Florida Virtual SCHOOL™

FLORIDA VIRTUAL SCHOOL SEES GAINS IN STUDENT PERFORMANCE IN 2020-21 AND 2021-22
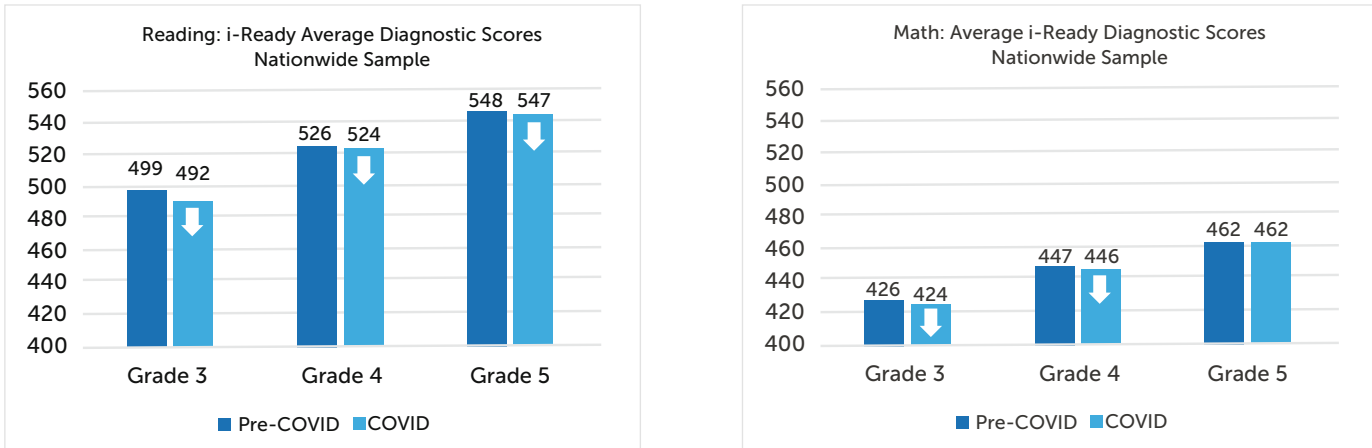
Math and English Language Arts Scores Increased in Grades 4-5 Despite Nationwide Learning Loss Due to the Pandemic

National Trends

Research suggests that academic achievement among K-12 students throughout the United States has declined as a result of the disruptions in education caused by the COVID-19 pandemic. For example, in one nationwide sample of students, there were statistically significant decreases in average i-Ready[1] diagnostic scores for reading in grades 3-5 and math in grades 3-4 (see Figure 1 and Table 1 below).

Figure 1: Nationwide Declines in Reading and Math i-Ready Diagnostic Scores During COVID [i]

Pre-COVID calculations represent the average among students whose initial diagnostic was in Fall 2016, 2017, or 2018.
COVID calculations represent the average among students whose initial diagnostic was in Fall 2019, 2020, or 2021.

Table 1: i-Ready Independent Samples t-test Results (Nationwide Sample)

i-Ready Reading	N	Mean	SD	t	p
Grade 3					
Pre-COVID	184,619	499	50	-39.77	< .0001
COVID	171,248	492	55		
Grade 4					
Pre-COVID	132,105	526	51	-9.82	< .0001
COVID	154,007	524	57		
Grade 5					
Pre-COVID	93,993	548	53	-3.87	< .0001
COVID	90,809	547	58		

i-Ready Math	N	Mean	SD	t	p
Grade 3					
Pre-COVID	207,366	426	25	-24.87	< .0001
COVID	211,656	424	27		
Grade 4					
Pre-COVID	156,373	447	27	-10.50	< .0001
COVID	197,696	446	29		
Grade 5					
Pre-COVID	105,691	462	29	0.00	NS
COVID	117,183	462	31		

NS = no statistically significant difference

In addition to lower initial i-Ready scores, studies indicate that overall gains were slower for students nationwide during the pandemic, particularly among students who started the year already behind their peers.[i]
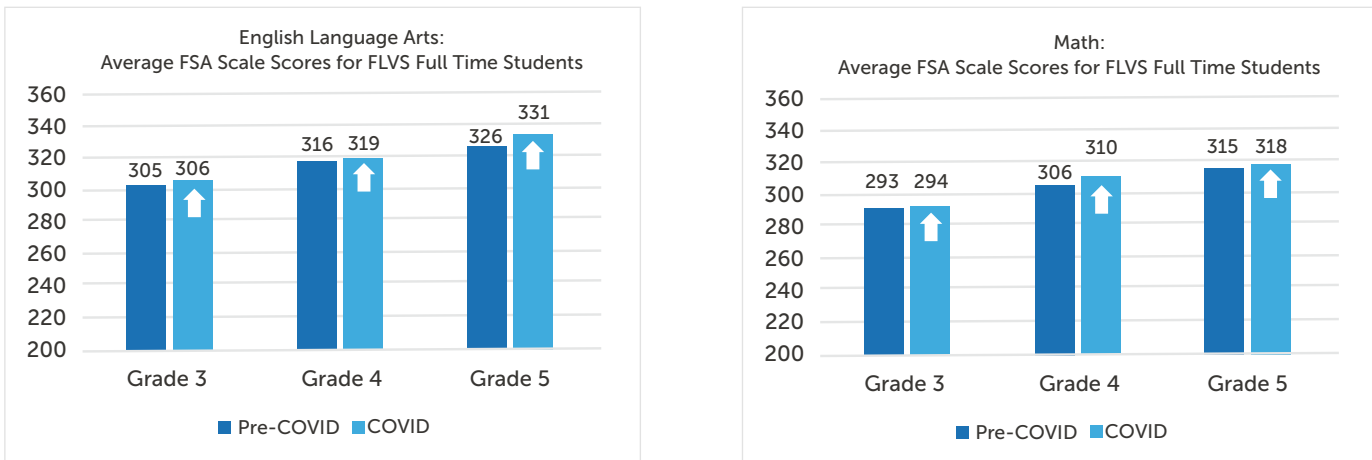
These findings beg the question of whether students accustomed to full-time online school showed similar declines. Florida Virtual School (FLVS) sought answers to this question and found noteworthy differences in achievement between the above reports and their students in its online elementary school.

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[1]i-Ready is an online program for reading and/or mathematics that includes an adaptive diagnostic assessment that helps teachers determine student needs, personalize their learning, and monitor progress throughout the school year (https://i-readycentral.com/familycenter/what-is-i-ready/).

FLVS Trends

The pandemic did not appear to negatively impact learning for FLVS Elementary students. In fact, despite a much smaller sample size, there were statistically significant increases in average FSA scale scores for FLVS students in grades 4-5 during the pandemic. Improvements were especially notable for students in grades 5 whose average scale score in ELA increased by 5 points.

Figure 2: Improvements in FSA Scale Scores Among FLVS Students During COVID

Pre-COVID calculations represent an average of 2017-2018 and 2018-2019 FSA scale scores.
COVID calculations represent an average of 2020-2021 and 2021-2022 FSA scale scores.

Table 2: FSA Independent Samples t-test Results (FLVS Full Time Students)

FSA ELA	N	Mean	SD	t	p
Grade 3					
Pre-COVID	512	305	22	1.36	NS
COVID	1,010	306	19		
Grade 4					
Pre-COVID	519	316	19	3.45	< .001
COVID	1,009	319	19		
Grade 5					
Pre-COVID	660	326	20	5.12	< .001
COVID	1,121	331	20		

FSA Math	N	Mean	SD	t	p
Grade 3					
Pre-COVID	514	293	22	0.83	NS
COVID	972	294	21		
Grade 4					
Pre-COVID	541	306	23	3.64	< .001
COVID	1,021	310	21		
Grade 5					
Pre-COVID	689	315	24	1.87	< .05
COVID	1,116	318	24		

NS = no statistically significant difference

Florida Virtual School is a fully accredited public school district with a 25-year history of offering students and families high quality and flexible online education in a supportive environment. The academic growth of FLVS Elementary students during the pandemic can be attributed in part to our instructional model, which includes evidence-based approaches and professional development for instructors, curriculum and courses developed for the online learning environment, and giving students the flexibility to communicate one-on-one with teachers as needed.

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[i]https://www.curriculumassociates.com/-/media/mainsite/files/i-ready/iready-covid-growth-research-paper-2021.pdf

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