

Summary of Research Questions and Findings from COVID-19 Impact Studies by Interim Test Vendors

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The impact of the COVID-19 pandemic on student achievement has been defined by some as the difference between student achievement during the pandemic and what achievement would have been if there had been no disruption to schooling. Beginning fall 2020, several interim assessment vendors have published studies attempting to quantify the effects on student learning in reading and mathematics precipitated by COVID-19 school disruptions. These studies include those done by [NWEA using its MAP assessment](#), [Curriculum Associates using i-Ready](#), [Renaissance using STAR](#), and [Amplify using DIBELS](#). We created this table to summarize the research questions, findings, and other characteristics of these studies.

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Research Questions	Key Findings Math	Key Findings Reading	Grades / Sample origins / Data analyzed	Sample Inclusion Criteria
Renaissance				
Did the pandemic have an impact on the reading and mathematics performance of students as they entered the 2020–2021 school year?	Moderate Negative, varied by grade (max 12 weeks behind)	Small Negative, varied by grade (max 7 weeks behind), with a positive effect for some grades	1-8 / 50 U.S. States and D.C. / fall 2019 and fall 2020	Students who took the test in both fall 2019 and fall 2020
Is the impact of the pandemic reflected in growth outcomes?	Moderate Negative, varied by grade (max 20 median SGPs below baseline)	Small Negative, varied by grade (max 6 median SGPs below baseline), with a positive effect in grade 8		
Do the impacts on performance and growth vary by subgroup? Were existing achievement gaps exacerbated?	No, for race/ethnicity, but differences may be too small to detect No, for groups defined by 2019 achievement			
Can we interpret the pandemic’s impacts in instructional terms?	Yes (Overall 8-11 weeks behind expectations)	Yes (Overall close to expectations, +/- 3 weeks)		
NWEA				
How did students perform this fall relative to a typical school year (specifically, fall 2019)?	Performance was 5-10 percentile points lower than in a typical year	Like a typical year	3-8 / States not Specified / fall 2019 and fall 2020	Schools that tested at least ten students in a grade in both fall 2019 and fall 2020 (“Analytic sample 1”)

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How has student growth changed since schools physically closed in March 2020?	Less growth than in a typical year	Like a typical year	4-8 / States not specified / fall 2019, winter 2020, and fall 2020	Students testing in fall 2019, winter 2020, and fall 2020 ("Analytic sample 2") ^a
How did observed fall 2020 achievement compare to NWEA's projected scenarios?	Students performed between a "partial absenteeism" learning scenario and "typical" learning scenario	Students performed in line with a typical learning scenario		
Curriculum Associates				
Are more students placing below grade level overall by subject in fall 2020 compared to prior academic school years?	Yes, a jump from 23% to 29% of students	Yes, an increase from 27% to 28% of students	1-8 / Eight states in reading: CO, FL, IN, MO, MS, NC, SC, TN; Twelve states in math: CO, FL, GA, ID, IN, MO, MS, NC, SC, TN, TS, UT / fall 2020	Students who tested in school during fall 2020 between August 1 and September 9
Are more students placing below grade level within subject and by grade in fall 2020 compared to prior academic school years?	Yes, for all grades, especially grades 2, 3, and 4	Yes, for grades 1-4; no, for grades 5-8		
Are more students placing below grade level in fall 2020 when disaggregated by race/ethnicity compared to prior academic school years?	Yes, schools with a higher proportion of BIPOC ^b students saw greater increases in proportion of students placing below grade level			
Are more students placing below grade level in fall 2020 when disaggregated by median annual household income compared to prior academic school years?	Yes, schools with the lowest median income saw greater increases in proportion of students placing below grade level			
Amplify				
Are more students scoring well below benchmark (i.e., in need of intensive intervention) than in 2019?	N/A	Yes, at all grades, with grade 1 showing the greatest increase (27% in 2019 to 40% in 2020)	K-5 / 41 states (not specified) / fall 2019 and fall 2020	Students testing in both fall 2019 and fall 2020
Across skill areas where is learning loss the greatest?		In grade 1, phonemic awareness		

Notes. ^a "As a reference distribution for estimating 'typical' growth [...] we relied on the prior cohorts of students who tested in winter 2019 and fall 2019 within each grade pair." (NWEA, p.3).

^b The Curriculum Associates study uses the term "BIPOC," which stands for "Black, Indigenous, and People of Color" to refer to "the NCES categories of American Indian or Alaska Native, Asian, Black or African American, Hispanic, Native Hawaiian or Other Pacific Islander, and Two or More Races." (p.3)