

COVID-19's IMPACT ON STUDENT ACHIEVEMENT AND ACADEMIC GROWTH IN DC



EmpowerK12

COVID-19'S IMPACT ON STUDENT ACHIEVEMENT AND ACADEMIC GROWTH IN DC

- > STUDENTS HAVE LOST 4 MONTHS OF LEARNING IN MATH AND 1 MONTH OF LEARNING IN READING.
- > AT-RISK STUDENTS HAVE LOST 5 MONTHS OF LEARNING IN MATH AND 4 MONTHS OF LEARNING IN READING.
- > ACHIEVEMENT GAPS ARE GROWING IN DC, AND AT-RISK STUDENTS ARE FALLING SIGNIFICANTLY BEHIND.
- > DC COVID LEARNING SLIDES ARE SIMILAR TO NATIONAL COVID LEARNING SLIDES.
- > THE SPRING COVID SLIDE WAS NOT AS DIRE AS PREDICTED IN THE SPRING.
- > EVIDENCE OF FURTHER SLIDE, PARTICULARLY FOR MATH, WAS SEEN DURING THE EXTENDED FALL ASSESSMENT WINDOW.
- > STUDENTS WHO ARE TYPICALLY LOWER PERFORMING OR ATTEND SCHOOLS THAT SERVE HIGHER PERCENTAGES OF AT-RISK STUDENTS WERE MORE LIKELY TO BE MISSING FROM THE FALL DATA.

The COVID-19 pandemic created significant challenges and disruptions to the typical school experience for District of Columbia students and their peers across the country. Most DC students remain in a distance learning posture since the pandemic erupted in mid-March 2020. For DC's most vulnerable students, access to food and essentials has been a challenge. Students reported to EmpowerK12 in the DC Student Well-Being Survey that conditions related to the pandemic increased the financial burden on their family and a significant portion reported losing an adult or family member they care about since the start of the pandemic.

Learning from home required educators to transition in-person content to lessons conducted via paper packets, web video, and other online tools once students were provided with a device and good internet connection — significant challenges in themselves. Many teachers juggled the responsibility of teaching their students, while simultaneously supporting their own children's "new normal" for school and life.

It is no surprise that many of students have slipped academically in the months since the start of the pandemic. This study shows that DC students have lost 4 months of learning in math and 1 month of learning in reading. Achievement gaps are growing in DC, and at-risk students are falling significantly behind. At-risk students have lost 5 months of learning in math and 4 months of learning in reading. On the positive side, the dire predictions of learning loss from this spring, counted in half to full numbers of years, did not pan out. Students gained knowledge this spring and summer. However, those gains significantly lagged typical gains during traditional in-person school. For our students most at risk of academic failure, their academic gains slowed even further compared to their more privileged peers.

Our city education leaders and policymakers sit in an unenviable position of navigating another tough budget year with the pressing realization that DC's most vulnerable students across all grade levels are falling behind.

This study provides valuable data for the DC community to utilize when designing creative solutions to improve hybrid learning and accelerate the academic and social-emotional recovery of students. This study is the second in a series of reports to provide DC education stakeholders with data to spur equitable action.

ABOUT THIS REPORT AND EMPOWERK12

This study highlights the COVID-19 academic slide for DC students. The dataset includes more than 30,000 students in DC Public Schools (DCPS) and DC charter schools with fall academic baseline data.

We thank Education Forward DC and the DC Charter School Alliance for funding this report. We also appreciate the guidance and national data provided for use by NWEA. Thank you to DC Public Schools and Capital City, Center City, Cesar Chavez, DC International, Digital Pioneers, E.L. Haynes, Friendship, Monument, Mundo Verde, Perry Street Prep, Rocketship DC, and Statesmen Public Charter Schools for providing data.



TABLE OF CONTENTS

1 | ABOUT EMPOWERK12

2 | STUDY CONTEXT

- Brief History of DC Achievement Prior to the Pandemic
- What Happened to DC Schools since March
- Summary of the Pandemic's Impact in DC to Date

3 | COVID ACADEMIC SLIDE ANALYSIS METHODOLOGY

4 | ABOUT THE STUDY SAMPLE AND PARTICIPATION

- Fall 2020 Assessment Participation Rates
- About the Assessments Utilized in this Report
- Impact of Remote Administration on Student Test Characteristics

5 | COVID SLIDE IN MATH & ELA/READING FOR GRADES 3-8

- Impact of COVID Slide in Months of Instructional Loss
- Percent of Students On-Track for PARCC Proficiency
- Changes in Average Percentiles & Comparison to National Loss
- Student Growth during the Extended Fall Testing Window
- Summary of COVID Slide in Grades 3-8

6 | COVID SLIDE IN EARLY LITERACY FOR GRADES K-2

7 | UPDATED 2021 DC PARCC PROFICIENCY PROJECTIONS

8 | RECOMMENDATIONS & STRATEGIES FOR RECOVERY

9 | REPORT APPENDICES

ABOUT EMPOWERK12

EmpowerK12, a DC educational data nonprofit, believes that schools and educators can provide a high-quality education to all students when equipped with timely, valid, and reliable data to make the best possible decisions.

We work with policymakers, system leaders, school leaders, educators, students, and families to boldly accelerate learning by providing stakeholders with high-quality data systems, robust strategic analysis, and an equity-oriented, collaborative improvement mindset.

EmpowerK12's COVID-19 impact work includes:

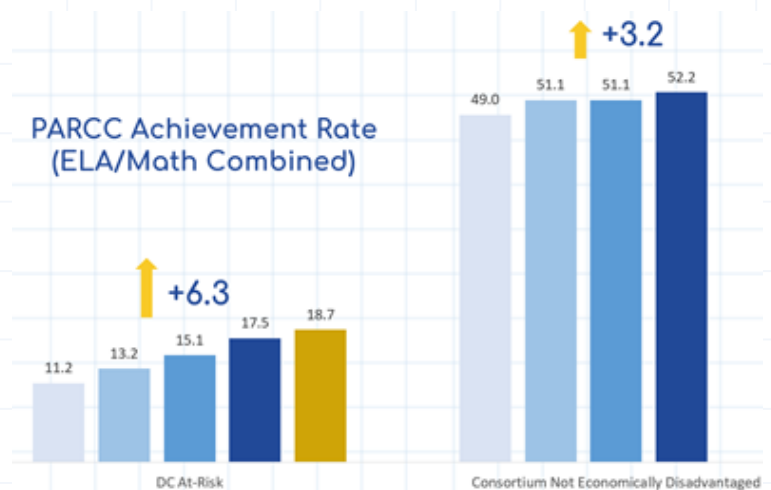
- The [DC Student Well-Being Survey](#), taken by 2,500 students in grades 3-12
- [Educator Continuous Improvement Network](#) (ECIN) with teachers from DC Public Schools, Friendship Public Charter School and Eagle Academy Public Charter School to improve outcomes for students with disabilities during this hybrid learning year.

STUDY CONTEXT HOW COVID-19 HAS IMPACTED DC EDUCATION

To understand fall baseline assessment data and the changes in outcomes illuminated by this report, we must understand the recent student achievement and growth in the District, as well as the toll the pandemic has taken on economic and social-emotional welfare of DC's students and families.

BRIEF HISTORY OF DC ACHIEVEMENT PRIOR TO THE PANDEMIC

Schools in both DC Public Schools and the charter sector have improved academic outcomes for all student groups over time. The percentage of District students meeting or exceeding expectations on the annual Partnership for Assessment of College and Career Readiness (PARCC) exam has improved from 24.8% (2015) to 37.1% (2019) in English language arts (ELA) and 22.1% to 30.5% over the same timeframe in math. These improvements have outpaced other states in the PARCC consortium. DC's students who are at-risk have improved more than national peers from wealthier families. Still, at the rate of improvement pre-COVID, DC at-risk students will not close the socioeconomic gap until 2053. The pandemic threatens to roll back the progress DC's most vulnerable students have made.



WHAT HAPPENED WITH DC SCHOOLS WHEN PANDEMIC REACHED THE US IN MARCH

The spring 2020 school closures and stay-at-home orders in response to the coronavirus outbreak brought unprecedented changes in the District during the 2019-20 school year. With little time to prepare, schools shifted to distance learning, adopting new models and learning tools. As learning largely moved to a virtual space, existing differences in achievement, language fluency, and ability, as well as inequalities in technology, internet access, income, and other resources were exacerbated. This sparked worry about achievement gaps and social-emotional well-being, in addition to health and financial concerns related to the pandemic. Distance learning and the response to school closures largely continues in the fall of 2020.

There was a lot of variation in how D.C.'s education community – including students, parents, and teachers – experienced distance learning. Parents reported varying levels of interactions with teachers and other school personnel, access to technology, and socialization among students. These differences existed across schools, but also within schools and even by child or class.

SUMMARY OF PANDEMIC IMPACTS IN THE DISTRICT TO DATE

The COVID-19 pandemic has had vast impacts across all facets of our society. To understand how the pandemic has affected academic growth, we must acknowledge the other health and wellness, and financial impacts in the District, as they both directly and indirectly impact students and families, their wellbeing, and their ability to access high-quality education.

STUDENT WELL-BEING¹

- Students reported anxiety related to the pandemic. 77% of students are concerned that their family will be exposed to COVID-19 and 45% report that their family's financial situation has become somewhat or significantly more stressful.
- Students who attend schools that serve a majority at-risk student population were less likely to report that they have a friend at school and that they feel loved.

IMPACTS ON STUDENTS' FAMILIES²

According to PAVE's Back to School Survey, families reported the following challenges:

- Managing their children's education at home (71%);
- Not having enough food at home (35%); and
- Job or income instability (45%).

77% OF DC STUDENTS ARE CONCERNED THAT THEIR FAMILY WILL BE EXPOSED TO COVID-19.

45% REPORT THAT THEIR FAMILY'S FINANCIAL SITUATION HAS BECOME SOMEWHAT OR SIGNIFICANTLY MORE STRESSFUL DUE TO THE PANDEMIC.

COVID-19 EDUCATION IMPACTS FROM THE DMV REGION AND NATIONAL STUDIES

Newly released data on this marking period's grades from Washington-area school districts shows significant drops in academic performance among the area's most vulnerable students and provides further evidence that these students are affected most significantly by online school.³ In Northern Virginia, Fairfax County Public Schools reported an 83 percent increase in the percentage of students who earned at least two F's and noted that the largest increases were among students with disabilities, English-language learners, and Hispanic students. While Arlington Public Schools is seeing only slight drops in literacy, the drops are steep for students of color and even steeper for English-language learners. In first grade, the percentage of English-language learners meeting the literacy benchmark in the Phonological Awareness Literacy Screening fell from 46 percent last year to 20 percent this year. Similarly, in second grade, that percentage fell from roughly 74 percent last year to 44 percent this year.

Meanwhile, Maryland's largest school district, Montgomery County, has reported that failing grades in both math and English have increased as much as six-fold among low-income students of color.⁴ For example, 24 percent of low-income Hispanic students failed math this marking period, compared to 4 percent last fall. Moreover, students with limited English proficiency and students in special education are also seeing dramatic increases in failure rates in the county. While 8 percent of students with limited English proficiency failed the first marking period in ninth-grade math last fall, that number rose to nearly 45 percent this fall. For students in special education in sixth-grade English, the failure rate rose by more than 100% from less than 5 percent last fall, to 10 percent this fall.

¹ EmpowerK12 (2020) [COVID-19's Impact on Student Well-Being](#)

² DC Parents Amplifying Voices in Education (2020) [Parent Coronavirus Impact Survey](#)

³ Washington Post (2020) [Virginia schools plan gradual reopening as evidence of online learning gap piles up](#)

⁴ Washington Post (2020) [Montgomery County schools report big spike in failing grades](#)



COVID-19 EDUCATION IMPACTS FROM NATIONAL STUDIES

In June 2020, a study by McKinsey & Company estimated the potential damaging effect of COVID 19-related school closures on learning for low-income, Black, and Hispanic students, and on the U.S. economy.⁵ They estimate that if schools reopen by January 2021, students who remained enrolled could lose 3-4 months of learning if they receive average remote instruction, 7-11 months with lower-quality remote instruction, and 12 to 14 months if they do not receive any instruction at all. The study also emphasizes that learning loss will likely be the most significant among low-income, Black and Hispanic students. They predict that while the average student may lose 6.8 months of learning compared with typical in-classroom learning, Black students may lose 10.3 months, Hispanic students may lose 9.2 months, and low-income students may lose more than a year of learning. They estimate existing achievement gaps will grow by 15 to 20 percent.

COVID-19 closures will also likely lead to an increase in high-school drop-out rates in addition to an increase in learning loss, and these effects will likely be felt long-term, according to McKinsey. They estimate that due to COVID-19 related learning losses alone, the average K-12 student may lose between \$61,000 and \$82,000 in lifetime earnings, or the equivalent of a full year of work. Furthermore, they predict this loss in earnings will be even greater for Black and Hispanic students. They estimate that white students would earn \$1,348 a year less over a 40-year working lifetime, while Black students will lose \$2,186 a year and Hispanic students will lose \$1,809 a year. Altogether, K-12 students are expected to lose \$110 billion in annual earnings due to COVID 19-related school closures, with \$98.8 billion of that due to loss of learning and \$11.2 billion due to the increase in high-school dropouts.

In December 2020, McKinsey & Co. released an updated study estimating that the shift to remote school in the spring set white students back by 1-3 months in math, while students of color lost 3-5 months.⁶ If schools remain closed through June, they predict white students will lose 7-8 months of math and students of color will lose 11-12 months. Alternatively, if schools reopen in January, they predict white students will have lost 4-5 months of learning in math while students of color will have lost 6-7 months. To counteract this serious loss of learning, McKinsey suggests a dramatic intervention is needed to get students back on track, and they estimate the cost of doing so. To scale up high-intensity tutoring to cover half of all US students, they estimate it would cost \$66 billion, or \$2,500 per student. To implement “vacation academies” over the summer to instruct small groups, they estimate it would cost \$42 billion, or \$1,600 per student.

⁵ McKinsey & Co. (2020) *COVID-19 and student learning in the United States: The hurt could last a lifetime*

⁶ Washington Post (2020) *New data finds unequal gaps in learning during remote school*

DC COVID ACADEMIC SLIDE ANALYSIS METHODOLOGY

Using data from more than 30,000 students in grades K-10 from public schools across the District that completed the NWEA MAP Growth, i-Ready Diagnostic, or DIBELS Text Reading and Comprehension (TRC) assessments in fall 2020, we examined four primary research questions:

- HOW DID STUDENTS PERFORM THIS FALL RELATIVE TO A TYPICAL YEAR?
- HOW HAS STUDENT GROWTH CHANGED SINCE SCHOOLS SHIFTED TO DISTANCE LEARNING DUE TO THE PANDEMIC IN MARCH 2020?
- HOW DOES FALL 2020 ACHIEVEMENT IN GRADES 3-8 COMPARE TO PRIOR YEARS?
- DO RESULTS DIFFERENT BETWEEN GRADE BANDS AND STUDENT DEMOGRAPHIC GROUPS?

As with many things in education, there are multiple ways to cut-and-slice the data with different metrics that have different nuanced interpretations addressing the central research questions. We focus on the following metric types:

PERCENT OF TYPICAL FALL-TO-FALL GROWTH MET This analysis focuses on students who completed the same assessment in fall 2019 (pre-COVID) and fall 2020. Both NWEA MAP and i-Ready provide students with a nationally-normed “expected growth” value based on how they performed the prior fall. Normally, the average DC student earns as much growth as expected, attaining 100% of the growth target. We analyze how that annual growth is different in fall 2020, and then translate those differences into months of instructional based on a 10-month academic year.

ON-TRACK FOR PARCC PROFICIENCY We examine the percent of sample students whose fall scores put them on-track to earning PARCC proficiency this spring. Students completing both computer-adaptive assessments for which we collected data and earning a score placing them in the top two performance quintiles (60-99th percentile) have, historically, been very reflective of actual PARCC proficiency percentages.

PERCENT OF STUDENTS MULTIPLE GRADE LEVELS BEHIND The i-Ready Diagnostic provides schools with grade level equivalency information, and Curriculum Associates, the test provider, produced a fall 2020 initial findings report that focused on the percent of students whose score indicated that they were two or more grade levels behind their peers based on their enrolled grade.

AVERAGE NATIONAL PERCENTILE RANK CHANGES NWEA, the test vendor for the MAP growth assessment, also produced an initial findings report from nearly 4 million assessments completed this fall. Their researchers focused on change in average percentile rank from last year to this year. Essentially, the NWEA team compares how fall scores would have ranked in the pre-COVID 2019-20 school year. We also analyze these changes in percentile rank for key DC student groups and offer comparisons with the national COVID slide data from NWEA.

EARLY LITERACY PROFICIENCY The Text Reading Comprehension assessment, a teacher-administered assessment where students read-aloud while educators follow along and score students based on a rubric, was administered to 5,100 students in grades K-2 this fall. TRC provides data by proficiency level.

This fall’s test administration window was unlike any other with nearly all students completing baseline assessments independently from home or from a distance with a teacher also online via zoom. Very few students in our sample completed their assessment in-person at school. Given the uniqueness of testing from home, we rigorously analyze test participation data as well as test characteristic data provided by vendors, including length of time taken and rapid guessing rates throughout the assessment. Our goal was to identify and narrow the sample down to a group of students whose test characteristics were reflective of a validity and reliable administration like most of the regular in-person tests taken at school.

For most analyses, we focus on “cohort” analyses of students who had reliable test characteristics this fall and had test data from fall or winter of last year. Key charts and graphs from this report focus on the cohort students, unless otherwise noted. Additional charts in the appendix provide data from all test-takers from last fall and from this fall.

ABOUT THE STUDY

SAMPLE AND PARTICIPATION

ELA/Math Participation Rates

At-Risk Status	Fall 2019	Winter 2019-20	Fall 2020
At-Risk	98%	98%	74%
Not At-Risk	98%	98%	79%
All Students	98%	98%	77%

SwD Status	Fall 2019	Winter 2019-20	Fall 2020
Has IEP	97%	98%	78%
No IEP	98%	98%	76%

Race-Ethnicity	Fall 2019	Winter 2019-20	Fall 2020
Asian	100%	100%	85%
Black or Afri...	98%	99%	74%
Hispanic/La...	98%	96%	82%
Two or more...	98%	96%	85%
White	99%	97%	85%

At-Risk School Group	Fall 2019	Winter 2019-20	Fall 2020
< 30% At-Risk	97%	96%	81%
30-54% At-Ri...	100%	99%	80%
55-69% At-Ri...	98%	99%	73%
> 70% At-Risk	98%	99%	66%

Spring 2019 Quintile	Fall 2019	Winter 2019-20	Fall 2020
1	99%	97%	71%
2	98%	98%	74%
3	98%	98%	69%

In October, we talked with Local Education Agency (LEA) and school leaders about analyzing fall leveled reading data for lower elementary school students and computer adaptive assessments for upper elementary, middle, and high school students. Schools in both sectors were challenged by the administration of baseline assessments in a remote posture. A few schools brought students into buildings using proper safety protocol to check-in on how they were doing academically and social-emotionally. Other schools utilized different academic baseline tools that students completed from home, some were the same assessments for the same grade levels as prior years, allowing for possible year-over-year comparisons. However, many schools chose tools that were new given the novel school context this year, and therefore did not have strong comparative data to collect from prior to the pandemic.

We received historical and fall 2020 assessment data for more than 30,000 students from DC Public Schools and 11 public charter school networks from across the District, representing nearly half of the students who typically participate in these types of assessments. The sample's demographics by race, disability status, and at-risk status closely mirror the citywide student population. We also analyzed assessment participation rates to determine whether selection bias (on which students took the assessment) was present. While most students regardless of demographic status participated in fall assessments at schools that administered them, approximately 25 percent of students are missing. Schools serving a larger population of students classified as at-risk (students whose families receive SNAP or TANF benefits, are homeless, in the foster care system, or are overage for their grade in high school) were likely to have lower participation rates.

	All DC Students 2019-20	Study Sample Fall 2020
Asian	2%	2%
Black/African American	64%	62%
Hispanic/Latinx	20%	20%
Two or More Races	3%	3%
White	12%	13%
At-Risk	47%	45%
Students with Disabilities	17%	17%
Total Students (K-10)	70,752	32,854
Total Students (3-8)	36,655	19,673

ABOUT THE ASSESSMENTS UTILIZED IN THIS REPORT

Computer-adaptive assessments have been utilized by DCPS and DC public charter schools for many years as a tool to baseline student knowledge as they return from the summer break. The tests allow educators to better understand their students' skills regardless of their actual grade level. While these tests have traditionally been administered in school settings, they are also assessments most easily adapted to remote learning delivery.

More than 19,000 students in grades 3-8 completed either the MAP Growth or i-Ready diagnostic this fall. We have more computer-adaptive math data than reading. Of those, the analysis sample of students with typical test administration characteristics includes 59% of the completed assessments.

This section contains information about the three assessments that we received from schools in both sectors: NWEA Measures of Academic Progress (MAP), i-Ready Diagnostic, and Text Reading Comprehension (TRC).

NEWA MEASURES OF ACADEMIC PROGRESS (MAP) measures what students know and what they're ready to learn next. By dynamically adjusting to each student's performance, MAP Growth creates a personalized assessment experience that accurately measures performance — whether a student performs on, above, or below grade level. MAP Growth reveals how much growth has occurred between testing events and, when combined with norms, shows projected proficiency.⁷

I-READY DIAGNOSTIC (I-READY) is an adaptive assessment designed to provide teachers with actionable insight into student needs. It offers a complete picture of student performance and growth. By adapting to student responses and assessing a broad range of skills — including skills above and below a student's chronological grade — the i-Ready Diagnostic pinpoints student ability level, identifies the specific skills students need to learn to accelerate their growth, and charts a personalized learning path for each student.⁸

TEXT READING COMPREHENSION (TRC) measures reading comprehension through a couple of different activities. The student reads the book to the educator. While the student reads the book, the educator follows along on an app. Any mistakes by the students are coded using the app like substituting a different word, pronouncing the word incorrectly, not knowing the word, only saying a portion of the word, or skipping over a word and not reading it.

After the student reads the story, they are asked to answer oral comprehension questions. For beginning readers (book levels A-D), students are asked to retell the story. Specifically, they are told to retell the beginning, middle, and end. They are not asked specific oral comprehension questions. For pre-readers, students are asked a series of questions regarding print concepts and reading behaviors before moving on to reading Level A books. These questions usually require students to make predictions, summarize the beginning, middle, or end of the story, clarify which character was associated with a specific action, and give an opinion as to why a certain event happened in the story (to show reasoning and interpretation.) Student data is then translated by the app into a proficiency determination.

⁷ NWEA (2020) *MAP Growth Fact Sheet*

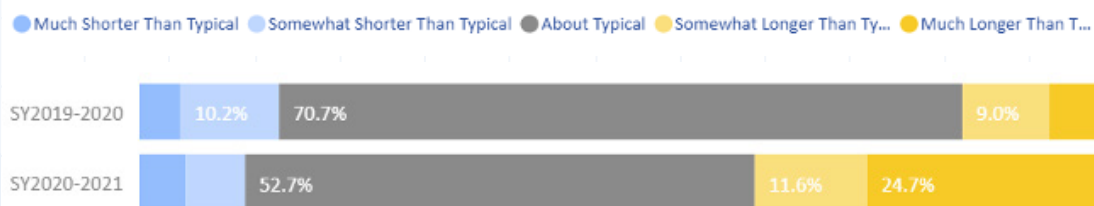
⁸ Curriculum Associates (2020) *Get to Know i-Ready Assessment*

IMPACT OF REMOTE ADMINISTRATION ON STUDENT TEST CHARACTERISTICS

Teachers faced several challenges when virtually administering assessments. They found it difficult to administer assessments with increased distractions in students' homes and often also needed to mitigate the additional support that some students received from family members. As with distance learning more broadly, students and teachers struggled with connectivity issues and both groups had to navigate through virtual programs that were, at times, unfamiliar to them. Special education teachers faced an additional challenge of replicating accommodations, if possible and with fidelity, that students require for testing.

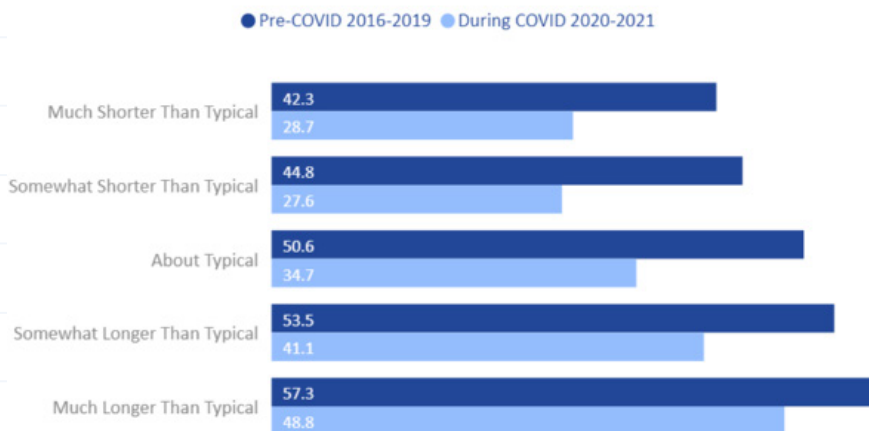
We analyzed test-taking characteristics from MAP and i-Ready to see how these administration challenges might have impacted the data to help narrow the student sample to students whose test scores were more likely to represent accurate portrayals of their skills. Both computer-adaptive assessments provide data on test duration and on the amount of rapid guessing. Students this fall tended to take a significantly longer to complete tests from home. The two charts below show the differences in fall testing time this year compared to last year. Twenty-five percent of students took more than 30 minutes longer than they typically take to complete the test. In the four prior falls, the median test duration was 58 minutes, while this year was a statistically significantly higher median of 72 minutes ($p < 0.01$).

Percent of Students by Time Taken Category and Fall Year

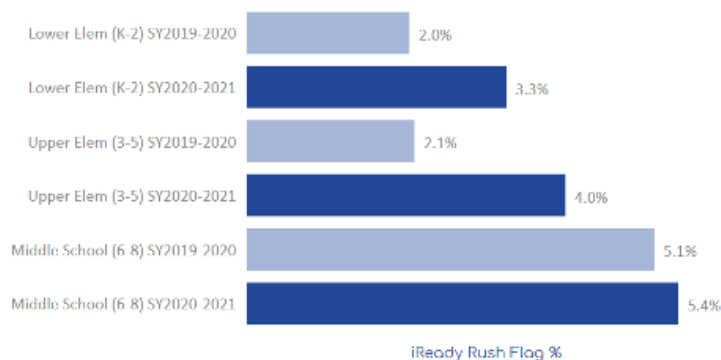


Students who take more time typically demonstrate better than average growth. In the four falls prior to 2020, students who took 30 minutes longer than normal had fall-to-fall growth percentiles 13% higher than those taking the typical amount of time. However, fall 2020, students who took much longer than normal showed growth rates 41% higher than students who took the typical amount of time. This data suggests some of the anecdotal stories about students obtaining additional support while taking the test at home were accurate. The fall-to-fall growth data by duration category (see appendix) for grades K-2 is particularly anomalous compared to prior years, so this study focuses on grades 3-8 for MAP and i-Ready.

Avg Fall-to-Fall Growth Percentile by Time Taken Category and Fall Year



i-Ready Percent of Test Takers with Rush Flag by Fall Year and Grade Band



MAP and i-Ready also report on student rapid guessing, a proxy for engagement and effort. The MAP test reports rapid guessing rates as numbers, and i-Ready provides a specific “rush flag” in their raw data. The next charts show how rapid guessing this fall compared to prior falls by assessment. For both MAP and i-Ready, the percentage of students with rush flags or higher than normal rapid guessing increased this fall compared to last year.

While most students appear to have test characteristics indicative of a good test administration, we narrow the COVID slide analysis sample of students to those whose time taken was not substantially higher or lower than typical and who did not receive a rush flag or rapid guessing rate more than one standard deviation higher than average.

Graphs and charts for all tested students regardless of test characteristics can be found in the appendix.

ABOUT THE STUDENT SAMPLE

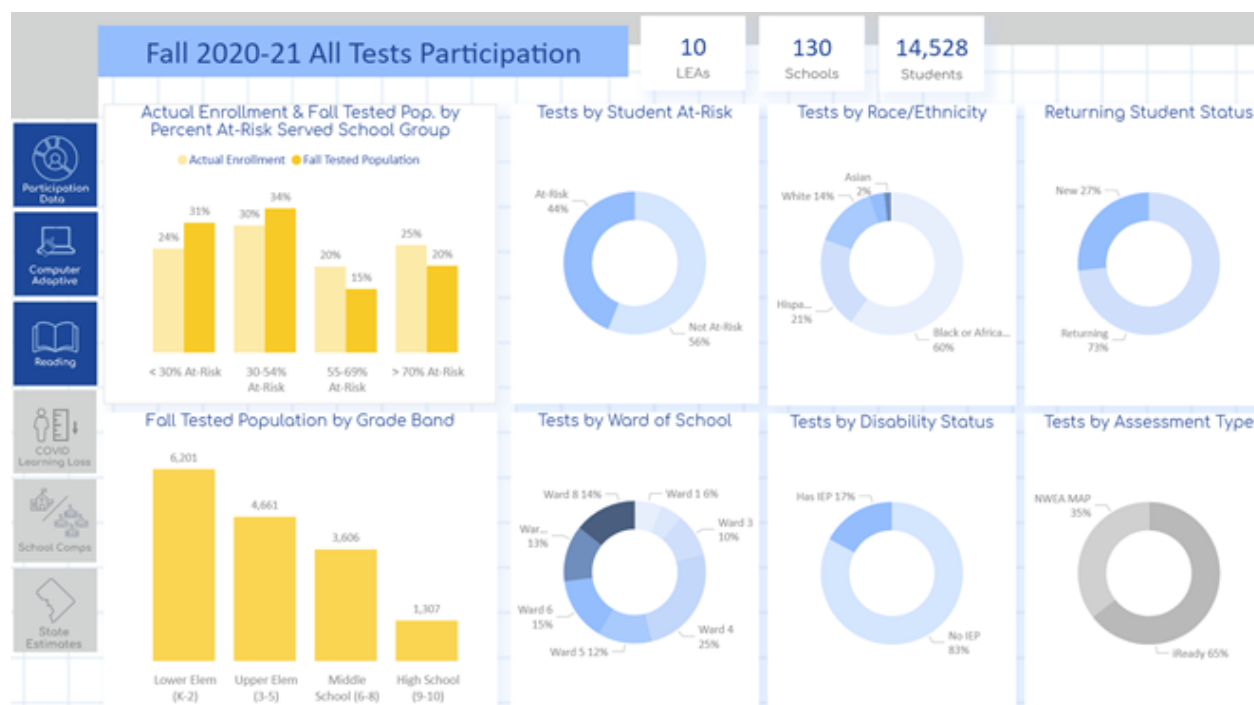


Figure 3. Fall 2020 Study Sample Information for MAP Growth and i-Ready Diagnostic



NWEA MAP has the more robust set of national norms available for an assessment aligned to the Common Core. For most assessments, percentiles are awarded by season, regardless of when in the season students took the test. MAP, on the other hand, can provide a national percentile ranking for students based on the instructional week they took the test. For example, a 5th grade student scoring a 476 is placed at the 57th percentile if they took the fall test September 1 or if they took it October 15. For MAP, a 5th grader scoring a 212 would be considered the 58th percentile on September 1 and 54th percentile on October 15.

	All DC Students 2019-20	Sample used for Analyses
Asian	2%	2%
Black/African American	64%	60%
Hispanic/Latinx	20%	21%
Two or More Races	3%	3%
White	12%	14%
At-Risk	47%	44%
Students with Disabilities	17%	17%
Total Students (K-10)	70,752	14,528
Total Students (3-8)	36,655	7,578

With assessment windows lasting longer this fall, the MAP assessment may provide more accurate data on the COVID slide. Yet, both assessments' national norms are very comparable, so we look at results from both tests together and separate. In the next sections of this report, we analyze data by assessment type (computer adaptive and leveled reading), provide an aggregate look on the impact of the pandemic on student proficiency and growth, and offer data-driven, research-based suggestions for recovery goals and priorities for the District.

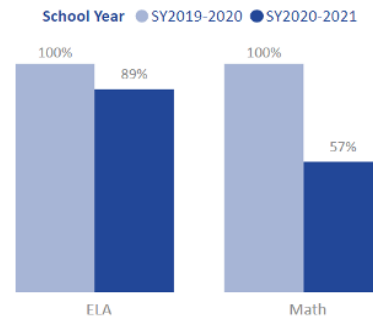
THE "COVID SLIDE" IMPACT ON STUDENTS GRADES 3-8

THE IMPACT OF COVID SLIDE IN MONTHS OF INSTRUCTION

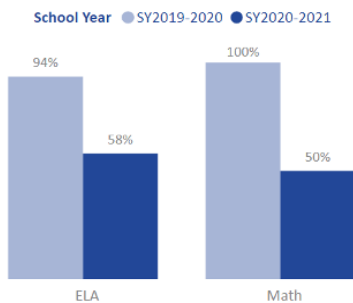
The computer adaptive assessments provide for each student their expected fall-to-fall growth in terms of scale score points. These expectations are set by finding the average growth for students in the same grade starting with the same baseline score. For example, a 6th grade student starting at 395 in the fall as a 5th grader is expected to make 10 points of growth on the i-Ready math test by fall of their 6th grade year. We can analyze the aggregate percent of typical growth met this fall to find out how many instructional months (out of 10 instructional months in the school year) students did not attain compared to normal.

Students in grades 3-8 this fall lost 4 months of math instruction and 1 month of ELA/reading instruction. Last year, students in those grades typically retain all 10 months in ELA/reading and math learning gains when assessed in the fall.

Percent of Typical Fall-to-Fall Growth Made by Subject for All Students in Grades 3-8



Percent of Typical Fall-to-Fall Growth Made by Subject for At-Risk Students in Grades 3-8



The impact of COVID-19 on academic slide this year was not spread evenly across student groups. At-risk student lost an additional month of math instruction compared to their not at-risk peers, and they fell about one-third of a year behind in reading. While COVID slide occurred at varying degrees in math for all students, the reading slide is more acute east of the Anacostia river. Students who attend schools in Wards 7 and 8 retained 5 months of reading instruction, while students west of the river appear to have gained ground.

ELA % of Expected Growth Made from Fall 2019 to Fall 2020

Equity Group	Fall 19-20	Fall 20-21	Change
All Students	100%	89%	-11%
At-Risk	94%	58%	-36%
Not At-Risk	108%	114%	7%
Has IEP	85%	100%	15%
No IEP	100%	88%	-13%
At-Risk & IEP	68%	80%	11%
Not At-Risk & No IEP	113%	113%	-0%
Black	94%	62%	-32%
Latinx	116%	117%	0%
White	127%	176%	50%
Other Races	50%	147%	97%
East of the River	103%	49%	-54%
West of the River	100%	110%	10%

Math % of Expected Growth Made from Fall 2019 to Fall 2020

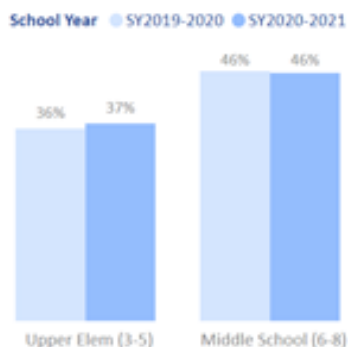
Equity Group	Fall 19-20	Fall 20-21	Change
All Students	100%	57%	-43%
At-Risk	100%	50%	-50%
Not At-Risk	100%	63%	-38%
Has IEP	100%	41%	-59%
No IEP	100%	62%	-38%
At-Risk & IEP	100%	29%	-71%
Not At-Risk & No IEP	105%	63%	-42%
Asian	133%	38%	-95%
Black	100%	50%	-50%
Latinx	93%	74%	-19%
White	127%	78%	-48%
Other Races	71%	46%	-25%
East of the River	100%	50%	-50%
West of the River	100%	60%	-40%

PROFICIENCY AS OF THIS FALL

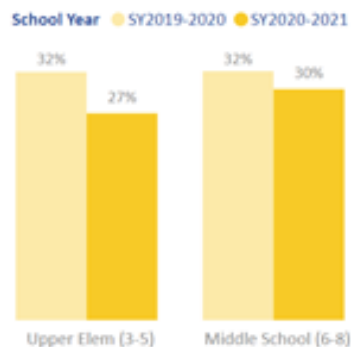
Both MAP and i-Ready results are predictive of PARCC outcomes. The tests offer similar rigor and are aligned to the Common Core standards like the PARCC. Based on the strong correlation between results, we find that the threshold for PARCC 4+ proficiency (students meeting or exceeding expectations) is about the 60th percentile on both assessments. We first look at how the data changes the percent of students on-track to meeting PARCC proficiency standards, and later, we examine how our spring predictive model fared this fall and update EmpowerK12's spring proficiency predictions.

For students who completed MAP or i-Ready test this fall and last fall, these charts show the percent of students who are at or above the 60th percentile and were on track for PARCC proficiency when they completed their fall baseline assessment. The middle school reading sample overall is higher performing than the District overall. Changes in percent of on-track for proficiency mirror the larger drops in average percentile for math and little to no change for ELA/reading. The changes in proficiency were not evenly spread across student groups.

ELA % Above 60th Percentile by Grade Level in Fall 2019 and Fall 2020 - Students with Similar Test Characteristics



Math % Above 60th Percentile by Grade Level in Fall 2019 and Fall 2020 - Students with Similar Test Characteristics



Math On-Track for PARCC Proficiency

Equity Group	Fall 19-20	Fall 20-21	Change	N-size
All Students	33%	28%	-5.1%	8,093
At-Risk	17%	10%	-6.6%	3,423
Not At-Risk	46%	41%	-4.9%	4,670
Has IEP	8%	8%	-0.1%	1,512
No IEP	39%	33%	-6.2%	6,581
At-Risk & IEP	3%	3%	-0.3%	830
Not At-Risk & No IEP	51%	46%	-5.6%	3,988
Asian	67%	66%	-1.0%	129
Black	21%	15%	-5.9%	4,769
Latinx	27%	22%	-4.7%	1,706
White	81%	77%	-4.2%	1,221
Other Races	59%	59%	-0.9%	268
East of the River	16%	10%	-6.0%	1,992
West of the River	39%	34%	-4.7%	6,101

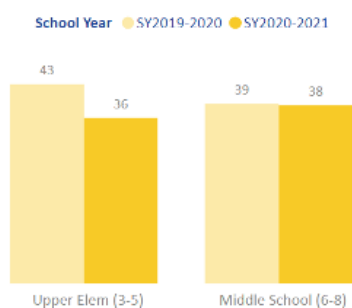
ELA/Reading On-Track for PARCC Proficiency

Equity Group	Fall 19-20	Fall 20-21	Change	N-size
All Students	42%	42%	0.0%	1,021
At-Risk	26%	23%	-3.3%	383
Not At-Risk	52%	53%	1.3%	638
Has IEP	11%	19%	8.3%	190
No IEP	49%	47%	-1.7%	831
At-Risk & IEP	5%	9%	3.6%	91
Not At-Risk & No IEP	58%	58%	-0.3%	539
Asian	73%	80%	6.7%	15
Black	30%	25%	-4.8%	589
Latinx	40%	47%	7.0%	242
White	84%	91%	7.1%	127
Other Races	76%	79%	3.7%	48
East of the River	28%	20%	-7.8%	239
West of the River	46%	48%	2.4%	782

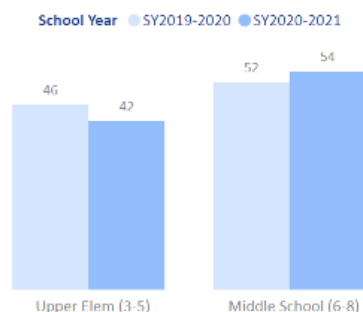
DIFFERENCE IN AVERAGE PERCENTILES FROM PRIOR ASSESSMENT PERIODS

NWEA's recent national brief on COVID slide focused on how average student achievement percentiles changed from fall 2019 to fall 2020, utilizing a set of national norms established before the pandemic. This metric provides another way to see how student groups' achievement has slid compared to a normal school year and compared to a national dataset. If a student group has an average percentile ranking of 45 from fall 2019, then that group outperformed 45% of students nationwide in the same grade on average. An average percentile of 40 in fall 2020 means that students outperform 40% of students in the same grade pre-COVID. Students in grades 3-8 with similar test characteristics this fall as last fall (guess rate and duration) dropped 3-5 percentage points in math and stayed about the same in reading.

Math Percentiles by Grade Level in Fall 2019 and Fall 2020 - Students with Similar Test Characteristics



Reading/ELA Percentiles by Grade Level in Fall 2019 and Fall 2020 - Students with Similar Test Characteristics



Achievement percentile drops differed across student groups in the District. Students of color, classified as at-risk, or who were previously lower-achieving students tended to have the largest drops in achievement percentile. A positive data point that stands out in the fall-to-fall percentile changes is the increase in average percentile for students with disabilities in reading. However, the sample size for this student group is small, and the same trend is not evident in the leveled reading data.

Math Average Percentile Change from Fall 2019 to Fall 2020

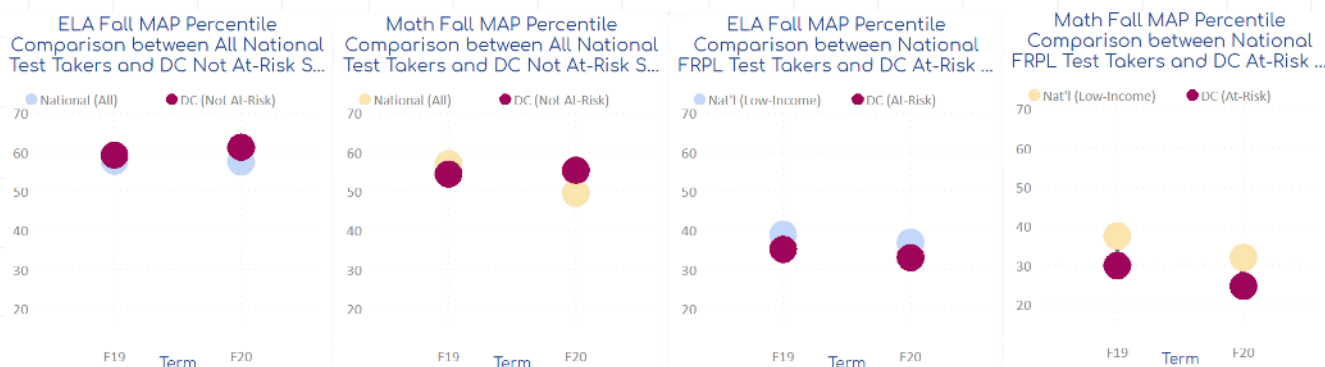
Equity Group	Fall 19-20	Fall 20-21	Change
All Students	41	37	-10%
At-Risk	26	21	-19%
Not At-Risk	53	49	-7%
Has IEP	12	12	-1%
No IEP	49	44	-10%
At-Risk & IEP	9	9	-6%
Not At-Risk & No IEP	60	56	-7%
Asian	72	74	2%
Black	30	25	-15%
Latinx	34	31	-8%
White	82	80	-3%
Other Races	66	64	-2%
East of the River	25	20	-19%
West of the River	46	43	-7%
1st Quintile (1-19)	11	9	-19%
2nd Quintile (20-39)	32	27	-16%
3rd Quintile (40-59)	49	43	-12%
4th Quintile (60-79)	66	61	-8%
5th Quintile (80-99)	88	86	-3%

ELA/Reading Average Percentile Change from Fall 2019 to Fall 2020

Equity Group	Fall 19-20	Fall 20-21	Change
All Students	50	49	-2%
At-Risk	36	31	-13%
Not At-Risk	59	60	1%
Has IEP	17	20	19%
No IEP	58	56	-4%
At-Risk & IEP	13	14	5%
Not At-Risk & No IEP	66	66	-0%
Asian	78	80	3%
Black	39	34	-15%
Latinx	47	53	12%
White	83	86	3%
Other Races	79	84	7%
East of the River	35	25	-28%
West of the River	55	56	3%
1st Quintile (1-19)	13	11	-15%
2nd Quintile (20-39)	35	30	-15%
3rd Quintile (40-59)	49	46	-5%
4th Quintile (60-79)	66	66	-0%
5th Quintile (80-99)	87	89	2%

COMPARING DIFFERENCES IN AVERAGE PERCENTILES WITH NATIONAL DATA

We compared DC students who took the NWEA MAP assessment the last two falls to compare how DC student percentiles matched up with national norms. The first two charts below compare DC “not at-risk” students with the overall national averages reported by NWEA since those two students are most demographically similar, and the second two charts compare national FRPL (free or reduced-price lunch) students with “at-risk” students in the District.

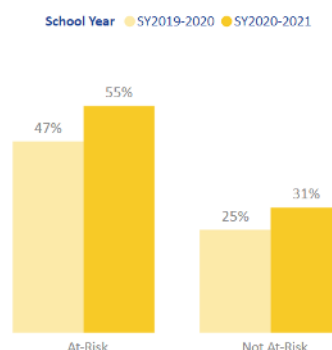


For DC’s not at-risk students, there was no COVID slide in reading compared to the small slide for students nationally, and their small math slide was also not as large as the national math slide. For at-risk students, the results were different. DC’s lowest-income at-risk students start, achievement-wise, a few average percentile points behind students on free or reduced-price meals nationally. However, their COVID slide was similar. This is a positive result as the national FRPL data includes a significant percentage of students who do not qualify for SNAP or TANF benefits in their state.

PERCENT OF STUDENTS MULTIPLE GRADE LEVELS BEHIND

Curriculum Associate’s i-Ready Diagnostic assessment provides schools with information about how many students are about one grade level behind and how many are two or more grade levels behind. Their fall COVID update report focused on this data point. We focus only on i-Ready math for this analysis as the sample for math includes both DCPS and public charter schools. DCPS does not use i-Ready as their reading baseline assessment, so the ELA data only includes a few charter schools (see appendix). DC’s “not at-risk” student population is more reflective of national demographics, and nationwide Curriculum Associates reported a six percentage point increase in percent of students two or more grade levels behind, same as DC not at-risk.

2+ Grade Levels Behind in Math by At-Risk Status and School Year



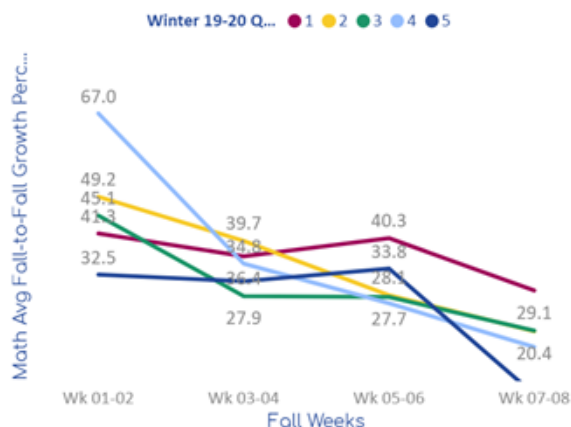
Equity Group	Fall 19-20	Fall 20-21	Change	N-size
All Students	35%	42%	7%	8,708
At-Risk	47%	55%	9%	3,988
Not At-Risk	25%	31%	5%	4,720
Has IEP	71%	72%	1%	1,614
No IEP	27%	35%	8%	7,094
At-Risk & IEP	76%	80%	3%	911
Not At-Risk & No IEP	19%	25%	6%	4,017
Asian	11%	11%	-0%	122
Black	43%	51%	8%	5,184
Latinx	39%	47%	8%	1,877
White	4%	5%	1%	1,264
Other Races	17%	21%	5%	261
East of the River	49%	55%	6%	2,281
West of the River	31%	37%	7%	6,427

Their report also provided data for math by family income status and grade. The average increase in percent of students two or more grade levels behind in math for families who make less than \$50,000 per year (the reported category closest to DC at-risk status thresholds) was 7%, similar to the DC at-risk student increase of 8%.

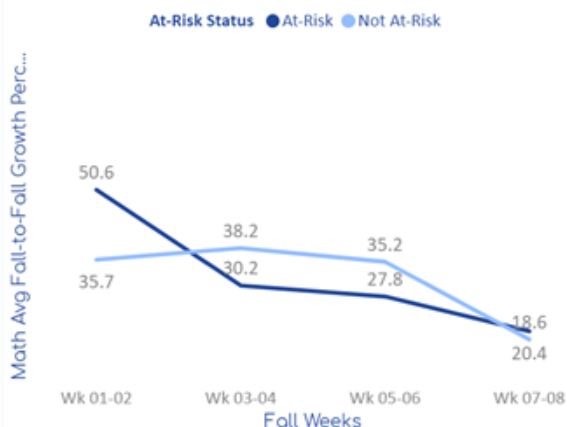
STUDENT GROWTH DURING THE EXTENDED FALL TESTING WINDOW

Recall that the MAP Growth assessment provides schools with expected growth for students based on which instructional week in the fall they took the test. The further into the school year a student completes the test, the more fall-to-fall growth they are expected to make. While in previous years the average growth percentile for students did not really move by week over the course of the 2-3 week testing window, we find a downward trend in fall-to-fall math growth percentiles during this year's 6-week testing window.

Math Avg Fall-to-Fall Growth Percentile by Fall 2020 Instructional Week and Winter 19-20 Quintile



Math Avg Fall-to-Fall Growth Percentile by Fall 2020 Instructional Week and At-Risk Status



For math, the downward slopes held regardless of at-risk status or prior achievement levels. For ELA/reading, previously lower achieving students appear to be sliding, while higher performing students are keeping pace with pre-COVID trends. The data shows that students this fall are gaining some skills and knowledge while distance learning, but the pace of academic growth is slower than pre-COVID in-person learning.



HOW DID STUDENTS FARE COMPARED TO DIRE SPRING COVID IMPACT PREDICTIONS?

NWEA and EmpowerK12 both released papers this past spring to predict the possible impact of the COVID-19 pandemic on student achievement and growth. MAP focused on changes in scale score, while we focused on changes to proficiency rates.

Using NWEA's model, we looked at typical and predicted MAP scale score changes from January 15 to October 1 (both dates were very close to the median test date for DC students from the Winter 2019-20 and Fall 2020-21 administrations). The chart below shows that DC students in the sample made math gains lower than pre-COVID typical growth, but higher than NWEA's COVID slide predictive model, and average ELA/reading gains were close to normal years.

	Pre-COVID Avg. Score Change	NWEA COVID Slide Prediction	DC Actual MAP Score Changes	Difference from COVID Pred.
<i>Upper Elem. (3-5) Math</i>	4.4	-5.2	-0.3	+4.9
<i>Upper Elem. (3-5) ELA</i>	2.3	0.3	3.2	+2.9
<i>Middle School (6-8) Math</i>	3.1	-2.1	0.1	+2.2
<i>Middle School (6-8) ELA</i>	1.9	0.0	1.8	+1.8

The sample had fewer previously lower-performing students than expected based on participation rates, and similarly lower-achieving students' COVID slide was larger than higher performing peers. Therefore, the positive differences for actual growth of the sample compared to NWEA's model are likely higher than the entire DC population average. There is still good news in that students were able to retain and gain some new information while distance learning, based on NWEA's study.



SUMMARY OF KEY POINTS FROM MAP AND I-READY ASSESSMENTS

HERE ARE OUR KEY TAKEAWAYS FROM THE COMPUTER-ADAPTIVE DIAGNOSTIC DATA:

> STUDENTS EXPERIENCED ACADEMIC SLIDE COMPARED TO PRE-COVID YEARS IN MATH SINCE THE START OF THE PANDEMIC UNTIL THE FALL ADMINISTRATION WINDOW, FALLING APPROXIMATELY FIVE MONTHS OR HALF AN ACADEMIC YEAR BEHIND WHERE THEY WOULD TYPICALLY BE THIS FALL.

> THE IMPACT ON ELA/READING WAS MUCH LESS SIGNIFICANT WITH STUDENTS DEMONSTRATING **90%** OF TYPICAL GROWTH IN READING AND ONLY ONE MONTH BEHIND WHETHER THEY TYPICALLY PERFORM IN THE FALL.

> THERE IS SOME EVIDENCE IN THE FALL ASSESSMENT DATA THAT STUDENTS ARE CONTINUING TO SLIDE COMPARE TO NORMAL ACADEMIC GROWTH TRENDS PRE-COVID. PAIRED WITH OUR KNOWLEDGE OF STUDENT ENGAGEMENT TRENDS AT EMPOWERK¹² PARTNER SCHOOLS CROSS-SECTOR AND ACROSS THE DISTRICT, WE EXPECT A WINTER UPDATE TO SHOW SIMILAR SLIDE. ADDITIONAL DISCUSSION ON FUTURE EXPECTATIONS FOR ACADEMIC GROWTH AND ACHIEVEMENT AS WELL AS POSSIBLE SHORT- AND LONG-TERM GOALS FOR RECOVERY CAN BE FOUND IN ANOTHER SECTION OF THIS REPORT.

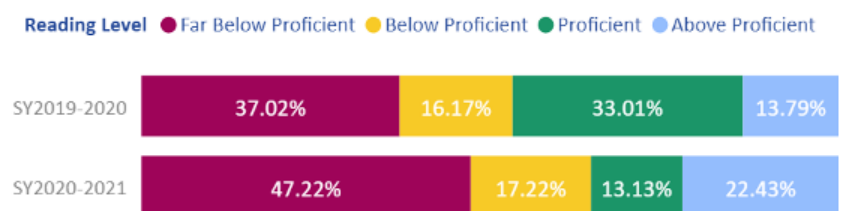


EARLY LITERACY PROFICIENCY SLIDE GRADES K-2

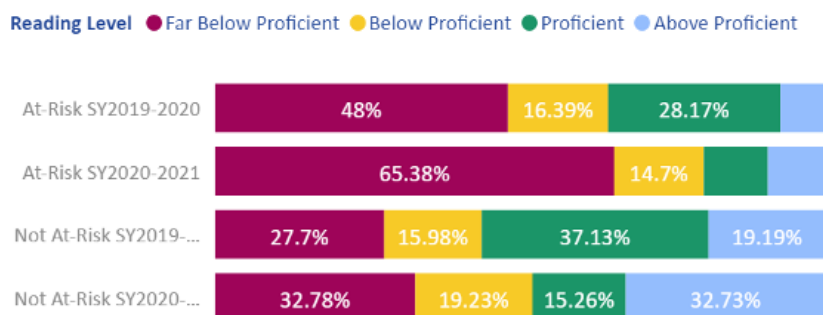
This fall, educators at 72 DCPS and six public charter schools administered the TRC (Text Reading Comprehension) assessment to students in kindergarten through second grade. TRC assesses beginning readers skills and comprehension, and it provides grade level proficiency determinations for students in kindergarten through 5th grade. The COVID slide in reading appears to be more substantial for lower elementary students in kindergarten through second grade, particularly at-risk students.

Overall, for students with a valid TRC assessment from this fall and last fall, more than one in four previously proficient lower elementary students have dropped below the TRC proficiency bar since last year. The impact on young children's literacy skills is seen more acute for at-risk students, who saw a 16 percentage point decrease in percent of students demonstrating proficiency, while "not at-risk" students saw a 14 percentage point gain in the percent of students above proficient from fall 2019 to fall 2020.

Students by School Year and Reading Level



Students by At-Risk Status, School Year and Reading Level



Literacy skills by the end of third grade matter. "For low-income children in particular, a 'readiness gap' fuels much of what has become known as the achievement gap...an acute readiness gap often begins at birth, continues growing until school entry, and leads to an achievement gap that persists through each subsequent year of schooling."⁹

Drops in early literacy proficiency were more likely to occur for at-risk students who live east of the river, signaling yet another way in which the COVID-19 pandemic has disproportionately impacted low-income families of color residing in East of the Anacostia neighborhoods.

Percent of Students in Grades K-2 Proficient on Early Literacy Assessment

Equity Group	Fall 19-20	Fall 20-21	Change	N-Size
All Students	48%	36%	-12%	3,967
At-Risk	36%	20%	-16%	1,768
Not At-Risk	58%	48%	-9%	2,199
Has IEP	26%	14%	-11%	575
No IEP	52%	40%	-12%	3,392
At-Risk & IEP	16%	9%	-7%	320
Not At-Risk & No IEP	60%	52%	-8%	1,944
Asian	60%	74%	14%	85
Black	44%	28%	-16%	2,213
Latinx	34%	27%	-6%	885
White	74%	64%	-10%	655
Other Races	68%	62%	-6%	129
East of the River	39%	21%	-19%	1,062
West of the River	51%	42%	-9%	2,905

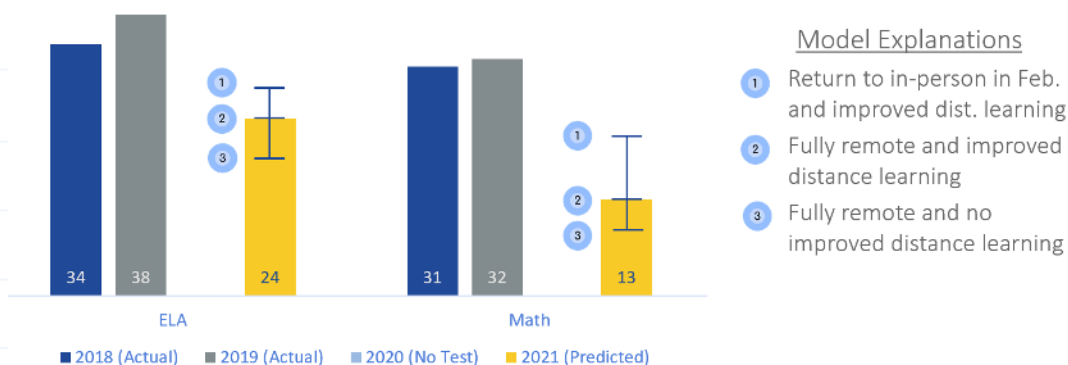
⁹Fiester (2010) *Early Warning! Why Reading by the End of Third Grade Matters.*

PREDICTING SPRING PARCC ACHIEVEMENT RATES IN MATH AND ELA

Most of the 2019-20 school year prior to the expected spring PARCC administration operated like a traditional school year. Then, in mid-March, the pandemic changed everything, and the spring PARCC administration was called off. Utilizing historical data as a strong foundation for a predictive model and attendance plus fall and winter assessment data from 2019-20, we calculated likely spring PARCC proficiency outcomes for every student in the sample.

Our spring COVID slide predictive model¹⁰, which was an ensemble model combining the NWEA COVID summer slide model, data from the impacts of hurricanes Harvey and Katrina, and the impact of chronic absenteeism in the District, was close to predicting actual academic slide for the sample of students this fall. In math, the model predicted the percent of students on-track for PARCC proficiency to drop to 25%, one point higher than the actual 24%, and in reading, the model over-projects the COVID slide with 36% predicted and 41% actual.

We utilized the fall data to refine the PARCC predictive model and reran the data for predicted PARCC proficiency this spring in grades 3-8 should students have the opportunity to complete the assessment. The predictive values utilize adjusted weighted averages of the fall sample data to be more reflective of the entire DC student population. We also apply the model to three different scenarios: one where students return in-person by February with improved distance learning instruction in the second quarter, one where students are mostly remote the whole year and distance learning improves, and another where students remain distance learning and the virtual instruction does not improve.



ELA/reading projected proficiencies for the spring may seem lower than the overall student fall COVID slide data from fall suggests. However, given the under-representation of lower performing student groups in the sample, the adjusted DC “all students” proficiency in reading is likely to drop at least 14 percentage points unless the situation changes. In-person instruction is more likely to have a large influence on math over reading based on national and local data.

In the creation of the likely proficiency ranges above, we considered different possible factors that could improve proficiency. These include both policy and practice strategies like the return of in-person school by February and improvement of distance learning for DC’s most vulnerable populations. We also considered a full remote year and if the fall slide continues throughout the year. When modeling them out, we find a pretty broad range of possible proficiency values.

¹⁰[EmpowerK12 \(2020\) How COVID-19 Regular School Closures Could Impact DC Student Proficiency in 2020–21](#)

RECOMMENDATIONS FOR RECOVERY GOALS AND NEXT STEPS

Now is the time to think boldly. It is time to end racial and socioeconomic outcome gaps for kids by the end of this decade, once and for all.

By outcome gaps, EmpowerK12 does not mean an exclusive reference to math and reading achievement gaps. We care about social-emotional well-being, science, history, high school graduation, post-secondary educational attainment, and preparedness for life and career. Our thoughts on bold achievement and growth goals, both by the end of this decade and in the next three years of education recovery:

CLOSE THE MATH AND ELA ACHIEVEMENT GAPS BY 2030

DC at-risk students close national achievement gap on NAEP with their not-economically disadvantaged peers by the 2030 administration. To accomplish this, DC will need to cut current gaps in half by 2024 to be on pace for full closure by the start of the next decade. The next section provides additional detail on interim targets and activities that may help meet this goal. Math achievement has taken a toll this past year. Yet, research suggests math skills can be the quickest to improve with quality instruction and tutoring.

STUDENTS CONVEY THAT THEY HAVE A JOY FOR LEARNING AND TEACHERS A JOY FOR TEACHING

This year has been incredibly challenging for teachers, students, and families. For many, but not all, the joy for learning and teaching has been sapped by the pandemic and distance learning. As we move into in-person education, schools should first focus on rebuilding relationships between and among families, teachers, and students and then on how fun it is to learn together. Common student and teacher surveys can help track progress and illuminate bright spots that schools can learn from.

MONITOR MULTI-DISCIPLINARY PROGRESS IN SCIENCE AND SOCIAL STUDIES AS WELL

The DC State Board of Education is poised to adopt new social studies standards. From our perspective, this year has emphasized the need to ensure all students have a proficient understanding of history and government. We assess student knowledge of science (also very important as this year shows) once elementary, middle, and high school. We should do the same for social studies.

FOSTER A COLLABORATIVE, DATA-DRIVEN CONTINUOUS IMPROVEMENT MINDSET AMONG SCHOOL LEADERS AND EDUCATORS

Improvement science is a unique approach to continuous improvement utilized by the manufacturing and medical fields to rapidly improve outcomes. The process involves teams of individuals across different units (i.e. different hospitals, parts of the assembly line, or roles in the organization) identifying a common aim. Then, each person collects robust ground-level data to analyze in rapid, iterative cycles and figure out what strategies produce positive results. Together, as a network, the individuals share what works and what does not work in order to propagate improvement with efficiency. Networks of educators trying out and learning new strategies of infusing hybrid learning into accelerated improvement will be key to meeting goals for students.

RECOMMENDATIONS FOR FUTURE FOLLOW-UP STUDY

This fall baseline assessment data analysis provides many important answers to key COVID impact questions, while also generating a myriad of new questions to ponder.

> WHY IS THE ACADEMIC SLIDE IN MATH SO MUCH LARGER?

Results clearly show a greater impact on math compared to reading, but in the District and across the nation this is a continuation of a steady trend. Students consistently experience larger learning loss compared to ELA when faced with time off from school no matter the circumstances (i.e. summer break, chronic absenteeism, natural disasters). Often this is just an accepted fact, but we must identify and address the root cause of the differences in student outcomes between math and ELA across the District to ensure swift recovery and retention of math skills.

> IS THE QUALITY OF DISTANCE LEARNING HAS IMPROVED THROUGHOUT THE PANDEMIC?

Although that cannot be determined by this study, this could be investigated further by conducting a follow-up study using the data found here and forthcoming data in school's winter test results. Additionally, this analysis only focused on test scores and data from the most recent years. Conducting similar analyses with other measures of academic progress and from other time periods could further clarify what is happening to our students.

> WHY WERE SOME SUBGROUPS WITH HISTORICALLY LOWER ACHIEVEMENT LESS AFFECTED BY COVID-19 THAN THEIR PEERS?

At the beginning of the pandemic, many stakeholders were concerned that vulnerable populations would be more negatively impacted by virtual learning. However, our analysis showed that students with disabilities in ELA and at-risk students in math achievement was not more affected compared to their peers. How were we able to prevent slides with these groups from occurring?

IMPROVEMENT SCIENCE HELPS ME IMPROVE BY...

"Giv[ing] me the opportunity to implement new strategies, reflect on those strategies and make the necessary changes."

- ELEMENTARY SCHOOL TEACHER, EAGLE ACADEMY PUBLIC CHARTER SCHOOL

"Engaging with other teachers from other schools on how they are challenging scholars and giving strategies to better their instruction. I love we were able to discuss what we were working on and having them give feedback/advice."

- MIDDLE SCHOOL TEACHER, FRIENDSHIP PUBLIC CHARTER SCHOOL

"Keep[ing] me on my toes about data collection!!"

- ELEMENTARY SCHOOL TEACHER, DC PUBLIC SCHOOLS



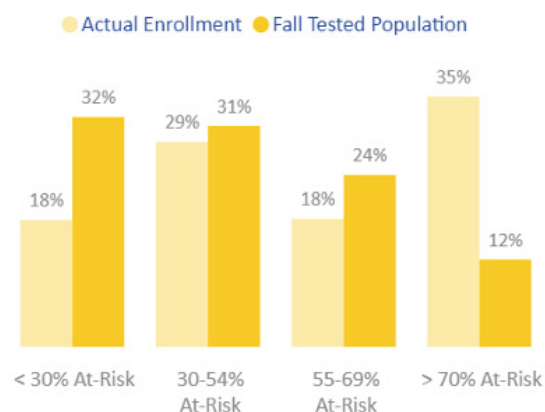
COVID ACADEMIC SLIDE ANALYSIS APPENDICES

ADDITIONAL ASSESSMENT SAMPLE DATA

PERCENT OF STUDENTS DEMOGRAPHICS OF SAMPLE TESTED STUDENTS IN GRADES 3-8 BY SUBJECT

	All DC Students 2019-20	ELA Sample used for Analysis	Math Sample used for Analysis
Asian	2%	2%	2%
Black/African American	64%	56%	60%
Hispanic/Latinx	20%	27%	20%
Two or More Races	3%	4%	3%
White	12%	12%	15%
At-Risk	47%	40%	43%
Students with Disabilities	17%	22%	20%
Total Students (3-8)	36,655	2,642	7,779

Actual Enrollment & Fall Tested Pop. by Percent At-Risk Served School Group



PARTICIPATION RATES FOR SAMPLE SCHOOLS IN GRADES 3-8 BY SUBJECT

ELA/Reading Participation Rates

At-Risk Status	Fall 2019	Winter 2019-20	Fall 2020
At-Risk	98%	99%	93%
Not At-Risk	99%	98%	97%
All Students	98%	98%	95%

SwD Status	Fall 2019	Winter 2019-20	Fall 2020
Has IEP	97%	98%	94%
No IEP	99%	98%	96%

Race-Ethnicity	Fall 2019	Winter 2019-20	Fall 2020
Asian	100%	100%	100%
Black or Afri...	98%	99%	94%
Hispanic/La...	98%	97%	99%
Two or more...	98%	95%	97%
White	100%	98%	99%

At-Risk School Group	Fall 2019	Winter 2019-20	Fall 2020
< 30% At-Risk	98%	96%	97%
30-54% At-Ri...	100%	99%	98%
55-69% At-Ri...	98%	99%	96%
> 70% At-Risk	98%	99%	84%

Spring 2019 Quintile	Fall 2019	Winter 2019-20	Fall 2020
1	99%	97%	93%
2	99%	98%	94%
3	99%	98%	96%
4	98%	96%	96%
5	99%	97%	97%

Math Participation Rates

At-Risk Status	Fall 2019	Winter 2019-20	Fall 2020
At-Risk	97%	98%	54%
Not At-Risk	98%	98%	60%
All Students	98%	98%	58%

SwD Status	Fall 2019	Winter 2019-20	Fall 2020
Has IEP	97%	98%	62%
No IEP	98%	98%	57%

Race-Ethnicity	Fall 2019	Winter 2019-20	Fall 2020
Asian	98%	100%	66%
Black or Afr...	97%	99%	54%
Hispanic/L...	97%	96%	64%
Two or more...	98%	96%	70%
White	98%	97%	64%

At-Risk School Group	Fall 2019	Winter 2019-20	Fall 2020
< 30% At-Risk	96%	96%	61%
30-54% At-Ri...	100%	100%	61%
55-69% At-Ri...	98%	99%	49%
> 70% At-Risk	98%	99%	47%

Spring 2019 Quintile	Fall 2019	Winter 2019-20	Fall 2020
1	97%	98%	51%
2	98%	98%	48%
3	98%	98%	46%
4	98%	96%	42%
5	99%	98%	44%

PARTICIPATION RATES FOR SAMPLE SCHOOLS IN GRADES K-8 BY GRADE LEVEL

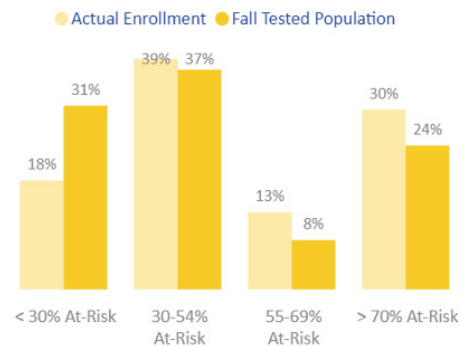
ELA/Math Participation Rates

GradeLevel	Fall 2019	Winter 2019-20	Fall 2020
KG	94%	94%	96%
01	98%	99%	86%
02	99%	99%	83%
03	98%	99%	73%
04	99%	99%	77%
05	99%	98%	80%
06	98%	99%	80%
07	96%	95%	76%
08	97%	95%	76%
All Students	96%	96%	82%

DEMOGRAPHICS OF SAMPLE LEVELED READING STUDENTS IN GRADES K-2

	All DC Students 2019-20	ELA Sample used for Analysis
Asian	2%	2%
Black/African American	64%	53%
Hispanic/Latinx	20%	21%
Two or More Races	3%	4%
White	12%	20%
At-Risk	47%	41%
Students with Disabilities	17%	13%
Total Students (K-2)	21,794	8,358

Actual Enrollment & Fall Tested Pop. by Percent At-Risk Served School Group



LEVELED READING PARTICIPATION RATES FOR SAMPLE SCHOOLS IN GRADES K-2

ELA/Reading Participation Rates

At-Risk Status	Fall 2019	Winter 2019-20	Fall 2020
At-Risk	95%	98%	95%
Not At-Risk	95%	97%	97%
All Students	95%	97%	96%

SwD Status	Fall 2019	Winter 2019-20	Fall 2020
Has IEP	93%	96%	93%
No IEP	95%	97%	96%

Race-Ethnicity	Fall 2019	Winter 2019-20	Fall 2020
Asian	90%	91%	95%
Black or Afri...	96%	98%	95%
Hispanic/La...	91%	94%	96%
Two or more...	93%	100%	99%
White	96%	97%	98%

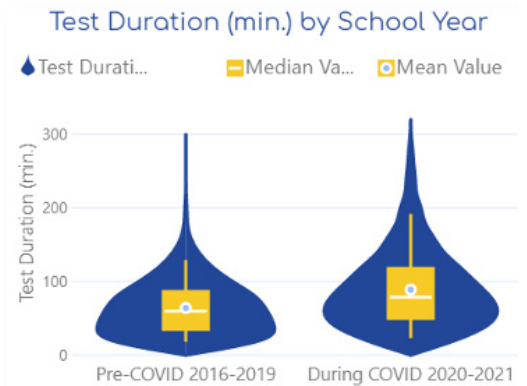
At-Risk School Group	Fall 2019	Winter 2019-20	Fall 2020
< 30% At-Risk	97%	99%	98%
30-54% At-Ri...	93%	95%	96%
55-69% At-Ri...	96%	99%	93%
> 70% At-Risk	95%	98%	95%

Spring 2019 Quintile	Fall 2019	Winter 2019-20	Fall 2020
1	100%	100%	100%
2	100%	97%	98%
3	99%	97%	93%
4	100%	100%	86%
5	100%	100%	97%

ADDITIONAL TEST CHARACTERISTICS DATA

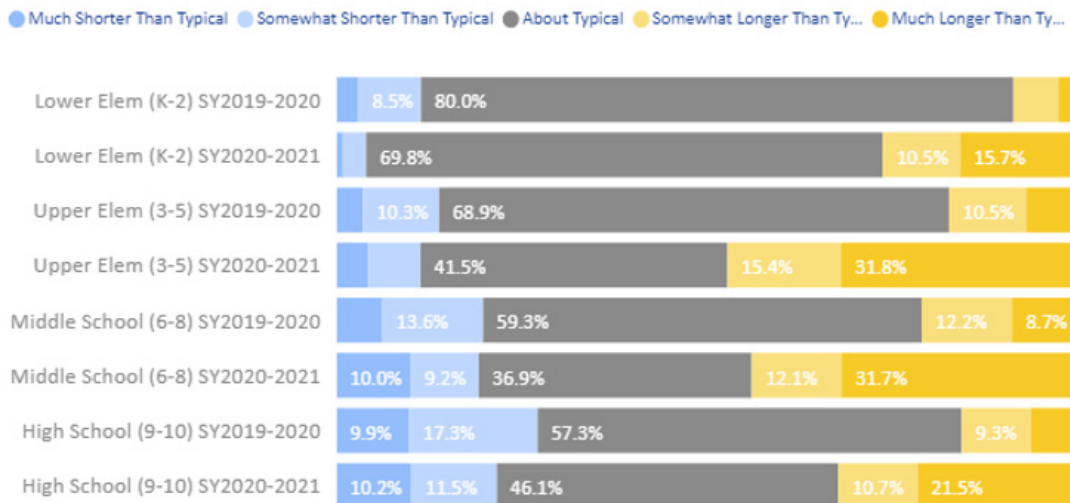
TEST DURATION BY SCHOOL YEAR, GRADE BAND, AND SUBJECT

Subject Grade Band	ELA			Math		
	Mean	Median	Std. Dev.	Mean	Median	Std. Dev.
Lower Elem (K-2)						
Pre-COVID 2016-2019	31.8	28	16.16	36.8	32	22.00
During COVID 2020-2021	44.5	39	24.75	48.2	40	32.41
Upper Elem (3-5)						
Pre-COVID 2016-2019	68.3	62	35.04	65.6	59	33.64
During COVID 2020-2021	74.9	65	43.64	78.3	68	45.00
Middle School (6-8)						
Pre-COVID 2016-2019	85.2	80	38.50	82.8	78	35.67
During COVID 2020-2021	111.7	101	54.72	102.6	92	53.73
High School (9-10)						
Pre-COVID 2016-2019	88.3	82	39.74	64.7	61	27.62
During COVID 2020-2021	102.4	94	47.86	90.4	82	43.01



PERCENT OF STUDENTS BY TIME TAKEN CATEGORY AND FALL YEAR

Percent of Students by Time Taken Category and Fall Year



TEST DURATION BY SCHOOL YEAR, GRADE BAND, AND PRIOR PERFORMANCE QUINTILE

Subject COVID Time Grade Band	ELA						Math					
	Pre-COVID 2016-2019			During COVID 2020-2021			Pre-COVID 2016-2019			During COVID 2020-2021		
	Mean	Median	Std. Dev.	Mean	Median	Std. Dev.	Mean	Median	Std. Dev.	Mean	Median	Std. Dev.
Upper Elem (3-5)												
1.00	59.1	52	32.12	58.6	51	35.85	58.9	53	32.32	64.5	55	41.03
2.00	72.9	67	34.89	70.6	64	38.68	71.1	64	34.57	78.8	69	44.99
3.00	78.7	72	36.87	79.9	69	46.87	75.3	68	35.55	86.2	77	46.98
4.00	84.8	80	36.79	84.3	73	45.66	77.8	71	35.75	89.1	81	44.83
5.00	84.5	80	35.54	87.4	81	44.19	74.9	67	34.63	84.1	74	44.37
Middle School (6-8)												
1.00	79.8	75	40.15	93.5	83	48.44	74.4	69	34.28	88.5	77	50.51
2.00	99.9	95	40.72	117.0	104	58.37	89.7	84	35.34	107.6	96	54.63
3.00	104.3	100	39.89	120.5	113	52.59	94.8	90	36.37	113.4	103	54.68
4.00	108.2	101	43.46	131.3	121	55.85	98.4	94	35.99	116.1	107	52.91
5.00	99.8	92	40.31	119.4	104	56.25	103.4	96	36.79	104.6	89	52.72

ADDITIONAL ASSESSMENT DATA FOR ALL TESTED STUDENTS AND "RELIABLE STUDENTS"

RUSH/GUESS FLAG RATE BY SCHOOL YEAR, GRADE BAND, AND SUBJECT

Subject Grade Band	ELA No Flag	Red Flag	Yellow Flag	Subject Grade Band	Math No Flag	Red Flag	Yellow Flag
Lower Elem (K-2)	96%	1%	3%	Lower Elem (K-2)	98%	1%	2%
Pre-COVID 2016-2019	96%	1%	3%	Pre-COVID 2016-2019	98%	1%	2%
During COVID 2020-2021	91%	2%	7%	During COVID 2020-2021	97%	1%	3%
Upper Elem (3-5)	83%	4%	12%	Upper Elem (3-5)	97%	0%	2%
Pre-COVID 2016-2019	85%	4%	11%	Pre-COVID 2016-2019	98%	0%	2%
During COVID 2020-2021	74%	6%	20%	During COVID 2020-2021	96%	1%	3%
Middle School (6-8)	82%	6%	12%	Middle School (6-8)	94%	2%	4%
Pre-COVID 2016-2019	82%	7%	11%	Pre-COVID 2016-2019	95%	2%	4%
During COVID 2020-2021	80%	5%	15%	During COVID 2020-2021	94%	2%	4%
High School (9-10)	75%	10%	15%	High School (9-10)	82%	6%	12%
Pre-COVID 2016-2019	76%	11%	13%	Pre-COVID 2016-2019	82%	6%	12%
During COVID 2020-2021	73%	6%	21%	During COVID 2020-2021	84%	2%	14%
Total	84%	5%	10%	Total	93%	2%	5%

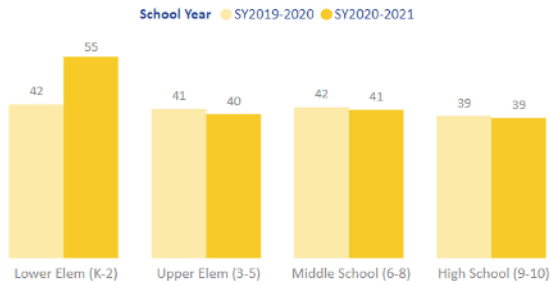
RUSH/GUESS FLAG RATE BY SCHOOL YEAR, GRADE BAND, AND PRIOR PERFORMANCE QUINTILE

Subject Grade Band	ELA No Flag	Red Flag	Yellow Flag	Subject Grade Band	Math No Flag	Red Flag	Yellow Flag
Upper Elem (3-5)	83%	4%	12%	Upper Elem (3-5)	97%	0%	2%
1.00	77%	6%	17%	1.00	96%	1%	3%
Pre-COVID 2016-2019	80%	6%	14%	Pre-COVID 2016-2019	97%	1%	2%
During COVID 2020-2021	64%	7%	29%	During COVID 2020-2021	94%	1%	4%
2.00	80%	5%	14%	2.00	97%	0%	3%
Pre-COVID 2016-2019	83%	5%	12%	Pre-COVID 2016-2019	98%	0%	2%
During COVID 2020-2021	67%	8%	25%	During COVID 2020-2021	95%	1%	4%
3.00	84%	4%	12%	3.00	98%	0%	2%
Pre-COVID 2016-2019	86%	3%	11%	Pre-COVID 2016-2019	98%	0%	2%
During COVID 2020-2021	73%	8%	19%	During COVID 2020-2021	96%	1%	3%
4.00	88%	3%	9%	4.00	98%	0%	1%
Pre-COVID 2016-2019	90%	2%	7%	Pre-COVID 2016-2019	99%	0%	1%
During COVID 2020-2021	80%	5%	14%	During COVID 2020-2021	97%	1%	2%
5.00	91%	3%	6%	5.00	99%	0%	1%
Pre-COVID 2016-2019	92%	2%	6%	Pre-COVID 2016-2019	99%	0%	1%
During COVID 2020-2021	89%	4%	8%	During COVID 2020-2021	98%	0%	2%
Middle School (6-8)	82%	6%	12%	Middle School (6-8)	94%	2%	4%
1.00	70%	12%	19%	1.00	91%	3%	6%
Pre-COVID 2016-2019	70%	12%	18%	Pre-COVID 2016-2019	91%	3%	6%
During COVID 2020-2021	66%	10%	24%	During COVID 2020-2021	91%	2%	6%
2.00	79%	7%	14%	2.00	94%	2%	4%
Pre-COVID 2016-2019	79%	7%	13%	Pre-COVID 2016-2019	94%	2%	4%
During COVID 2020-2021	74%	7%	20%	During COVID 2020-2021	94%	2%	4%
3.00	84%	5%	11%	3.00	95%	1%	4%
Pre-COVID 2016-2019	85%	5%	10%	Pre-COVID 2016-2019	96%	1%	3%
During COVID 2020-2021	78%	5%	17%	During COVID 2020-2021	93%	2%	4%
4.00	89%	4%	8%	4.00	97%	1%	3%
Pre-COVID 2016-2019	89%	4%	7%	Pre-COVID 2016-2019	96%	1%	3%
During COVID 2020-2021	88%	4%	9%	During COVID 2020-2021	97%	1%	2%
5.00	97%	1%	2%	5.00	98%	0%	2%
Pre-COVID 2016-2019	97%	1%	2%	Pre-COVID 2016-2019	98%	0%	1%
During COVID 2020-2021	98%	0%	2%	During COVID 2020-2021	97%	0%	3%
Total	83%	5%	12%	Total	96%	1%	3%

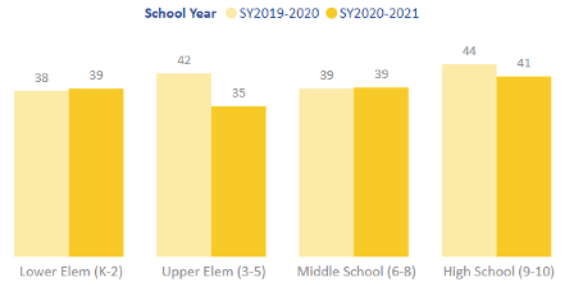
ADDITIONAL ASSESSMENT DATA FOR ALL TESTED STUDENTS AND “RELIABLE STUDENTS”

AVERAGE PERCENTILE CHANGE FROM FALL 2019 TO FALL 2020

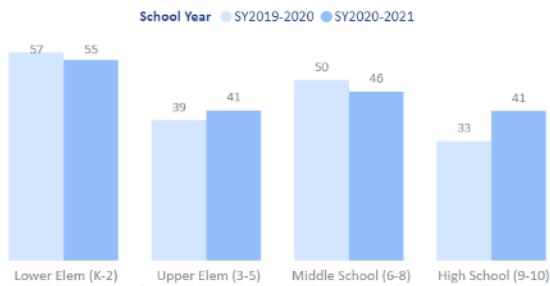
Math Percentiles by Grade Level in Fall 2019 and Fall 2020 - All Tested Students



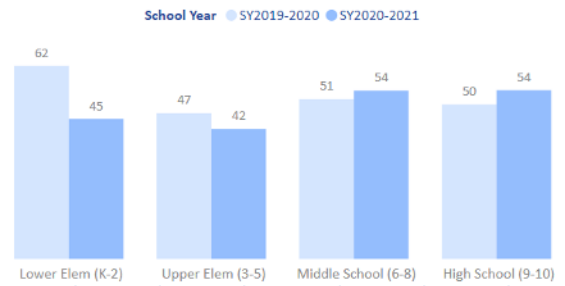
Math Percentiles by Grade Level in Fall 2019 and Fall 2020 - Students with Similar Test Characteristics



ELA Percentiles by Grade Level in Fall 2019 and Fall 2020 - All Tested Students

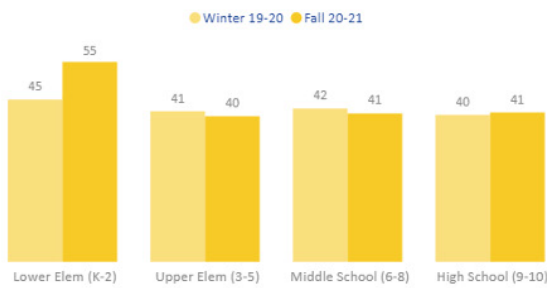


Reading/ELA Percentiles by Grade Level in Fall 2019 and Fall 2020 - Students with Similar Test Characteristics

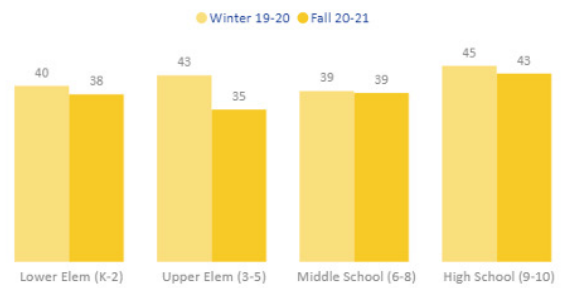


AVERAGE PERCENTILE CHANGE FROM WINTER 2019 TO FALL 2020

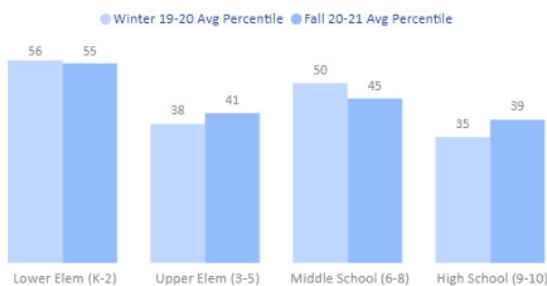
Math Percentiles by Grade Level in Fall 2019 and Fall 2020 - All Tested Students



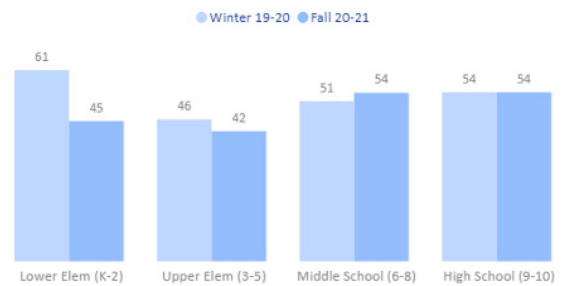
Math Percentiles by Grade Band in Winter 2019-20 and Fall 2020 - Students with Similar Test Characteristics



ELA Percentiles by Grade Level in Fall 2019 and Fall 2020 - All Tested Students

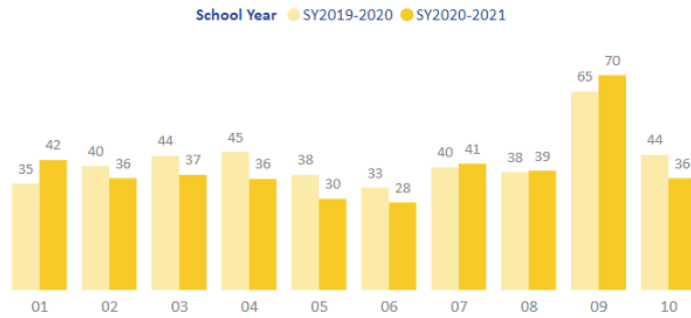


ELA Percentiles by Grade Band in Winter 2019-20 and Fall 2020 - Students with Similar Test Characteristics

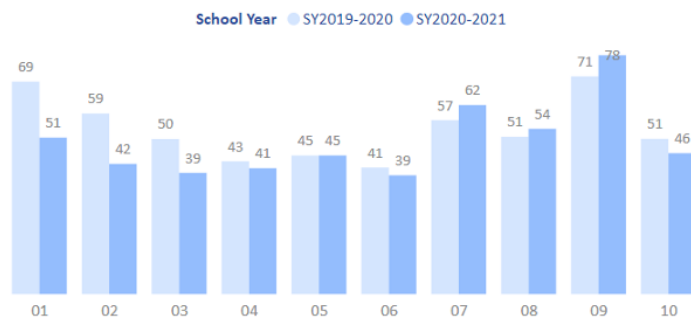


AVERAGE PERCENTILE CHANGE FROM WINTER 2019 TO FALL 2020 BY GRADE LEVEL

Math Percentiles by Grade Level in Fall 2019 and Fall 2020 - Students with Similar Test Characteristics

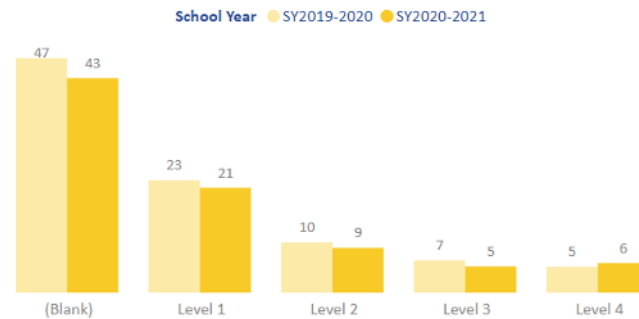


Reading/ELA Percentiles by Grade Level in Fall 2019 and Fall 2020 - Students with Similar Test Characteristics

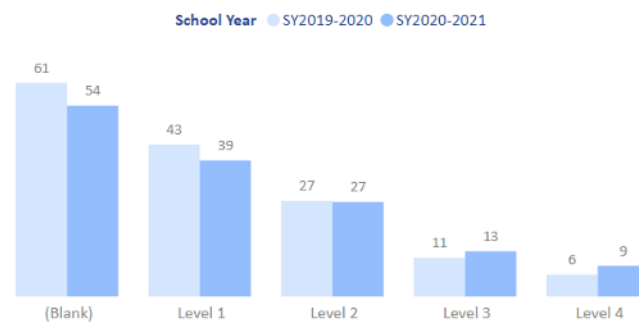


AVERAGE PERCENTILE CHANGE FROM WINTER 2019 TO FALL 2020 BY SPECIAL ED SUPPORT LEVEL (BLANK = NO IEP)

Math Percentiles by Grade Level in Fall 2019 and Fall 2020 - Students with Similar Test Characteristics



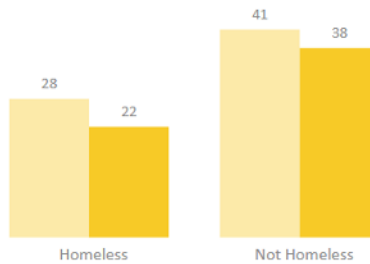
Reading/ELA Percentiles by Grade Level in Fall 2019 and Fall 2020 - Students with Similar Test Characteristics



AVERAGE PERCENTILE CHANGE FROM WINTER 2019 TO FALL 2020 BY HOMELESS STATUS

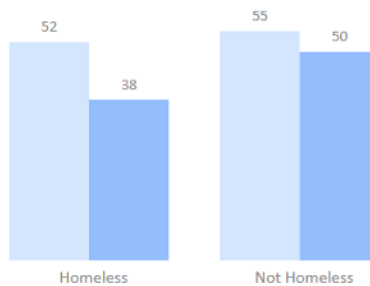
Math Percentiles by Grade Level in Fall 2019 and Fall 2020 - Students with Similar Test Characteristics

School Year ● SY2019-2020 ● SY2020-2021



Reading/ELA Percentiles by Grade Level in Fall 2019 and Fall 2020 - Students with Similar Test Characteristics

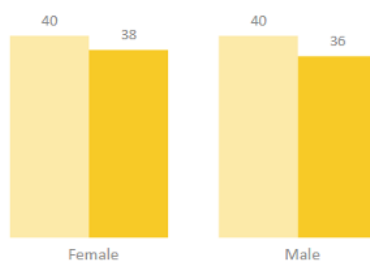
School Year ● SY2019-2020 ● SY2020-2021



AVERAGE PERCENTILE CHANGE FROM WINTER 2019 TO FALL 2020 BY GENDER

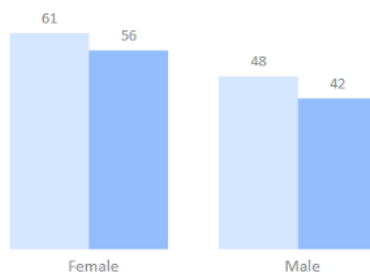
Math Percentiles by Grade Level in Fall 2019 and Fall 2020 - Students with Similar Test Characteristics

School Year ● SY2019-2020 ● SY2020-2021



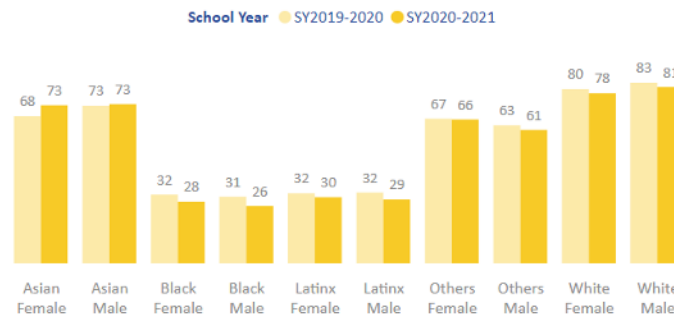
Reading/ELA Percentiles by Grade Level in Fall 2019 and Fall 2020 - Students with Similar Test Characteristics

School Year ● SY2019-2020 ● SY2020-2021

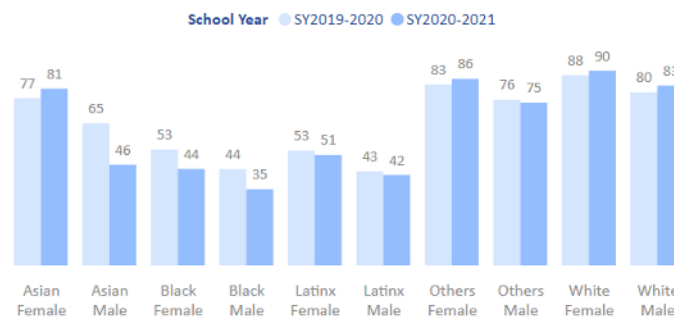


AVERAGE PERCENTILE CHANGE FROM WINTER 2019 TO FALL 2020 BY RACE/GENDER

Math Percentiles by Grade Level in Fall 2019 and Fall 2020 - Students with Similar Test Characteristics

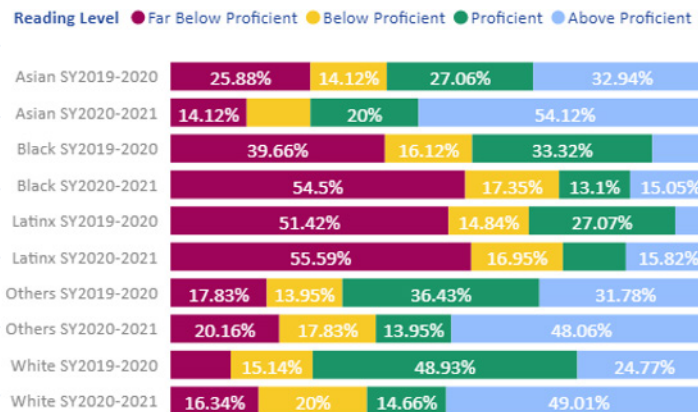


Reading/ELA Percentiles by Grade Level in Fall 2019 and Fall 2020 - Students with Similar Test Characteristics



TRC LEVELED READING PROFICIENCY BY RACE, RIVER LOCATION, AND YEAR

Students by Race, School Year and Reading Level



Students by River Location, School Year and Reading Level

