The Relationship between *i-Ready Diagnostic* and the 2024 Arkansas Teaching, Learning & Assessment System (ATLAS)

Correlation Brief | March 2025

Research Overview

i-Ready Diagnostic and the 2024 ATLAS are highly correlated, with an average spring correlation of .79 for English Language Arts (ELA) and .86 for Mathematics.

Sample Summary

Curriculum Associates conducted a large-scale study on the relationship between the *i-Ready Diagnostic* and the 2024 ATLAS for Grades 3–8 in ELA and Mathematics, the primary grades in which *i-Ready* is used in Arkansas for which there is a state summative assessment in place. Students came from a total of 15 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 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 Arkansas Districts in Study

District	Schools Participating	Location	Total Enrollment	% National School Lunch Program	% English Language Learners[1]
1	23	City (20), Suburb (2), Rural (1)	9,000–9,499	80%	20%
2	14	City (13), Rural (1)	6,500–6,999	40%	10%
3	5	City (4), Rural (1)	2,500–2,999	100%	10%
4	5	Town (5)	2,500–2,999	50%	5%
5	6	Suburb (6)	2,000–2,499	100%	<5%
6	2	Rural (1), Town (1)	1,000–1,499	45%	<5%
7	3	Town (3)	1,000–1,499	90%	5%
8	4	Town (3), Rural (1)	1,000–1,499	100%	<5%
9	2	Town (2)	1,000–1,499	100%	5%
10	2	Rural (1), Town (1)	700–799	100%	5%
11	1	Rural (1)	600–699	50%	<5%
12	2	Rural (2)	600–699	100%	<5%
13	2	Rural (1), Town (1)	600–699	100%	<5%
14	2	Rural (2)	600–699	100%	<5%
15	2	Rural (1), Town (1)	600–699	100%	5%
Average of Participating Districts[2]				**84%**	**5%**
Average across All Districts in the State[2]				**64%**	**13%**

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.

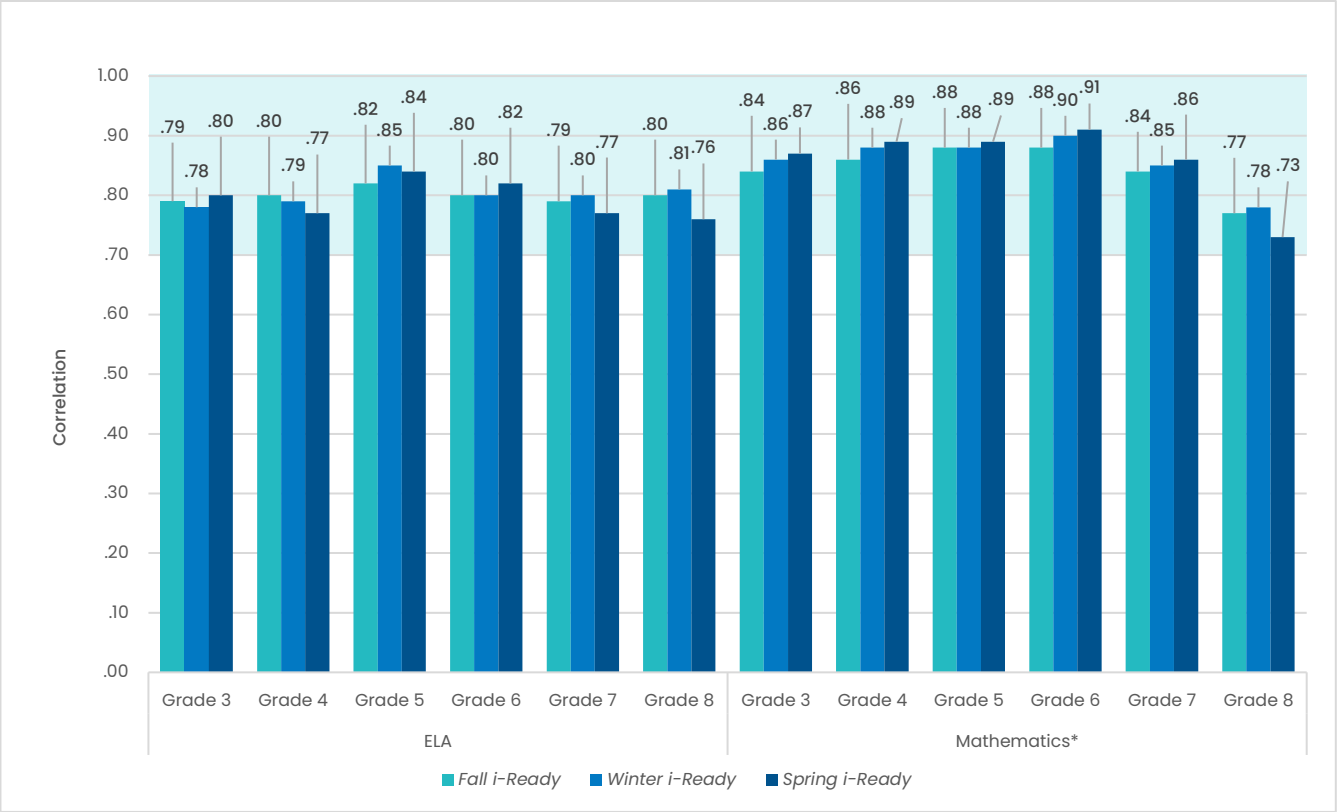
[1]Data on English language learners is only available at the district level. Data from U.S. Department of Education, National Center for Education Statistics, ED*Facts* file 141, Data Group 678, 2022–2023, extracted November 14, 2024. [2]Weighted averages.

Data from U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Local Education Agency (School District) Universe Survey", 2022–2023 v.1a. (obtained from https://nces.ed.gov/ccd/pubagency.asp), represent 2022–2023 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 ATLAS (see Figure 1). Specifically, spring correlations for ELA ranged from .76 for Grade 8 to .84 for Grade 5, and spring correlations for Mathematics ranged from .73 for Grade 8 to .91 for Grade 6. 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 ATLAS.

Figure 1: Correlations Between *i-Ready Diagnostic* Scores and 2024 ATLAS Scores



*Correlations were calculated with students whose tested grade matched their chronological grade. Off-grade testing in Mathematics restricted the range of scores in the samples and may have contributed to suppressed correlations, particularly in Grade 8.

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 17,000 students, with between 620 and 1,074 students per grade for ELA for the spring *i-Ready* assessment and between 951 and 3,050 students per grade for Mathematics for the spring *i-Ready* assessment (see Table 2). These students took both the *i-Ready Diagnostic* and the ATLAS during the 2023–2024 school year.

Table 2. Sample Sizes for Correlations

	ELA			Mathematics		
	Fall	**Winter**	**Spring**	**Fall**	**Winter**	**Spring**
Grade 3	1,190	1,262	1,074	2,607	3,264	3,000
Grade 4	1,132	1,210	979	2,666	3,130	3,050
Grade 5	1,186	1,183	1,026	2,637	3,232	2,955
Grade 6	1,147	1,268	1,070	2,722	3,139	2,850
Grade 7	782	821	620	1,495	1,730	1,432
Grade 8	813	818	630	1,044	1,179	951

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

Table 3. Race/Ethnicity Information for Sample of Arkansas Students in this Study

	American Indian or Alaska Native	Asian	Black	Hawaiian or Pacific Islander	Hispanic	Two or More Races	White
ELA	0.4%	1.9%	46.5%	0.0%	19.10%	4.3%	27.8%
Mathematics	0.4%	2.5%	21.6%	4.0%	18.3%	7.4%	49.4%