The Relationship between *i-Ready Diagnostic* and the 2022 State of Texas Assessments of Academic Readiness (STAAR®)

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Research Overview

i-Ready Diagnostic and the 2022 STAAR are highly correlated—**with an average spring correlation of .78 for Reading and .80 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 2022 STAAR for Grades 3–8 in Reading and Grades 3–7 in 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 7 school districts, one of which is a charter agency (see Table 1). The school districts were selected for participation in the study specifically to be generally 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[1]
1	37	City (29), Suburb (8)	25,000–29,999	90%	45%
2	15	Suburb (12), City (3)	9,500–9,999	90%	35%
3	18	City (18)	9,000–9,499	75%	35%
4	11	Rural (7), Suburb (2), City (1),Town (1)	6,000–6,499	80%	40%
5	4	City (4)	3,000–3,499	70%	5%
6	4	Town (4)	1,500–1,999	65%	5%
7	2	Town (2)	1,500–1,999	65%	5%
Average of Participating Districts[2]				83%	36%
Average across All Districts in the State[2]				60%	19%

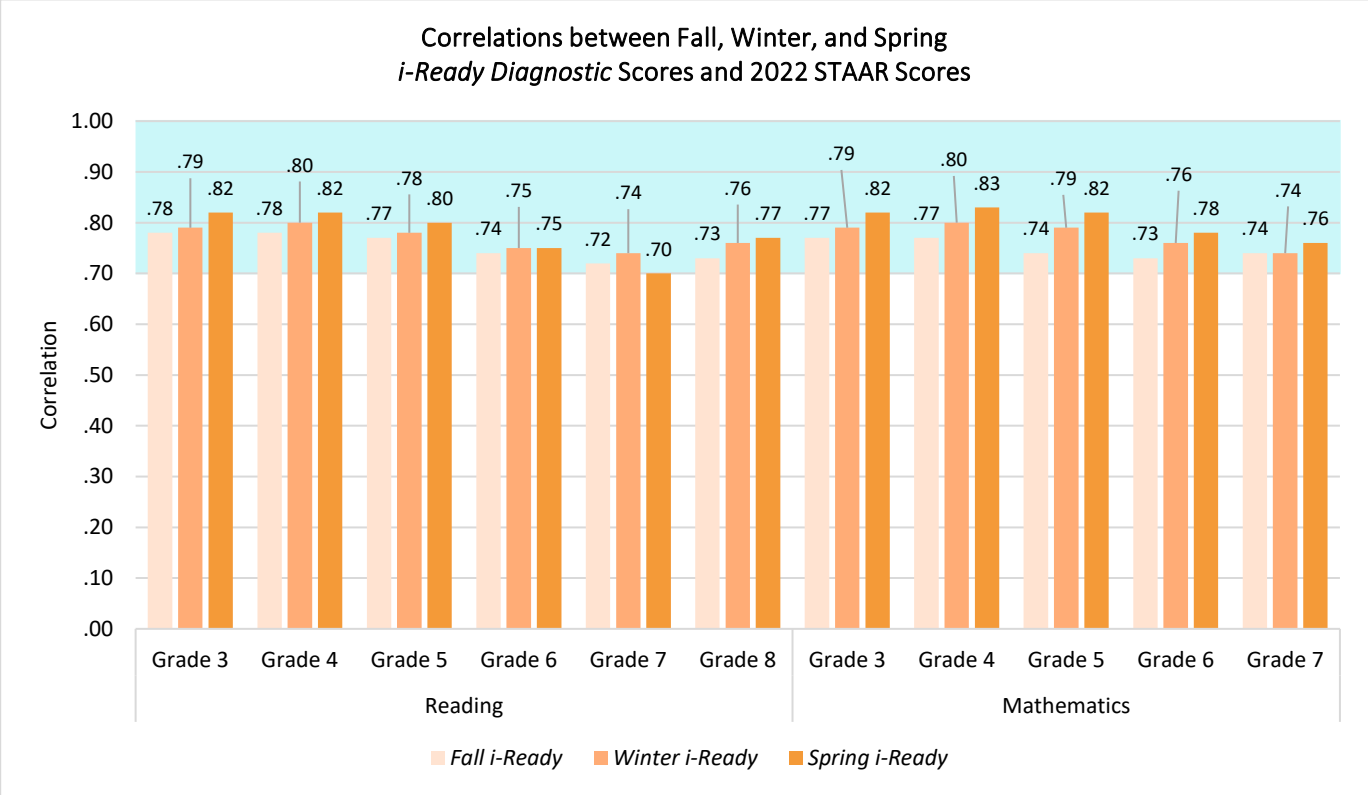
Note: Demographic data are available at the school and district level and may not precisely describe the study sample. District-specific statistics are provided as ranges or rounded to the nearest five percent in order to ensure the anonymity of participating districts.
[1]Data on English language learners is only available at the district level.
[2]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", 2020–2021 v.1a. (obtained from https://nces.ed.gov/ccd/pubagency.asp), represent 2020–2021 data, which was the most recent full dataset available from NCES at the time of the study.

*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. To avoid confusion, we have omitted Mathematics grade 8 from this report.

Correlation Results

Across all grades and subjects included in the study, results provide evidence for the strong correlation between *i-Ready Diagnostic* and the STAAR (see Figure 1). Specifically, spring correlations for Reading ranged from .70 for Grade 7 to .82 for Grades 3 and 4, and spring correlations for Mathematics ranged from .76 for Grade 7 to .83 for Grade 4. These correlations, **all meeting or 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. To avoid confusion, we have omitted Mathematics grade 8 from this report.

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 28,000 students, with between 451 and 1,944 students per grade for Reading for the spring *i-Ready* assessment and between 3,074 and 6,166 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 2021–2022 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.

Table 2. Sample Sizes for Correlations

	Reading			Mathematics		
	Fall	Winter	Spring	Fall	Winter	Spring
Grade 3	1,464	1,561	1,944	4,545	4,738	6,021
Grade 4	1,554	1,684	1,922	4,669	4,857	6,166
Grade 5	1,616	1,763	1,831	4,601	4,756	6,097
Grade 6	603	511	451	3,299	3,319	3,361
Grade 7	587	670	540	3,122	3,178	3,074
Grade 8	532	608	520	N/A	N/A	N/A

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. To avoid confusion, we have omitted Mathematics grade 8 from this report.

Table 3 shows the percentage of students in each race/ethnicity group from the study samples. In both the Reading 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
Reading	.2%	1.7%	4.8%	.1%	83.7%	1.0%	8.5%
Mathematics	.5%	5.6%	17.3%	.1%	68.9%	1.0%	6.6%