The Relationship between *i-Ready Diagnostic* and the 2022–2023 Florida Assessment of Student Thinking Progress Monitoring 1 and 2 (FAST PM1 and PM2)

Curriculum Associates Research Brief | June 2023

Research Overview

i-Ready Diagnostic and the 2022–2023 FAST PM1 are highly correlated—**with an average fall correlation of .79 for English Language Arts (ELA) Reading and .81 for Mathematics**. Similarly, *i-Ready Diagnostic* and the 2022–2023 FAST PM2 are highly correlated—**with an average winter correlation of .80 for ELA Reading 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 2022–2023 FAST PM1 and PM2 for Grades 3–8 in ELA Reading and Grades 3–7 in Mathematics, the primary grades in which *i-Ready* is used in Florida for which there is a state assessment in place.* Students came from a total of nine school districts, two of which are charter agencies (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 the National School Lunch Program as a proxy). See the Appendix for more information on the sample.

Table 1. Demographic Information for Florida Districts in Study

District	Schools Participating	Location	Total Enrollment	% National School Lunch Program	% English Language Learners[1]
1	279	Suburb (211), City (63), Rural (5)	100,000+	75%	20%
2	153	Suburb (87), City (53), Rural (13)	90,000–94,999	70%	10%
3	68	Suburb (31), City (30), Rural (7)	50,000–54,999	55%	15%
4	29	Suburb (17), City (9), Rural (3)	25,000–29,999	55%	15%
5	38	Suburb (32), City (5), Rural (1)	25,000–29,999	50%	5%
6	31	City (16), Suburb (13), Rural (2)	20,000–24,999	70%	10%
7	41	Suburb (25), City (14), Rural (2)	15,000–19,999	60%	15%
8	17	Suburb (8), City (4), Rural (4),Town (1)	10,000–14,999	70%	5%
9	6	Rural (6)	2,000–2,499	70%	5%
Average of Participating Districts[2]				68%	14%
Average across All Districts in the State[2]				55%	10%

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 the U.S. Department of Education, National Center for Education Statistics (NCES), Common Core of Data, and 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 Florida, not all Grade 8 students take the same Mathematics state test. Some students take a Grade 8 Mathematics test while others take an Algebra test. To avoid confusion, we have omitted Mathematics Grade 8 from this report.

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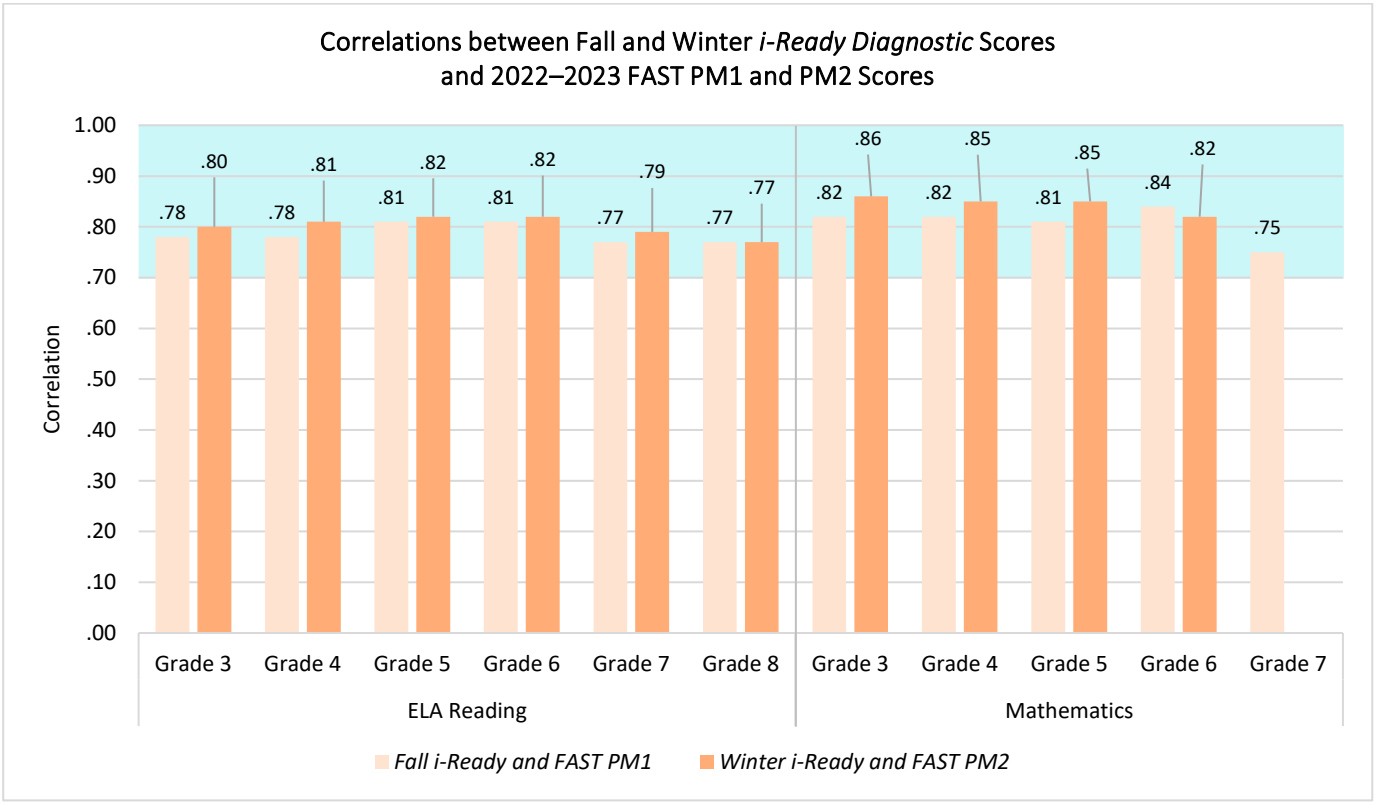
Correlation Results

Across all grades and in both subjects, results provide evidence for the strong correlation between *i-Ready Diagnostic* and the FAST PM1 and PM2 (see Figure 1). Specifically, correlations between fall *i-Ready* scores and FAST PM1 scores ranged from .77 to .81 for ELA Reading and from .75 to .84 for Mathematics. Correlations between winter *i-Ready* scores and FAST PM2 scores ranged from .77 to .82 for ELA Reading and from .82 to .86 for Mathematics. 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 FAST Progress Monitoring assessments.

Figure 1



Note: In Florida, not all Grade 8 students take the same Mathematics state test. Some students take a Grade 8 Mathematics test while others take an Algebra test. To avoid confusion, we have omitted Mathematics Grade 8 from this report. Additionally, winter results for Mathematics Grade 7 are omitted because a large proportion of students were accelerated and did not take the Mathematics FAST on grade, or did not take *i-Ready* in winter, significantly reducing the sample and restricting the range of the correlations.

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.

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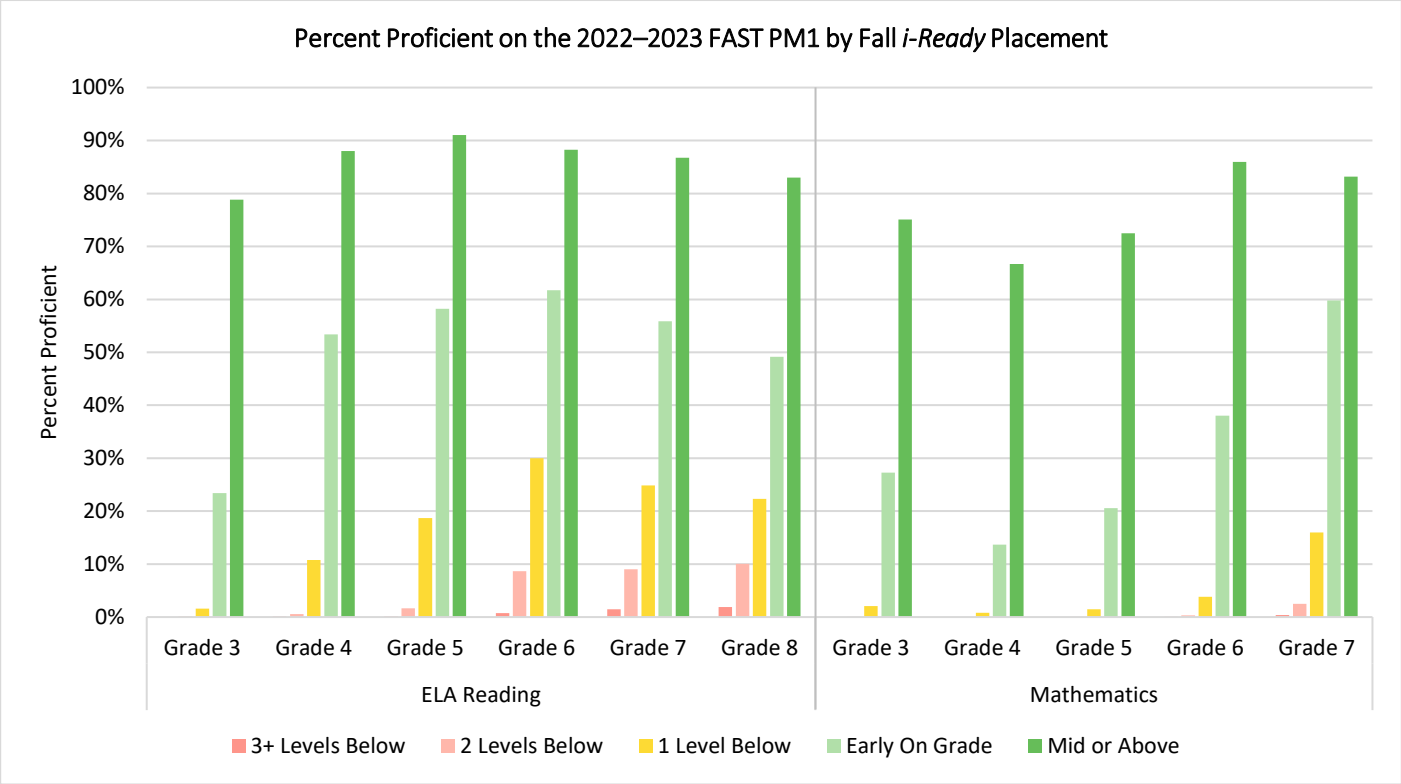
FAST PM1 Percent Proficient by *i-Ready* Placement Results

Across all grades and in both subjects, students who scored Mid On Grade Level or above on the fall *i-Ready* assessment had a high probability of scoring proficient on the FAST PM1. In ELA Reading, the percentage of students who scored proficient on the FAST PM1, out of those who placed Mid On Grade Level or above in *i-Ready*, ranged from 79 percent in Grade 3 to 91 percent in Grade 5, with an average of 86 percent. In Mathematics, the percentage of students who scored proficient on the FAST PM1, out of those who placed Mid On Grade Level or above in *i-Ready*, ranged from 67 percent in Grade 4 to 86 percent in Grade 6, with an average of 77 percent.

Figure 2



Note: In Florida, not all Grade 8 students take the same Mathematics state test. Some students take a Grade 8 Mathematics test while others take an Algebra test. To avoid confusion, we have omitted Mathematics Grade 8 from this report.

These results may help Florida educators understand *i-Ready* placement levels in a state-specific context. Florida students who score Mid On Grade Level or above in the fall *i-Ready* assessment have a high probability of scoring proficient on the FAST PM1. Additionally, students who score Early On Grade Level or even below grade level in the fall *i-Ready* assessment sometimes score proficient on the FAST PM1, but at much lower rates than those who score Mid On Grade Level or above.

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Appendix

The sample included more than 255,000 students, with between 27,760 and 52,525 students per grade for ELA Reading for the fall *i-Ready* assessment and between 24,563 and 51,137 students per grade for Mathematics for the fall *i-Ready* assessment (see Table 2). Students in the fall sample took both the fall *i-Ready Diagnostic* and the FAST PM1 during the 2022–2023 school year. Students in the winter sample took both the winter *i-Ready Diagnostic* and the FAST PM2 during the 2022–2023 school year.

Table 2. Sample Sizes for Correlations

	ELA Reading		Mathematics	
	Fall	Winter	Fall	Winter
Grade 3	52,525	48,126	51,137	45,897
Grade 4	45,778	41,781	44,534	39,954
Grade 5	46,929	42,683	44,105	39,876
Grade 6	30,400	22,571	30,707	11,054
Grade 7	27,760	20,867	24,563	N/A
Grade 8	28,544	22,137	N/A	N/A

Note: In Florida, not all Grade 8 students take the same Mathematics state test. Some students take a Grade 8 Mathematics test while others take an Algebra test. To avoid confusion, we have omitted Mathematics Grade 8 from this report. Additionally, winter results for Mathematics Grade 7 are omitted because a large proportion of students were accelerated and did not take the Mathematics FAST on grade, or did not take *i-Ready* in winter, significantly reducing the sample and restricting the range of the correlations.

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

Table 3. Race/Ethnicity Information for Sample of Florida Students in This Study

	American Indian or Alaska Native	Asian	Black	Hawai'ian or Pacific Islander	Hispanic	Two or More Races	White
ELA Reading	.1%	2.1%	20.4%	.1%	55.0%	3.2%	19.1%
Mathematics	.1%	2.1%	20.9%	.0%	54.4%	3.3%	19.3%

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