

# The Relationship between *i-Ready Diagnostic* and the 2023 New York State Testing Program (NYSTP)

Curriculum Associates Research Brief | July 2024

## **Research Overview**

*i-Ready Diagnostic* and the 2023 NYSTP are highly correlated—with an average spring correlation of .79 for English Language Arts (ELA) and .84 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 NYSTP for Grades 3–8 in ELA and Mathematics, the primary grades in which *i-Ready* is used in New York for which there is a state summative assessment in place. Students came from a total of 26 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 New York Districts in Study

District	Schools Participating	Location	Total Enrollment	% National School Lunch Program	% English Language Learners1	
1	39	City (39)	20,000–24,999	70%	15%	
2	36	City (36)	15,000–19,999	90%	15%	
3	15	Suburb (15)	7,500–7,999	75%	15%	
4	12	City (12)	6,500–6,999	80%	15%	
5	11	Suburb (10), Rural (1)	6,000–6,499	25%	<5%	
6	8	Suburb (5), Rural (3)	4,000–4,499	30%	5%	
7	3	Suburb (3)	3,500–3,999	30%	5%	
8	6	Suburb (5), Rural (1)	3,000–3,499	20%	5%	
9	7	Suburb (7)	3,000–3,499	30%	5%	
10	5	Suburb (5)	3,000–3,499	30%	<5%	
11	6	Suburb (6)	2,500–2,999	35%	5%	
12	4	Suburb (4)	2,500–2,999	45%	20%	
13	8	Suburb (8)	2,000–2,499	40%	5%	
14	2	Suburb (2)	2,000–2,499	35%	<5%	
15	4	Town (4)	1,500–1,999	50%	<5%	
16	3	Suburb (3)	1,000–1,499	25%	<5%	
17	4	City (4)	1,000–1,499	45%	<5%	
18	4	Suburb (4)	1,000–1,499	70%	<5%	
19	4	Suburb (3), Rural (1)	1,000–1,499	25%	<5%	
20	3	Suburb (3)	1,000–1,499	55%	10%	
21	4	Town (3), Rural (1)	1,000–1,499	30%	<5%	
22	2	Rural (2)	1,000–1,499	40%	5%	
23	3	Rural (2), Town (1)	1,000–1,499	35%	*	
24	2	Suburb (2)	900–999	25%	<5%	
25	1	Rural (1)	900–999	30%	*	
26	2	Suburb (2)	600–699	15%	5%	

#### Table 1 (continued).

Average of Participating Districts <sup>2</sup>	56%	10%
Average across All Districts in the State <sup>2</sup>	53%	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.

<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, EDFacts file 141, Data Group 678, 2020–2021, extracted May 10, 2023.

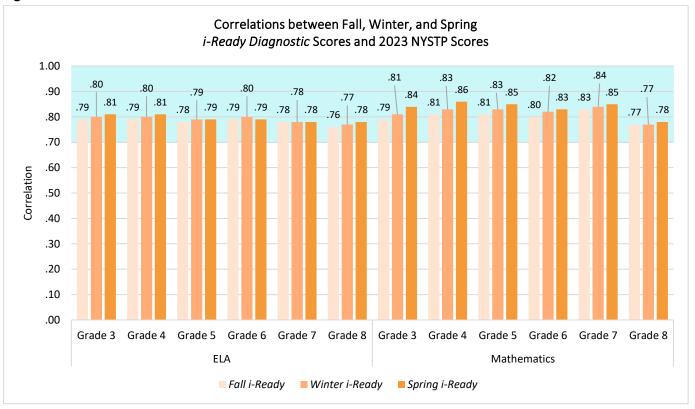
<sup>2</sup>Weighted averages.

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 <a href="https://nces.ed.gov/ccd/pubagency.asp">https://nces.ed.gov/ccd/pubagency.asp</a>), represent 2021–2022 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 the NYSTP (see Figure 1). Specifically, spring correlations for ELA ranged from .78 for Grades 7 and 8 to .81 for Grades 3 and 4, and spring correlations for Mathematics ranged from .78 for Grade 8 to .86 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 NYSTP.

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 56,000 students, with between 5,436 and 7,837 students per grade for ELA for the spring *i-Ready* assessment and between 5,395 and 9,258 students per grade for Mathematics for the spring *i-Ready* assessment (see Table 2). These students took both the *i-Ready Diagnostic* and the NYSTP during the 2022–2023 school year.

**Table 2. Sample Sizes for Correlations** 

		ELA		Mathematics			
	Fall	Winter	Spring	Fall	Winter	Spring	
Grade 3	7,680	7,861	7,837	9,154	9,252	9,258	
Grade 4	7,616	7,730	7,680	9,134	9,263	9,222	
Grade 5	7,414	7,532	7,518	8,941	9,033	9,109	
Grade 6	7,612	7,574	7,519	8,701	8,797	8,556	
Grade 7	6,772	6,268	6,283	7,918	7,917	7,687	
Grade 8	6,120	5,501	5,436	5,508	5,612	5,395	

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 New York Students in this Study

	American Indian or Alaska Native	Asian	Black	Hawaiian or Pacific Islander	Hispanic	Two or More Races	White
ELA	.5%	8.1%	25.9%	.1%	21.6%	4.3%	39.5%
Mathematics	.4%	8.1%	24.0%	.1%	24.0%	4.2%	39.1%