

# The Relationship between *i-Ready Diagnostic* and the 2022 Georgia Milestones Assessment System (GMAS)

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## Research Overview

*i-Ready Diagnostic* and the 2022 GMAS 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 2022 GMAS for Grades 3–8 in ELA and Mathematics, the primary grades in which *i-Ready* is used in Georgia for which there is a state summative assessment in place. Students came from a total of 11 school districts, all public and none of which were 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 Georgia Districts in Study**

District	Schools Participating	Location	Total Enrollment	% National School Lunch Program	% English Language Learners <sup>1</sup>
1	104	Suburb (103), Rural (1)	100,000+	55%	15%
2	82	Suburb (63), City (16), Rural (3)	55,000–59,999	45%	10%
3	31	Suburb (23), Rural (8)	25,000–29,999	30%	10%
4	43	City (28), Suburb (13), Rural (2)	20,000–24,999	60%	5%
5	26	Suburb (17), Rural (8), Town (1)	15,000–19,999	30%	<5%
6	13	Rural (10), Town (3)	8,000–8,499	65%	<5%
7	9	Suburb (6), Rural (3)	4,500–4,999	70%	10%
8	7	Rural (5), Town (2)	3,500–3,999	70%	5%
9	2	Town (2)	2,500–2,999	55%	5%
10	5	Rural (4), Town (1)	2,500–2,999	90%	5%
11	3	Rural (3)	1,500–1,999	100%	10%
<b>Average of Participating Districts<sup>2</sup></b>				50%	11%
<b>Average across All Districts in the State<sup>2</sup></b>				56%	7%

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.

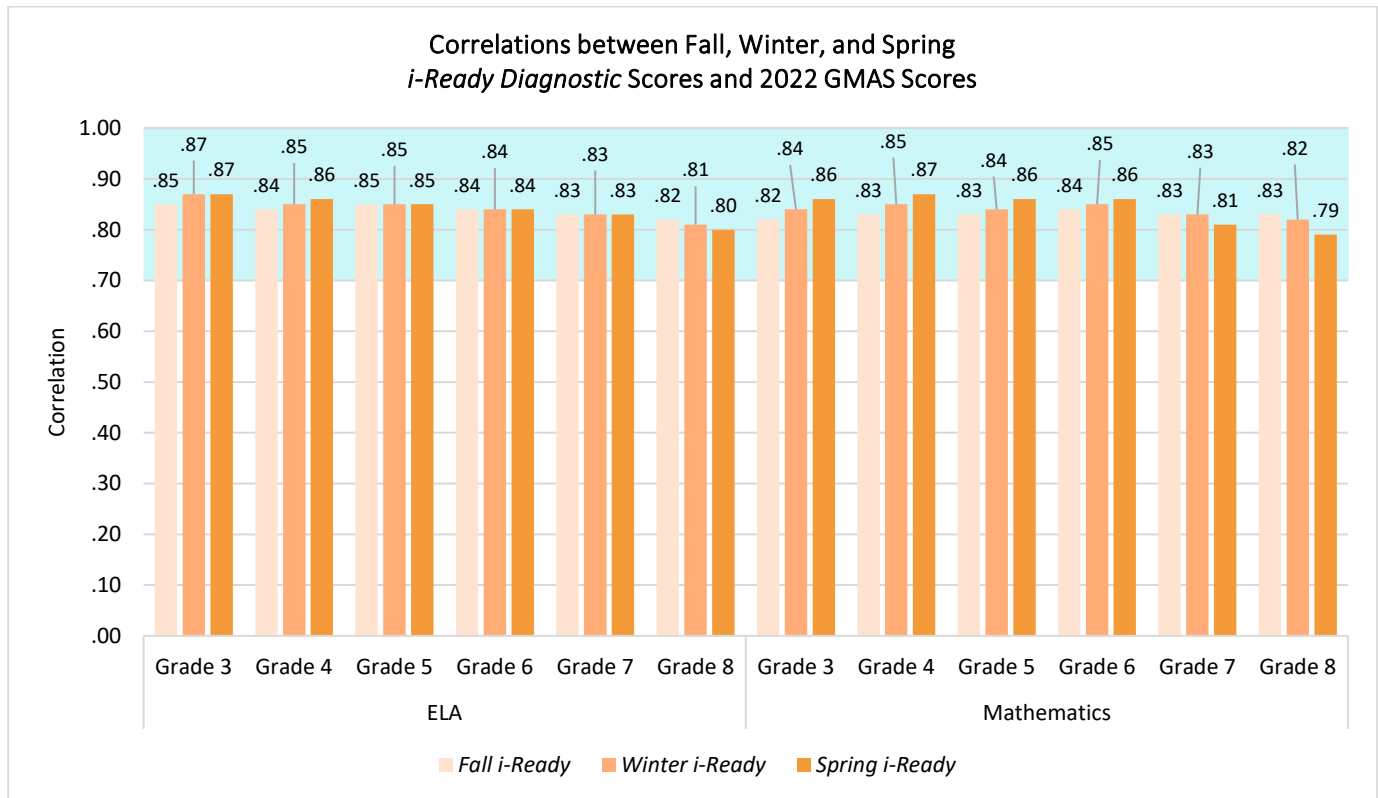
<sup>2</sup>Weighted averages.

Data from U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), “Local Education Agency (School District) Universe Survey”, 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.

## Correlation Results

Across all grades and in both subjects, results provide evidence for the strong correlation between *i-Ready Diagnostic* and the GMAS (see Figure 1). Specifically, spring correlations for ELA ranged from .80 for Grade 8 to .87 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 GMAS.

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 114,000 students, with between 8,698 and 11,759 students per grade for ELA for the spring *i-Ready* assessment and between 9,374 and 18,973 students per grade for Mathematics for the spring *i-Ready* assessment (see Table 2). These students took both the *i-Ready Diagnostic* and the GMAS 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**

	ELA			Mathematics		
	Fall	Winter	Spring	Fall	Winter	Spring
<b>Grade 3</b>	11,489	11,915	11,759	19,208	20,428	18,881
<b>Grade 4</b>	11,336	11,753	11,723	19,263	20,618	18,973
<b>Grade 5</b>	11,296	11,786	11,246	19,253	20,545	17,676
<b>Grade 6</b>	10,457	10,687	9,341	12,537	13,590	10,285
<b>Grade 7</b>	10,709	10,547	8,982	12,941	13,284	10,207
<b>Grade 8</b>	10,673	10,539	8,698	12,180	12,833	9,374

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 Georgia Students in this Study**

	American Indian or Alaska Native	Asian	Black	Hawaiian or Pacific Islander	Hispanic	Two or More Races	White
<b>ELA</b>	.3%	7.6%	37.3%	.1%	15.6%	4.3%	34.9%
<b>Mathematics</b>	.3%	8.2%	33.6%	.0%	21.1%	4.5%	32.3%