

# The Relationship Between *i-Ready*<sup>®</sup> Diagnostic and the 2019 Mississippi Academic Assessment Program (MAAP)

Curriculum Associates Research Brief | April 2020

## Research Overview

*i-Ready Diagnostic* and the 2019 MAAP are highly correlated—with an average spring correlation of .79 for English Language Arts and .85 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 2019 MAAP for grades 3–8, the primary grades in which *i-Ready* is used in Mississippi for which there is a state summative assessment in place. The sample (see Table 2) included more than 23,000 students, with between 2,820 and 3,770 students per grade for ELA for the spring *i-Ready* assessment and between 2,976 and 3,624 students per grade for mathematics for the spring *i-Ready* assessment. These students took both the *i-Ready Diagnostic* and MAAP during the 2018-2019 school year. Students came from a total of 13 school districts (see Table 1; all public and none of which were charter agencies), and these 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.

**Table 1. Demographic Information for Mississippi Districts in Study**

District	Schools Participating	Location	Total Enrollment	% Non-Caucasian	% National School Lunch Program	% English Language Learners <sup>1</sup>
1	14	City (9), Suburb (3), Rural (2)	5,000 - 5,499	65%	100%	10%
2	9	City (9)	4,500 - 4,999	65%	75%	5%
3	8	Rural (6), Town (2)	4,000 - 4,499	35%	60%	<5%
4	8	Town (8)	3,000 - 3,499	100%	100%	<5%
5	7	City (7)	3,000 - 3,499	95%	100%	5%
6	5	Rural (4), Town (1)	2,500 - 2,999	50%	85%	<5%
7	4	Town (3), Rural (1)	2,500 - 2,999	55%	85%	<5%
8	6	Rural (6)	2,000 - 2,499	5%	70%	<5%
9	5	Town (5)	2,000 - 2,499	90%	100%	<5%
10	4	Suburb (4)	2,000 - 2,499	30%	55%	<5%
11	2	Rural (1), Town (1)	1,500 - 1,999	40%	70%	*
12	3	Suburb (2), Rural (1)	1,000 - 1,499	40%	65%	<5%
13	2	Suburb (2)	900 - 999	80%	100%	5%
<b>Average of Participating Districts<sup>2</sup></b>				59%	82%	3%
<b>Average Across All Districts in the State<sup>2</sup></b>				56%	75%	3%

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.

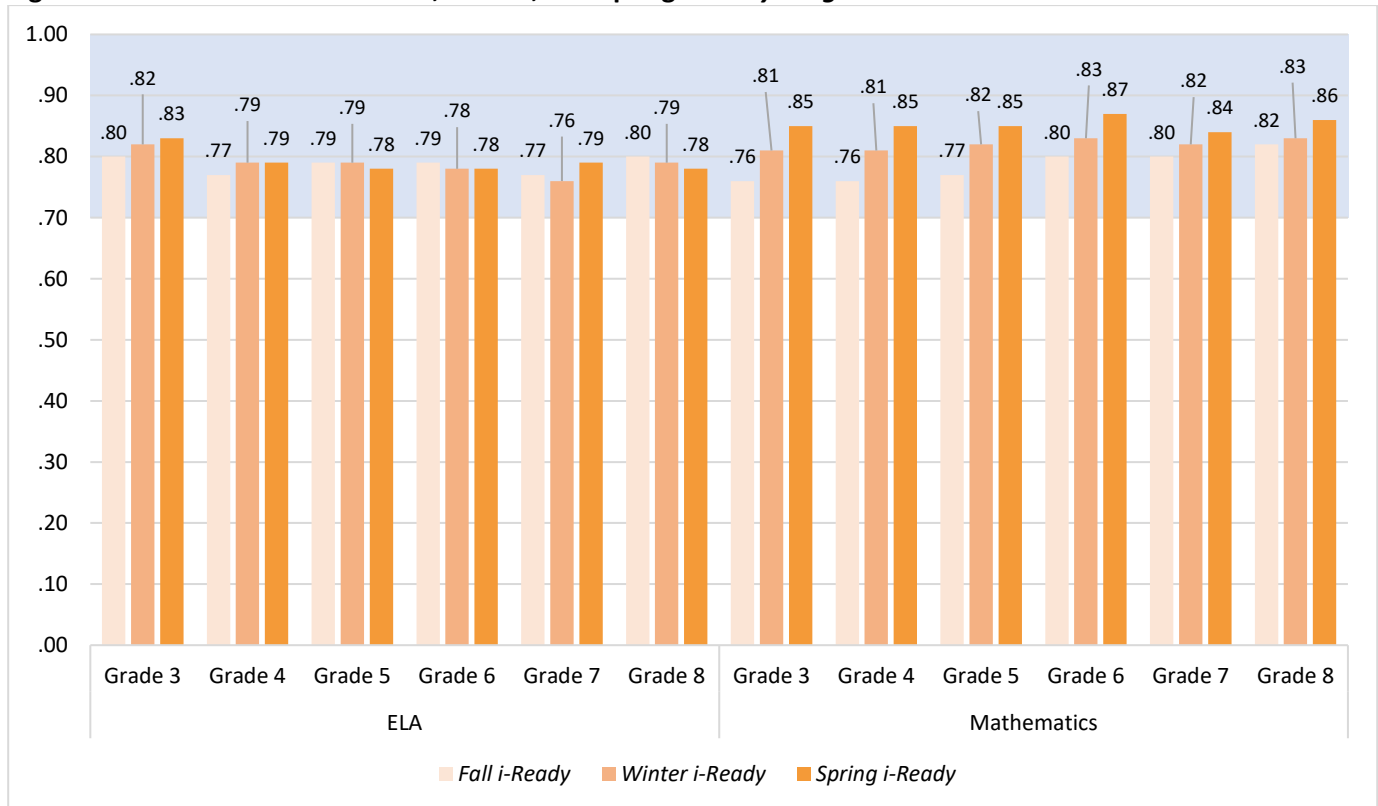
<sup>2</sup>Weighted averages.

Data from U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), “Local Education Agency (School District) Universe Survey”, 2017-2018 v.1a. (obtained from <https://nces.ed.gov/ccd/pubagency.asp>), represent 2017-2018 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 MAAP (see Figure 1). Specifically, spring correlations for ELA ranged from .78 for grades 5, 6, and 8 to .83 for grade 3, and for mathematics ranged from .84 for grade 7 to .87 for grade 6. These correlations—all surpassing the **.70 standard set by the National Center on Intensive Intervention for screening tools**—provide evidence of a strong relationship between *i-Ready Diagnostic* and MAAP.

**Figure 1. Correlations Between Fall, Winter, and Spring *i-Ready Diagnostic* Scores and 2019 MAAP Scores**



**Table 2. Sample Sizes for Correlations**

	ELA						Mathematics					
	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
<b>Fall</b>	3,639	3,879	4,027	3,886	3,767	3,392	3,626	3,878	4,023	3,886	3,762	3,389
<b>Winter</b>	3,752	3,855	3,849	3,898	3,691	3,331	3,655	3,828	4,096	3,758	3,813	3,332
<b>Spring</b>	3,087	3,770	3,653	3,427	3,238	2,820	3,184	3,552	3,421	3,624	3,464	2,976

## 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 similar constructs.

© Curriculum Associates, LLC. (2020, April 3). *The Relationship Between i-Ready® Diagnostic and the 2019 Mississippi Academic Assessment Program (MAAP)* (Curriculum Associates Research Report No. RR 2020-23). North Billerica, MA: Author.