



# Using *i-Ready* during Summer School

ESSA Level 3 Evidence

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## Study Overview

This pilot study examines how the fall assessment scores of students who used *i-Ready Personalized Instruction* as part of a summer-learning program differed from students who did not participate in such a program. Elementary school students in kindergarten through fourth grade who used *i-Ready* instruction over the summer returned to school the following fall with higher *i-Ready Diagnostic* scores than students who did not use *i-Ready* instruction over the summer. This study meets Every Student Succeeds Act (ESSA) Level 3 (Promising) evidence criteria and demonstrates that *i-Ready Personalized Instruction* can be used as an evidence-based summer learning program.

## Introduction

For the past year, the coronavirus pandemic has unmoored the nation's education system, leaving educators worried about the unprecedented levels of unfinished learning (particularly among underserved students) they could face in fall 2021. Much research, including that done by Curriculum Associates, has confirmed that students [started off further behind](#) in fall 2020 when compared to the fall starting point in previous school years. More recent research from Curriculum Associates shows that students have more [unfinished learning](#) at midyear than in prior years. Many districts are exploring summer school or an extended school year as a way to help address unfinished learning and teaching. As during the school year, it is important for educators to have access to evidence-based instructional programs to support students' learning in a summer school setting.

*i-Ready* instruction—the system of personalized lessons designed to fill students' knowledge gaps and help every student reach grade-level proficiency—has been studied by numerous third-party and independent organizations, as well as Curriculum Associates' own research team, in partnership with educators throughout the country. *i-Ready's* evidence base includes multiple studies meeting ESSA criteria demonstrating how *i-Ready* can be used to address unfinished learning.

This research brief discusses results from a pilot research study examining the impact of the use of *i-Ready* instruction in a summer-school context across nine different school districts across the United States for students in elementary school. In general, we found that students who completed at least 10 *i-Ready* lessons and passed at least 70% of their completed lessons as part of a summer school program started the following fall with a significantly higher score on the *i-Ready Diagnostic* when compared to students who did not use *i-Ready* instruction over the summer.

## Research Questions

This research study seeks to answer the following research question:

- 1) Did students who used *i-Ready Personalized Instruction* as part of a regular summer-school program start the following fall with higher scores on the *i-Ready Diagnostic* when compared to students who didn't use *i-Ready Personalized Instruction* as part of a regular summer-school course?

## Methodology and Sample Description

Curriculum Associates field staff identified nine districts with schools that used *i-Ready Personalized Instruction* as part of their summer-school curriculum during summer 2019. Students were eligible for inclusion if they were enrolled in kindergarten through fourth grade during the 2018–2019 school year and had an *i-Ready Diagnostic* score from both spring and fall 2019. Within the nine districts, students who had completed at least 10 *i-Ready* lessons between June 1 and July 31 and had an average lesson pass rate of 70% were included in the *i-Ready* summer-learning group. Students who used *i-Ready Personalized Instruction* during the 2018–2019 school year and had no *i-Ready* usage between June 1 and July 31 were included in the control group.

The final sample consisted of more than 1.1 million students in the Reading analysis and 1.5 million students in the Mathematics analysis. Due to the study design, the majority of students in the analytic sample were part of the control group. See Table 1 for the student counts by subject and grade level.

**Table1: Student Counts by Subject and Grade Level**

		Grade K	Grade 1	Grade 2	Grade 3	Grade 4	All Grades
Reading	<i>i-Ready</i> Students	288	361	386	234	179	1,448
	Control Group	192,328	268,622	304,332	317,494	317,427	1,400,203
Mathematics	<i>i-Ready</i> Students	188	293	390	353	206	1,430
	Control Group	188,228	286,885	334,778	394,052	356,483	1,560,426

Using an Analysis of Covariance (ANCOVA) approach, we tested the hypothesis that students who used *i-Ready Personalized Instruction* during summer school, completed at least 10 lessons, and passed at least 70% of those lessons would score significantly higher in the fall when compared to peers who did not use *i-Ready Personalized Instruction* over the summer. Using an ANCOVA allowed us to control for scores from the previous spring to ensure that differences in the two groups of students before summer school were accounted for in the analysis.

# Results

## Overall Results

Across kindergarten through fourth grade in both Reading and Mathematics, students who used *i-Ready Personalized Instruction* as part of their summer-school program began the following fall with higher *i-Ready Diagnostic* scores than students who did not use *i-Ready* instruction during summer school. The differences were all statistically significant.

While only a preliminary study, these results provide promising support for the hypothesis that students who use *i-Ready* in a summer-school setting start the following year with higher *i-Ready Diagnostic* scores when compared to peers who do not use *i-Ready* instruction over the summer. The benefits seen translate into an additional five to 18.5 weeks of instruction in Reading and between four-and-one-half to seven-and-one-half weeks of instruction in Mathematics for students who participated in a summer school using *i-Ready*.

**Table 2: *i-Ready Diagnostic* Scores in Fall 2019 after Using *i-Ready* during Summer 2019**

Grade as of June 2018	Reading			Mathematics		
	<i>i-Ready</i> Students' Gain Above Control Group	Standard Error	Effect Size*	Score Difference	Standard Error	Effect Size*
K	8.19	1.44	0.33	4.11	1.19	0.25
1	4.81	1.31	0.19	2.42	0.87	0.16
2	5.25	1.30	0.21	3.63	0.70	0.26
3	7.28	1.65	0.29	2.54	0.74	0.18
4	7.38	1.93	0.27	2.17	0.98	0.15

\*Effect size calculated using Hedge's *g*

## Conclusion

Elementary school students in kindergarten through fourth grade who used *i-Ready* instruction over the summer as part of a summer-school program returned to school the following fall with higher *i-Ready Diagnostic* scores than students who did not use *i-Ready* instruction over the summer. This study meets ESSA Level 3 (Promising) evidence criteria and demonstrates that *i-Ready Personalized Instruction* can be used as an evidence-based summer-learning program.



## **Limitations**

This study was designed to examine the impact of summer school on student performance based on fall scores on the *i-Ready Diagnostic* assessment. While there was indeed an impact, the results should not be interpreted as eliminating summer learning loss. Use of *i-Ready* in a summer-school setting may contribute to the reduction of learning loss over the summer, but more research would need to be completed to answer that specific question. We did not have any additional information about how *i-Ready* was used in the context of these summer school programs, nor if there was consistency between what one district did in their summer-school program compared to other districts and their summer-school programs. The results shown here may not be typical across all districts using *i-Ready* as part of a summer-school curriculum, but rather specific to the included districts. We hope to explore the use of *i-Ready* during summer school in more detail in the future.



## About *i-Ready Personalized Instruction*

*i-Ready Personalized Instruction (i-Ready)* is an evidence-based program for students in kindergarten through eighth grade with an individualized plan for instruction based on each student's performance on the online, adaptive *i-Ready Diagnostic* (Diagnostic). Once students complete the Diagnostic, *i-Ready* builds a unique lesson plan with a differentiated starting point for every learner based on their overall and domain-level placement. *i-Ready* allows teachers to add lessons and/or adjust the lesson sequence provided to individuals or groups of students. *i-Ready* is aligned to college- and career-ready standards and embeds multimedia instruction and progress monitoring into every online lesson. Lessons provide explicit instruction and extensive practice, offer supportive feedback, and build conceptual understanding for learners of all levels. To learn more about research showing how *i-Ready* positively impacts student achievement in Reading and Mathematics, including research that meets the ESSA Level 2 criteria for Moderate Evidence, please visit [CurriculumAssociates.com/i-Ready-Research](https://CurriculumAssociates.com/i-Ready-Research).

## About the *i-Ready Diagnostic*

The *i-Ready Diagnostic* is a computer-adaptive assessment that provides valid and reliable test scores for students in kindergarten through 12th grade. The Diagnostic starts each student at a difficulty level based on an educated guess that is derived from their chronological grade level. As students answer questions correctly or incorrectly, the test adjusts up or down with questions of varying difficulty until the assessment reaches the level of difficulty that is “just right” for each student. The Diagnostic can be administered at three time points during the school year, typically during fall, winter, and spring. Multiple studies have been conducted to support the reliability and validity of the Diagnostic for Reading and for Mathematics as well as their consistency with state content standards used across the United States. The Diagnostic received high ratings from the National Center on Intensive Intervention for use as an Academic Screening and Progress Monitoring tool for both Reading and Mathematics. To learn more about the Diagnostic, visit [CurriculumAssociates.com/Diagnostic](https://CurriculumAssociates.com/Diagnostic).