,500–2,999	100%	10%
12	4	Town (3), Rural (1)	2,500–2,999	80%	10%
13	2	Town (2)	1,500–1,999	65%	5%
14	1	Town (1)	400–499	60%	5%
15	1	City (1)	200–299	90%	50%
<b>Average of Participating Districts<sup>2</sup></b>				78%	31%
<b>Average across All Districts in the State<sup>2</sup></b>				61%	19%

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.

<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, ED*Facts* file 141, Data Group 678, 2020–2021, extracted May 10, 2023.

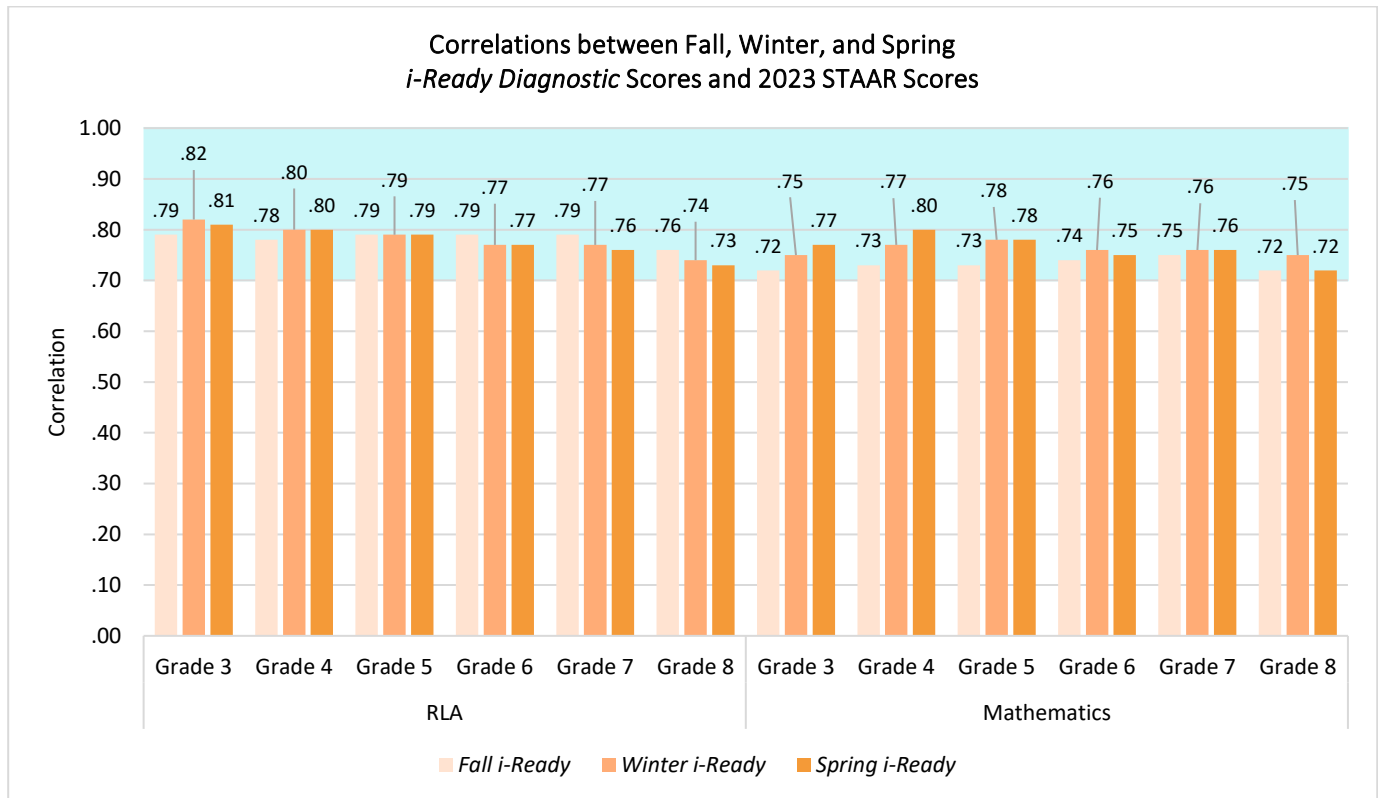
<sup>2</sup>Weighted averages.

Data from U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), “Local Education Agency (School District) Universe Survey”, 2021–2022 v.1a. (obtained from <https://nces.ed.gov/ccd/pubagency.asp>), represent 2021–2022 data, which was the most recent full dataset available from NCES at the time of the study.

## Correlation Results

Across all grades and in both subjects, results provide evidence for the strong correlation between *i-Ready Diagnostic* and the STAAR (see Figure 1). Specifically, spring correlations for RLA ranged from .73 for Grade 8 to .81 for Grade 3, and spring correlations for Mathematics ranged from .72 for Grade 8 to .80 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 STAAR.

Figure 1



Note: In Texas, not all Grade 8 students take the same Mathematics state test. Some students take a Grade 8 Mathematics STAAR while others take an algebra test. This can restrict the sample of students and impact correlations in Mathematics Grade 8.

## 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 56,000 students, with between 1,628 and 4,892 students per grade for RLA for the spring *i-Ready* assessment and between 3,774 and 10,303 students per grade for Mathematics for the spring *i-Ready* assessment (see Table 2). These students took both the *i-Ready Diagnostic* and the STAAR during the 2022–2023 school year.

**Table 2. Sample Sizes for Correlations**

	RLA			Mathematics		
	Fall	Winter	Spring	Fall	Winter	Spring
<b>Grade 3</b>	5,875	5,357	4,892	10,919	10,561	9,990
<b>Grade 4</b>	5,800	5,664	4,812	11,080	10,588	10,303
<b>Grade 5</b>	5,602	5,215	4,750	10,895	10,391	10,083
<b>Grade 6</b>	2,750	2,797	1,813	5,762	5,905	4,931
<b>Grade 7</b>	2,374	1,970	1,723	4,536	4,760	4,385
<b>Grade 8</b>	1,867	1,874	1,628	4,262	4,385	3,774

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

**Table 3. Race/Ethnicity Information for Sample of Texas Students in this Study**

	American Indian or Alaska Native	Asian	Black	Hawaiian or Pacific Islander	Hispanic	Two or More Races	White
<b>RLA</b>	.2%	1.7%	11.3%	.1%	70.8%	2.3%	13.6%
<b>Mathematics</b>	.4%	3.8%	15.5%	.1%	64.5%	1.8%	13.8%