

Understanding Student Needs

Early Results from Fall Assessments

Curriculum Associates Research Brief | October 2020

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Research Overview

In spring 2020, schools across the country were forced to close to protect their students, teachers, and communities from the COVID-19 pandemic. Following these unprecedented school closures, many predicted widespread learning loss for American students (Chetty, Friedman, Hendren & Stepner, 2020; Hippel, 2020; Hobbs, 2020). Through a series of interviews with educators at this time about the effects of school closures and challenges of the coming academic year (Curriculum Associates, 2020a), we learned that understanding where students would start the 2020–2021 school year was at the top of district leaders' lists. Now that students have returned—whether in their local school buildings, remotely, or a little of both—we know that educators are continuing to ask themselves, "How far behind are my students?," "What are their greatest areas of need?," and "What can I do to help them?"

The goal of this study is to share what we are seeing as reflected based on students' fall 2020 i-Ready Diagnostic for Reading and Mathematics placement levels to help shed light on these critical questions. At Curriculum Associates, our Research team has access to assessment data from a guarter of a million students who have already taken their fall placement tests in Reading and Mathematics. We dove into the assessment data as soon as we had a large enough sample to work with to provide educators with early insights into how students are performing across the country. The preliminary results uncovered thus far are encouraging and offer reasons for optimism as we kick off a historic school year.

While there are countless research questions raised by the pandemic-related closing and reopening of schools, we wanted to prioritize helping educators better understand the academic needs of students. To do so, we examined students' criterion-referenced grade-level placements with a particular focus on students who are starting the school year behind and not yet ready for grade-level instruction, as we know this is an area of concern. While this sample is not nationally representative of all students across the country, we believe it is still instructive for educators in facing the challenges of this unusual year. For more resources on teaching and learning during the 2020–2021 school year, please visit Curriculum Associates.com/Teaching-Learning-2020.

Research Questions

This analysis was designed to understand early Reading and Mathematics placement results in a way that ultimately informs teaching and learning this academic year. With this goal in mind, we sought to answer the following four research questions by examining the most recent Diagnostic results in Reading and Mathematics in comparison to the Diagnostic results from the prior three school years. For the purposes of this paper, students who placed Two or More Grade Levels Below their chronological grade on the Diagnostic were considered to be performing below grade level.

- **1.** Are more students placing below grade level overall by subject in fall 2020 compared to prior academic school years?
- 2. Are more students placing below grade level within subject and by grade in fall 2020 compared to prior academic school years?
- 3. Are more students placing below grade level in fall 2020 when disaggregated by race/ ethnicity compared to prior academic school years?
- 4. Are more students placing below grade level in fall 2020 when disaggregated by median annual household income compared to prior academic school years?

Sample Description

The school-level data on race and ethnicity used in this analysis was sourced from the National Center for Education Statistics (NCES), which asks students to identify as American Indian or Alaska Native, Asian, Black or African American, Hispanic, Native Hawaiian or Other Pacific Islander, White, or Two or More Races. Throughout this paper, we will use the term "Black" to refer to the NCES category of Black or African American, the term "Latino" to refer to the NCES category of Hispanic, and the term "BIPOC" (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.

We recognize that language changes with time and that each demographic group described is not monolithic, nor are all individuals within any designated demographic group in agreement on preferred language. As a company, we will continue to review, reflect on, and evolve the terminology with the goal of using bias-free, inclusive, and sensitive language labels.

Methodology

For this study, we were interested in examining the earliest available placement results from students in fall 2020 with a large enough sample to compare performance data for Grades 1–8 from the fall of the current 2020–2021 school year (which we will refer to throughout this paper as "fall 2020") to a rolling average of fall performance data for Grades 1–8 across the three most recent typical school years: 2017–2018, 2018–2019, and 2019–2020 (which we will refer to throughout this paper as "historical average"). In order to have what we considered to be a fair basis of comparison for this analysis, we only included students who tested in school during fall 2020 between August 1 and September 9. With these criteria in place, the final analytic sample for the Diagnostic for Reading analysis consisted of 109,066 students in Grades 1–8 in 348 schools during the 2020–2021 school year, and the sample for the Diagnostic for Mathematics analysis consisted of 148,868 students in Grades 1–8 in 447 schools during the 2020–2021 school year.

The Reading analysis represented eight states across the country (Colorado, Florida, Indiana, Missouri, Mississippi, North Carolina, South Carolina, and Tennessee) and the Mathematics analysis represented 12 states across the country (Colorado, Florida, Georgia, Idaho, Indiana, Missouri, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Utah). For both subjects, the West, Midwest, and South US Census geographical regions were represented. Most students in this study were concentrated in the South region, with 76% of students in the Reading analysis and 79% of students in the Mathematics analysis located there. Nearly two-thirds of the students across both the Reading and Mathematics analysis were enrolled in schools located in rural or suburban areas, with the remainder of students in schools located in towns or urban areas. See Appendix A for more information on our methodology and sample characteristics.

About the i-Ready Diagnostic

The Diagnostic is a valid and reliable computer-adaptive assessment for students in Grades K–12 for Reading and

Mathematics. The Diagnostic can be administered at three time points during the school year: typically, during fall, winter, and spring.

The Diagnostic provides five criterion-referenced Grade-Level Placements: Mid or Above Grade Level, Early On Grade Level, One Grade Level Below, Two Grade Levels Below, and Three or More Grade Levels Below. Unlike normative scores, these performance or achievement levels articulate the high expectations students must achieve to be considered as having attained grade-level knowledge and skills. These placement levels are designed to help educators understand what level of instruction students are prepared for as the year begins.

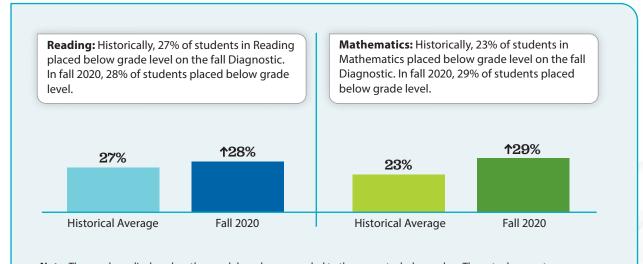
The Diagnostic <u>received high ratings</u> from the National Center on Intensive Intervention for use as an Academic Screening and Progress Monitoring tool for both Reading and Mathematics.

Results

1) Are more students placing below grade level overall by subject in fall 2020 compared to prior academic school years?

As we examined the earliest available data from the Diagnostic for Reading and for Mathematics, a twofold pattern emerged. In this preliminary set of data, a smaller proportion of students appear to be ready for grade-level instruction in fall 2020 compared with the historical average, and the proportion of students placing below grade level is greater in Mathematics than in Reading. See Graph 1.

Graph 1: Percentage of Students Placing Two or More Grade Levels Below Reading and Mathematics, Grades 1-8



Note: The numbers displayed on the graph have been rounded to the nearest whole number. The actual percentages were as follows: Mathematics historical average (23.05%), Mathematics fall 2020 average (29.42%), Reading historical average (26.72%), and Reading fall 2020 average (28.25%). The difference between the historical and fall 2020 average was 1.53% for Reading and 6.37% for Mathematics.

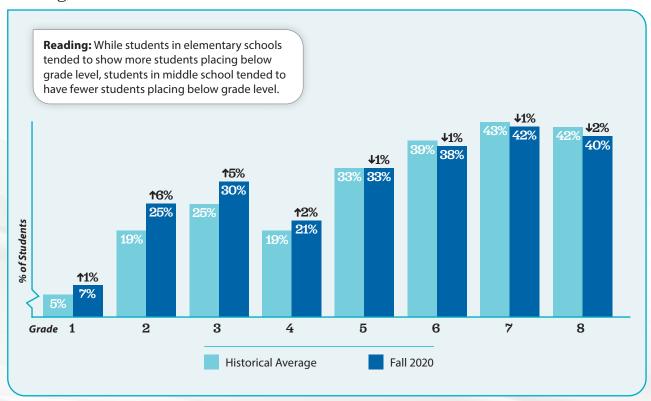
2) Are more students placing below grade level within subject and by grade in fall 2020 compared to prior academic school years?

While the overall trend showed that the proportion of students placing below grade level was greater in Mathematics than in Reading based on all grades combined, more nuanced patterns emerged when we looked at the data within each subject by grade level.

Reading

In Reading, our preliminary data shows that fewer students are performing below grade level in Reading Grades 5, 6, and 7 after school closures compared to historical data. See Graph 2. The proportion of students placing below grade level in Reading decreased slightly for students in Grade 5 (one percentage point), Grade 6 (one percentage point), Grade 7 (one percentage point), and Grade 8 (two percentage points). The results for early elementary show that students in Grades 2 and 3 saw the greatest increase in below-grade level performance relative to past years (a difference of six percentage points and five percentage points, respectively).

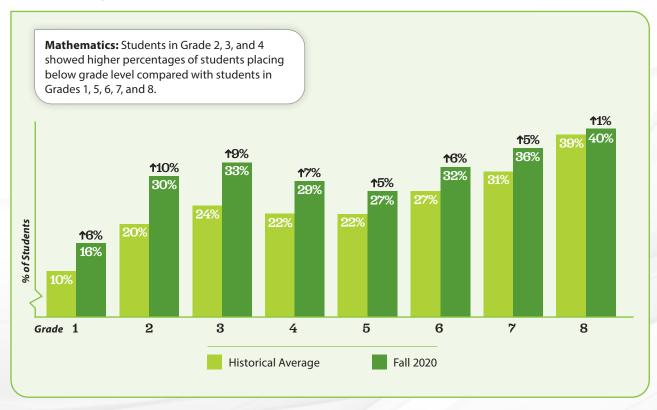
Graph 2: **Students Placing Two or More Grade Levels Below** Reading, Grades 1–8



Mathematics

In Mathematics, a greater proportion of students tended to place below grade level within each grade in fall 2020 compared to the average across the three prior school years. The largest percentage point differences in fall 2020 performance relative to the historical average appeared among students in Grade 2 (10 percentage points), Grade 3 (nine percentage points), and Grade 4 (seven percentage points), whereas the smallest percentage point differences appeared within the upper elementary and middle school grades: Grade 5 (five percentage points), Grade 6 (six percentage points), Grade 7 (five percentage points), and Grade 8 (one percentage point). See Graph 3.

Graph 3: Percentage of Students Placing Two or More Grade Levels Below Mathematics, Grades 1-8



3) Are more students placing below grade level in fall 2020 when disaggregated by race/ethnicity compared to prior academic school years?

To answer this question, the Research team created three comparison groups based on the proportion of BIPOC students: schools with less than 25% of students identifying as BIPOC ("lower proportions"), 25%-50% of students identifying as BIPOC, and more than 50% of students identifying as BIPOC ("higher proportions"). On Graphs 4 and 5, we are highlighting the results for Grade 3 students, as that is a pivotal year for student learning, and research shows that performance in third grade is predictive of high school outcomes (Hernandez, 2011). The percentage of students placing Two or More Grade Levels Below their chronological grade for each Grades 1–8 are shown in Table 1 (Reading) and Table 2 (Mathematics).

Reading

When visually examining the Grade 3 data for Reading disaggregated by the proportion of BIPOC students enrolled in a school, we see that schools with higher proportions of BIPOC students have historically had a larger percentage of students begin the school year below grade level, and this trend continued in fall 2020. See Graph 4.

Across all grade levels, there was a greater increase in the percentage of students placing below grade level in fall 2020 compared with the historical average in schools with higher proportions of BIPOC students (seven percentage points) than schools with lower proportions of BIPOC students (five percentage points). Given the importance of the transition between learning to read and reading to learn, it should be noted that schools with greater proportions of BIPOC students trended toward having a larger percentage of students in Grades 2-5 who are starting the 2020-2021 school year below grade level (ranging from 33%–46%) compared with schools that have lower proportions of BIPOC students (ranging from 21%–27%). That said, the percentage of students placing below grade level in schools with higher proportions of BIPOC students decreased in fall 2020 compared to the historical average for Grades 5, 6, 7, and 8. See Table 1.



Graph 4: Percentage of Students Placing Two or More Grade Levels Below by BIPOC Student Proportion Reading, Grade 3

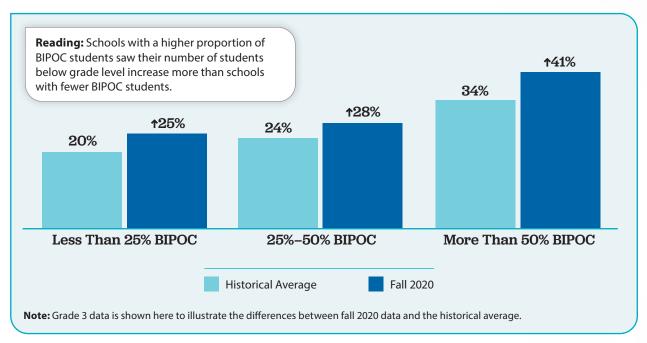


Table 1: Percentage of Students Placing Two or More Levels Below by BIPOC Student Proportion Reading, Grades 1-8

	Grade	1	2	3	4	5	6	7	8
Less Than	Historical Average	4%	15%	20%	16%	27%	34%	40%	38%
25% BIPOC	Fall 2020	5%	21%	25%	18%	27%	31%	40%	37%
	Difference	11%	↑6 %	↑5%	↑3 %	↑0 %	↓3 %	0%	↓1%
	Historical Average	5%	18%	24%	17%	31%	38%	41%	40%
25%-50% BIPOC	Fall 2020	6%	24%	28%	20%	32%	38%	40%	38%
	Difference	↑2 %	↑7 %	14%	↑2 %	1%	0%	↓2 %	↓2 %
	Historical Average	7%	26%	34%	26%	47%	53%	53%	52%
More Than 50% BIPOC	Fall 2020	9%	33%	41%	31%	46%	52%	52%	51%
50% BIPUC	Difference	↑2%	18%	↑7%	↑4%	↓1 %	↓1%	↓1%	↓1%

Note: The up arrow indicates the percentage of students placing below level increased whereas the down arrow indicates the percentage of students placing below grade level decreased in fall 2020 compared to the historical average.

Mathematics

When visually examining the Grade 3 data for Mathematics disaggregated by the proportion of BIPOC students, we can see that schools with higher proportions of BIPOC students have historically had a larger percentage of students begin the year below grade level, and this trend continued in fall 2020. See Graph 5.

Across all grades, the differences between fall placements in 2020 compared with the historical average tended to be more pronounced for Mathematics than for Reading, particularly in Grade 2 (14 percentage points), Grade 3 (12 percentage points), and Grade 4 (13 percentage points). For more detailed performance data by grade and race/ethnicity, see Appendix B: Detailed Results for Reading and Appendix C: Detailed Results for Mathematics.

Graph 5: Percentage of Students Placing Two or More Grade Levels Below by BIPOC Student Proportion Mathematics, Grade 3

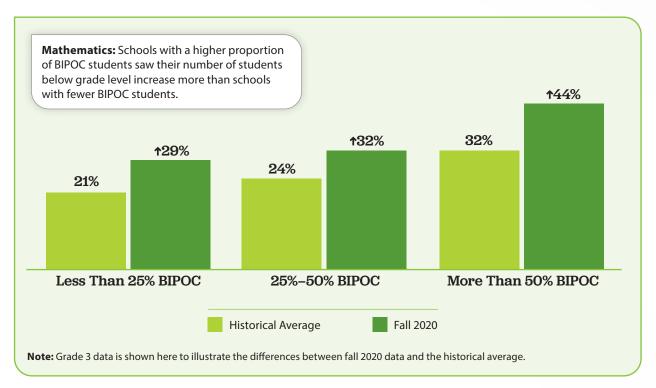


Table 2: Students Placing Two or More Grade Levels Below by BIPOC Student Proportion Mathematics, Grades 1-8

	Grade	1	2	3	4	5	6	7	8
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Less Than	Historical Average	8%	16%	21%	19%	20%	25%	29%	36%
25% BIPOC	Fall 2020	13%	25%	29%	26%	24%	31%	34%	37%
	Difference	↑6 %	↑9 %	↑8 %	↑7 %	↑4 %	↑6 %	↑5 %	↑2%
200/ 000/	Historical Average	9%	20%	24%	20%	20%	25%	30%	37%
25%-50% BIPOC	Fall 2020	15%	29%	32%	27%	26%	31%	34%	38%
	Difference	16 %	↑9 %	↑8 %	↑7 %	16%	↑5%	↑5%	1%
	Historical Average	13%	27%	32%	28%	28%	35%	42%	51%
More Than	Fall 2020	22%	41%	44%	41%	35%	41%	46%	52%
50% BIPOC	Difference	↑9%	14%	↑12 %	13%	↑7 %	↑6 %	↑5%	↑2%

Note: The up arrow indicates the percentage of students placing below level increased in fall 2020 compared to the historical average.

4) Are more students placing below grade level in fall 2020 when disaggregated by median annual household income compared to prior academic school years?

To answer this research question, the Research team created three comparison groups based on the median household income for each school's zip code: schools located in zip codes where the median household income is less than \$50,000 ("lower income"), schools located in zip codes where the median household income is between \$50,000-\$75,000, and schools located in zip codes where the median household income is more than \$75,000 ("higher income"). As with research question 3, the graph below highlights results for Grade 3 students, as that is a pivotal year for student learning, and research shows that performance in Grade 3 is predictive of high school outcomes (Hernandez, 2011). The percentage of students placing Two or More Grade Levels Below their chronological grade for each Grades 1–8 are shown in Table 3 (Reading) and Table 4 (Mathematics).

Reading

Looking at the Grade 3 results for Reading (Graph 6), it appears that schools in lower-income zip codes have historically seen more students begin the year below grade level (29%) compared with schools in higher-income zip codes (19%). Additionally, students in lower-income schools appear to be impacted more than students in higher-income schools by school closures: the percentage of students placing below grade level increased by a greater amount in lower-income schools (five percentage points) compared with higher-income schools (three percentage points).

As shown in Table 3, the percentage of students in some upper elementary and middle school grades attending schools in lower-income zip codes who placed below grade level decreased in fall 2020 compared to the historical average: Grade 5 (one percentage point), Grade 6 (two percentage points), Grade 7 (one percentage point), and Grade 8 (three percentage points). This pattern held for students attending schools in zip codes with a median household income between \$50,000-\$75,000 in Grade 5 (one percentage point) and Grade 8 (two percentage points) and for students attending schools in higher-income zip codes in Grade 6 (two percentage points).

Graph 6: Percentage of Students Placing Two or More Grade Levels Below by Median Household Income Reading, Grade 3

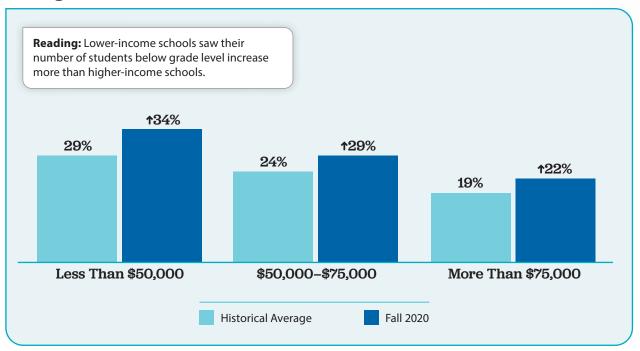


Table 3. Percentage of Students Placing Two or More Grade Levels Below by Median Household Income Reading, Grades 1–8

					N.				
	Grade	1	2	3	4	5	6	7	8
Loca Thom	Historical Average	6%	21%	29%	22%	40%	45%	47%	45%
Less Than \$50,000	Fall 2020	7%	29%	34%	26%	39%	43%	45%	42%
	Difference	↑2 %	↑8 %	↑5%	↑4 %	↓1 %	↓2 %	↓3 %	↓3 %
¢50.000	Historical Average	5%	19%	24%	18%	33%	38%	40%	40%
\$50,000- \$75,000	Fall 2020	7%	26%	29%	20%	32%	39%	40%	39%
	Difference	↑2%	↑7%	16 %	↑2%	↓1%	11%	0%	↓2 %
	Historical Average	3%	14%	19%	14%	21%	25%	26%	28%
More Than \$75,000	Fall 2020	3%	16%	22%	15%	23%	24%	31%	29%
	Difference	0%	13%	↑3%	↑1%	↑2%	↓2 %	↑5%	↑1%

Note: The up arrow indicates the percentage of students placing below level increased whereas the down arrow indicates the percentage of students placing below grade level decreased in fall 2020 compared to the historical average.

Mathematics

As with the Reading analysis, the Grade 3 results for Mathematics also show that schools in lower-income zip codes have historically seen more students begin the year below grade level (29%) compared with schools in higher-income zip codes (19%). Additionally, Grade 3 students in lower-income schools appear to be impacted more than students in higher-income schools by school closures: the percentage of students placing below grade level increased by a greater amount in lower-income schools (10 percentage points) compared with higher-income schools (six percentage points). See Graph 7.

Among third graders, the increase in the percentage of students in lower-income schools performing below grade level was higher in Mathematics than it was in Reading. As shown in Table 4, this pattern held true for most grades and was particularly pronounced in Grade 2 (12 percentage points), Grade 3 (10 percentage points), and Grade 4 (10 percentage points).

Graph 7: Percentage of Students Placing Two or More Grade Levels Below by Median Household Income Mathematics, Grade 3

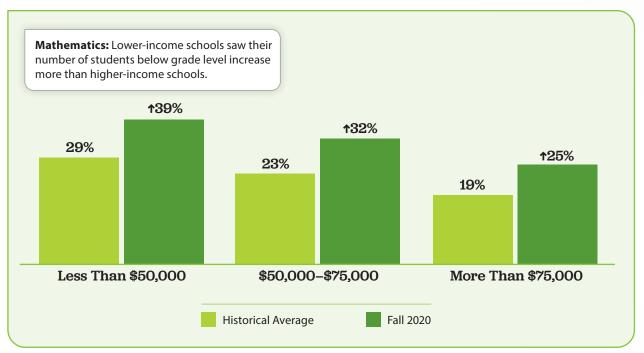


Table 4: Percentage of Students Placing Two or More Grade Levels Below by Median Household Income Mathematics, Grades 1-8

	Grade	1	2	3	4	5	6	7	8
	Historical Average	11%	24%	29%	25%	26%	31%	35%	42%
Less Than \$50,000	Fall 2020	18%	36%	39%	35%	32%	35%	39%	43%
	Difference	↑7 %	12%	10%	10%	↑6 %	↑4 %	↑4 %	↑1 %
¢50.000	Historical Average	10%	20%	23%	21%	21%	25%	29%	37%
\$50,000- \$75,000	Fall 2020	16%	29%	32%	28%	25%	32%	34%	38%
	Difference	↑7%	19%	↑9 %	↑7 %	↑5%	↑7 %	↑4 %	↑1%
	Historical Average	7%	15%	19%	17%	15%	18%	20%	27%
More Than	Fall 2020	11%	21%	25%	21%	20%	23%	25%	27%
\$75,000	Difference	↑4%	↑6 %	↑6%	↑5%	↑6 %	↑5%	↑5%	0%

Note: The up arrow indicates the percentage of students placing below level increased in fall 2020 compared to the historical average. Numbers in gray indicate data with fewer than 500 students in the sample.

Conclusion

The unplanned school closures that swept across the United States in spring 2020 brought remarkable changes to the way our teachers were asked to teach and our students were asked to learn. Our preliminary research indicates that approximately one-third of students are starting the 2020–2021 school unprepared for on-grade level instruction in Reading and Mathematics (28% and 29%, respectively), and more students are starting the current school year behind grade level compared with the historical average, particularly in Mathematics. Notably, in Reading, we see several grade levels where students are doing better in fall 2020 compared with the historical average among all students as well as BIPOC and lower-income students. We believe that heroic efforts from teachers, students, and families last spring largely paid off.

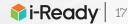
While the collective data gives us reason for optimism, future research efforts need to explore the disproportionate impact of school closures on students who are BIPOC or attending schools in lowerincome zip codes and how these students and their communities recover from pandemic-related setbacks and succeed in spite of the incredible challenges they face. As more assessment data becomes available over the course of this unusual school year, our Research team will continue to explore the data, unpack trends, and share findings with educators in an effort to support the enormous challenges we face during the current 2020–2021 school year. Toward that end, we will continue to interview educators and carry out research efforts to document exemplary schools that are defying the odds (Curriculum Associates, 2020b).

Limitations

We recognize that millions of students will be testing at home this year; however, we chose to limit this preliminary analysis to include only data from Diagnostics taken in school settings to ensure the greatest possible comparability with results from the previous two school years. All results should be interpreted as only representative of the students included in this analysis. In future research, we plan to explore the differences in data collected from tests taken in and out of school environments, but in the interest of providing timely insight to educators, we limited this particular analysis to include only students who tested in school, as that most closely mirrors our historical data. In addition, we will continue to monitor the comparative performance of students in fall 2020, including examining the impact disruptions related to COVID-19 had on overall student performance at the end of the 2020–2021 school year and beyond.

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Appendix A

Detailed Methodology and Sample Characteristics

For this analysis, we limited our sample to focus on students who took the i-Ready Diagnostic in their school building to enable a more comparable year-over-year comparison because as far as we know, the vast majority of prior-year Diagnostic tests were taken in school buildings. Based on publicly available district plans (EdWeek, 2020), we knew that many students would be returning to school in an entirely remote environment and/or a hybrid model of some time in their school buildings and some time spent learning remotely. Because we do not have a precedent for understanding how Diagnostic testing results may differ if taken at home or in a different location other than a school building, we decided to only include data from tests taken in school buildings. To determine which students took a Diagnostic in their school building, we relied on students' self-report data from a within-platform popup asking them if they were working in their school building or not. See Figure 1.

In order to be included in this analysis, students had to be enrolled in districts and grades where at least 200 students per grade and subject had taken a Diagnostic in Reading (for the Reading analysis) and Mathematics (for the Mathematics analysis) during the fall 2020 testing window. In addition, students had to be enrolled in districts and grades where at least 70% of the student body had taken the Diagnostic for Reading (for the Reading analysis) or for Mathematics (for the Mathematics analysis) during the fall testing windows of the two prior academic years: 2018–2019 and 2019–2020.

From those districts meeting the above criteria, we then compared the number of students within schools who completed their fall 2020 i-Ready Diagnostic in school to the number of students in the same school and subject who had tested in fall 2019–2020. We selected only those schools where the number of students completing their Diagnostic assessments in school comprised at least 50% of the number of students who completed a Diagnostic assessment in fall 2019–2020. This last step allowed us to create a historical average for those same schools in each subject across the fall testing window from the prior three school years: 2017–2018, 2018–2019, and 2019–2020. This historical average served as a comparison for the more recent results from the 2020–2021 school year.

To identify which students placed Two or More Grade Levels Below in fall 2020, we used our standard i-Ready Diagnostic criterion-referenced placements to identify those students who placed at least two grade levels below their chronological grade. Students who place Two or More Grade Levels Below represent students who are not yet ready for grade-level instruction.

As such, the analytic dataset included students who were located in districts that had used the i-Ready Diagnostic for the prior two academic years, had taken the Diagnostic exclusively in their school building (and not at home or another location outside of school) during fall 2020, and were enrolled in Grades 1–8 during the 2020–2021 school year. Students who were kindergarteners in the 2020–2021 school year were not included in this analysis because they cannot place Two or More Grade Levels Below within our system.



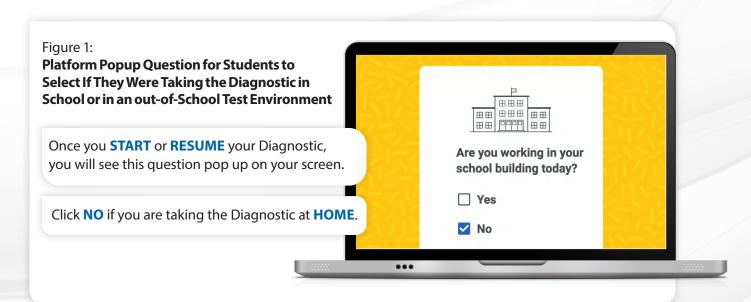
Table 5: Final Analytic Sample by Subject and Grade

2020-2021 School Year, Grades 1-8

	1	2	3	4	5	6	7	8	All Grades
Reading	14,119	14,841	15,661	15,875	15,940	12,855	9,789	9,986	109,066
Mathematics	20,441	21,350	21,579	22,001	21,716	15,242	13,540	12,999	148,868

Table 6: School-Level Sample Characteristics Based on 2020–2021 School Year Enrollment Data Reading and Mathematics, Grades 1-8

	Demographic Variable	Average	Range
Reading	% Black Students	14%	0%–97%
	% Latino Students	15%	0%-82%
	% BIPOC Students	35%	3%-98%
	Median Annual Household Income	\$61,013	\$26,971–\$136,937
	Total Student Enrollment	653	39–2,544
Mathematics	% Black Students	12%	0%-97%
	% Latino Students	14%	0%-82%
	% BIPOC Students	33%	3%-98%
	Median Annual Household Income	\$60,228	\$23,955-\$136,937
	Total Student Enrollment	692	39–2,544



Appendix B

Detailed Below-Grade Level Placements for Reading

Table 7: Percentage of Students Placing Two Grade Levels Below Disaggregated by Students Identifying as Black Reading, Grades 1–8

	Grade	1	2	3	4	5	6	7	8
Less Than	Historical Average	5%	18%	24%	18%	32%	38%	43%	41%
25% Black	Fall 2020	6%	24%	29%	21%	32%	36%	41%	39%
	Difference	11%	↑6 %	↑5%	↑2 %	0%	↓2 %	↓1 %	↓2 %
	Historical Average	7%	22%	30%	23%	44%	43%	44%	43%
25%–50% Black	Fall 2020	10%	30%	35%	25%	40%	47%	42%	40%
	Difference	↑3%	18%	↑5%	↑2%	↓3 %	↑5%	↓2 %	↓3 %
	Historical Average	5%	20%	34%	26%	50%	62%	54%	53%
More Than 50% Black	Fall 2020	6%	23%	32%	31%	41%	54%	53%	56%
	Difference	↑1%	↑3%	↓2 %	↑5%	↓10 %	↓8 %	↓1 %	↑3%

Note: Numbers in gray indicate fewer than 500 students in the sample.

Table 8: Percentage of Students Placing Two Grade Levels Below Disaggregated by Students Identifying as Latino Reading, Grades 1–8

	Grade	1	2	3	4	5	6	7	8
Less Then	Historical Average	5%	17%	23%	17%	31%	38%	42%	41%
Less Than 25% Latino	Fall 2020	6%	23%	27%	20%	30%	37%	41%	39%
	Difference	11%	↑6 %	14%	↑2 %	↓1 %	↓1 %	↓1 %	↓1%
	Historical Average	7%	27%	34%	26%	44%	50%	52%	49%
25%-50% Latino	Fall 2020	9%	36%	44%	31%	46%	47%	51%	47%
	Difference	11%	↑9 %	10%	↑5%	↑2%	↓3 %	↓1 %	↓2 %
	Historical Average	9%	32%	39%	29%	49%	47%	53%	53%
More Than	Fall 2020	12%	41%	48%	35%	54%	48%	50%	42%
50% Latino	Difference	↑3 %	↑9 %	↑9%	↑7%	↑5%	↑1%	↓3 %	↓11%

Note: Numbers in gray indicate fewer than 500 students in the sample.

Appendix C

Detailed Below-Grade Level Placements for Mathematics

Table 9: Percentage of Students Placing Two Grade Levels Below Disaggregated by Students Identifying as Black Mathematics Grades 1-8

	Grade	1	2	3	4	5	6	7	8
Loss Thom	Historical Average	9%	19%	23%	21%	21%	26%	31%	38%
Less Than 25% Black	Fall 2020	16%	29%	32%	28%	26%	31%	36%	39%
	Difference	↑6 %	19%	↑9 %	↑7 %	↑5%	↑5 %	↑5%	11%
	Historical Average	12%	26%	32%	26%	29%	27%	36%	42%
25%–50% Black	Fall 2020	21%	38%	42%	40%	35%	35%	33%	39%
	Difference	19 %	12%	10%	13%	16%	↑7%	↓4 %	↓4 %
	Historical Average	9%	25%	31%	29%	31%	41%	47%	54%
More Than 50% Black	Fall 2020	14%	35%	40%	41%	31%	44%	54%	60%
	Difference	↑5%	10%	10%	12%	0%	↑4%	↑7%	16%

Note: Numbers in gray indicate fewer than 500 students in the sample.

Table 10: Percentage of Students Placing Two Grade Levels Below Disaggregated by Students Identifying as Latino Mathematics, Grades 1–8

	Grade	1	2	3	4	5	6	7	8
Loca Thom	Historical Average	9%	18%	23%	20%	20%	25%	30%	37%
Less Than 25% Latino	Fall 2020	14%	27%	30%	27%	25%	31%	34%	38%
	Difference	↑6 %	↑9 %	↑8 %	↑7 %	↑5%	↑6 %	14%	11%
	Historical Average	15%	29%	32%	29%	29%	41%	42%	49%
25%-50% Latino	Fall 2020	26%	44%	46%	43%	35%	45%	51%	52%
	Difference	↑11%	15%	13%	14%	↑7 %	↑4 %	19 %	↑3%
	Historical Average	14%	31%	35%	31%	27%	28%	42%	-
More Than	Fall 2020	22%	48%	49%	40%	37%	27%	44%	-
50% Latino	Difference	↑8%	17%	↑14%	10%	10%	↓1 %	↓2 %	-

Note: Numbers in gray indicate fewer than 500 students in the sample.

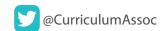


Built to address the rigor of the new standards, *i-Ready* helps students make real gains. *i-Ready* collects a broad spectrum of rich data on student abilities that identifies areas where a student is struggling, measures growth across a student's career, supports teacher-led differentiated instruction, and provides a personalized instructional path within a single online solution.

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