

BRIEF

Informing COVID-19 recovery: Insights from NWEA's MAP Growth assessment and policy recommendations



“It’s on us to make the change we need in our country.. We will need innovative and creative leadership fueled by urgency. The resources are there. At the federal, state, and local level—we must act.”

—Secretary Miguel Cardona, Equity Summit, June 22, 2021

Context

Our nation—and the world—have persisted through an unprecedented and challenging year. Although the pandemic appears to be waning, many of the effects are ongoing. While no one has been left unscathed, the disruptions have hit communities of color and low-income families the hardest. Student learning has been disrupted on an unprecedented scale, [exposing previously unseen and deeper inequities](#) within our education system.

Despite the challenges, there is reason for optimism. With the worst of the pandemic hopefully behind us, and significant federal funding to deploy, we have an opportunity to develop a strong foundation for an equitable and excellent education for all students. Recovery can lead to transformation, if educators, school leaders, and policymakers get the resources and support they need to rise to the challenge.

As policymakers and education leaders continue to plan for the next school year—and the years that follow—data will be critical in ensuring our nation advances the learning of all students and addresses the inequities that impact both students of color and students living in poverty. Below are highlights from analyses by NWEA researchers on student growth and achievement during the 2020–21 school year and equity-focused recommendations to support recovery developed by NWEA’s Policy and Advocacy team—drawing on the research and wisdom of our colleagues across the [civil rights, policy, and advocacy communities](#).

Summary of key findings¹

The data from NWEA’s MAP® Growth™ assessment², administered in the fall, winter, and spring of the 2020–2021 school year, reveals the disproportionate impact of the pandemic on academic progress and achievement for our nation’s most underserved students.³ MAP Growth was administered to about 5.5 million public school students in reading and math. On average, students struggled compared to “normal” times—the 2018–19 school year in this analysis—and the story varies further by subject and grade level. The overwhelming takeaway, however, is that educators, as well as state and district leaders, must make strategic, data-informed decisions about how to advance learning and support success, particularly for historically marginalized students.

¹ This section includes analyses and findings from research by NWEA researchers [Karyn Lewis](#), [Megan Kuhfeld](#), [Erik Ruzek](#), and [Andrew McEachin](#) released in July 2021. For the full results and more detail on the data and analyses, please see the [research brief](#). Note: for simplicity of presentation, numbers and calculations presented in figures in this brief are rounded. Because of this, some numbers differ slightly from those presented in the research.

² MAP Growth is a computer adaptive test that is vertically scaled across grades K–12 and measures student achievement on the RIT scale. RIT scores can be used to compare academic growth across students and time—within an academic year and over multiple years.

³ The research is a continuation of [previous research](#) conducted by NWEA Research on the early impacts of the COVID-19 pandemic on students academically in fall 2020.

ALL STUDENTS MADE GAINS IN 2020-21 AT A LOWER RATE THAN A “TYPICAL” YEAR

Figures 1.a and 1.b compare the 2018-19 (“typical” year) and 2020-21 academic gains trajectories for fall, winter, and spring (as measured by mean RIT scores) in reading and math for grades 3-8.⁴

In reading, students entered the 2020-21 school year at about the same level as a “typical” year. However, students experienced lower academic gains and ended the school year an average of 3-6 percentile points behind, compared to 2018-19.

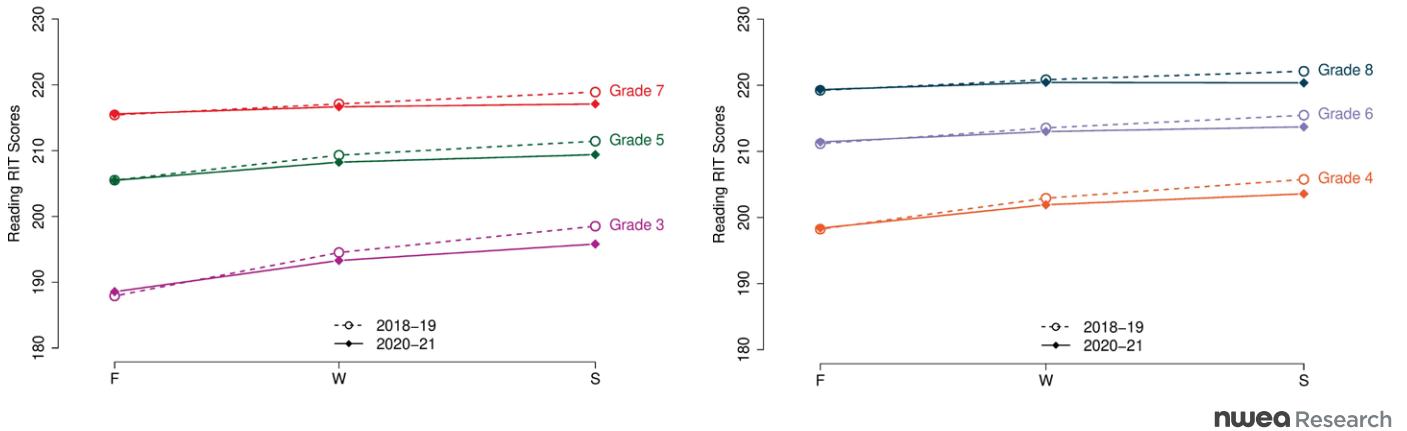


Figure 1.a Average MAP Growth RIT scores for grades 3-8 in reading

In math, students entered the 2020-21 school year behind where they started in a “typical” school year and also experienced lower academic gains. Students ended the school year an average of 8-12 percentile points behind compared to the 2018-19 school year.

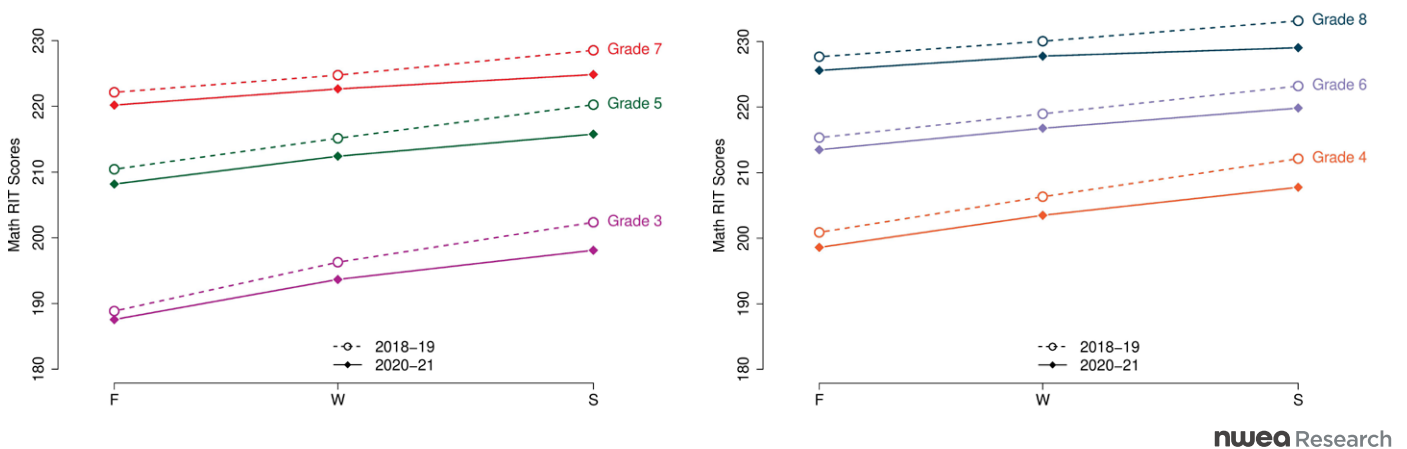


Figure 1.b Average MAP Growth RIT scores for grades 3-8 in math

⁴ For greater readability, the grade levels have been divided between two figures for each subject area.

STUDENT ACHIEVEMENT AT THE END OF THE 2020-21 SCHOOL YEAR WAS LOWER COMPARED TO PRE-PANDEMIC LEVELS, WITH LARGER DECLINES IN MATH

Figures 2.a and 2.b show the median end-of-year achievement percentile ranks⁵ of a more “typical” year compared to the median end-of-year achievement percentile ranks for spring 2021. The figures also show the difference between the two medians in the brackets. All grades experienced a lower median percentile rank in spring 2021 in both reading and math.

In spring 2019, the median percentile score for third-graders in reading was 57. In spring 2021, the percentile score for third-graders was 51. Achievement for third-graders in reading was 6 percentile points lower at the end of spring 2021 than in a “typical” year.

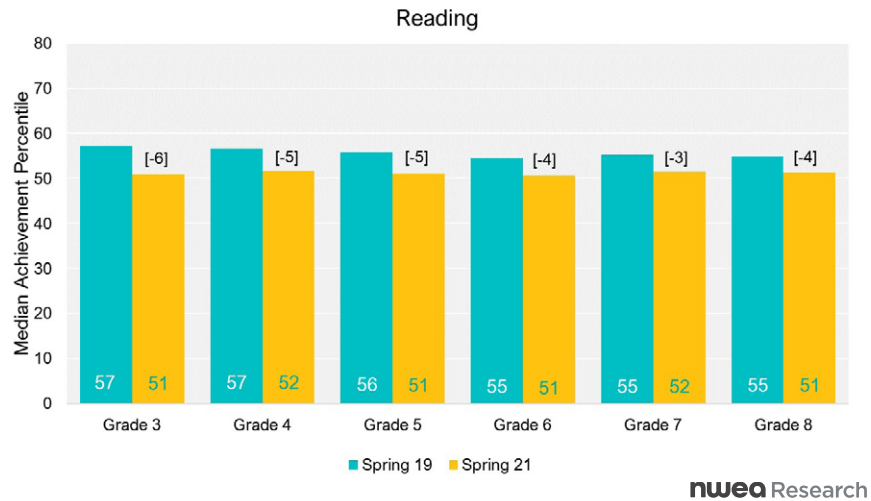


Figure 2.a Spring 2019 and 2021 achievement comparisons by grade in reading

In spring 2019, the median percentile score for third-graders was 55; it was 43 for third-graders in spring 2021. Achievement for third-graders in math was 12 percentile points lower at the end of spring 2021 than in a “typical” year.

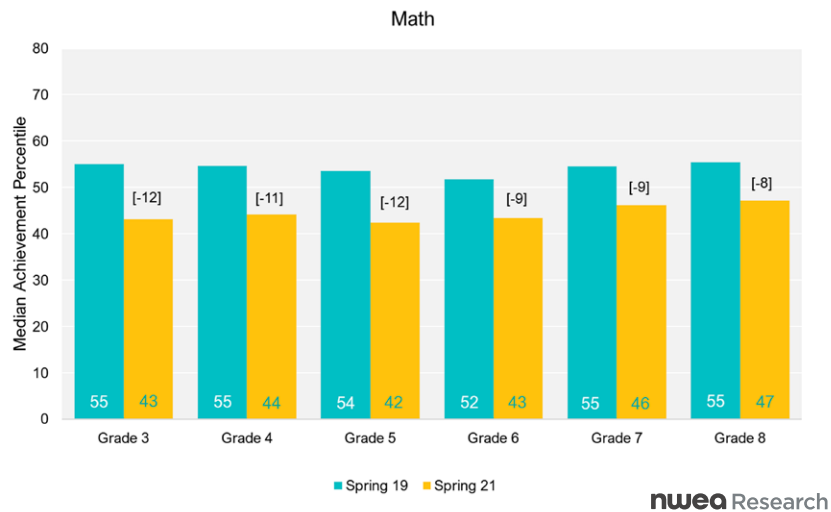


Figure 2.b Spring 2019 and 2021 achievement comparisons by grade in math

⁵ Achievement percentiles are based on NWEA’s 2020 MAP Growth norms, which are a nationally representative set of norms based on data from 2015-16 to 2017-18. An achievement percentile provides some indication for how a student’s score in a particular grade and subject area compares to other same-grade students across the country.

HISTORICALLY MARGINALIZED AND ECONOMICALLY DISADVANTAGED STUDENTS WERE DISPROPORTIONATELY IMPACTED

Spring achievement declines were particularly evident for students of color in early grades.

Figures 3.a and 3.b present the differences in the median end-of-year achievement percentile ranks of spring 2019 compared to spring 2021 separately for all students and by race/ethnicity of student groups. The greatest declines in achievement were experienced by Black and Latinx students in grades 3-5 in reading and American Indian and Alaska Natives (AIAN), Black, and Latinx students in grades 3-5 in math.

In spring 2021, Black and Latinx fifth-graders had a median percentile score that was 7 points lower than Black and Latinx fifth-graders in spring 2019.

Reading

Grade	All Students	Asian American	White	AIAN	Latinx	Black
3	-6	-5	-4	-6	-10	-10
4	-5	-3	-4	-4	-8	-8
5	-5	-3	-4	-7	-7	-7
6	-4	-2	-4	-6	-6	-6
7	-3	-1	-4	-2	-4	-6
8	-4	-1	-3	-1	-5	-6

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Figure 3.a Differences in achievement from spring 2019 to 2021 by student group in reading

In spring 2021, AIAN third-graders had a median percentile score that was 14 points lower than AIAN third-graders in spring 2019.

Math

Grade	All Students	Asian American	White	AIAN	Latinx	Black
3	-12	-9	-9	-14	-17	-15
4	-11	-8	-8	-13	-15	-14
5	-11	-9	-9	-12	-13	-11
6	-8	-7	-8	-12	-10	-8
7	-9	-7	-9	-7	-7	-7
8	-8	-7	-8	-4	-8	-7

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Figure 3.b Differences in achievement from spring 2019 to 2021 by student group in math

Figure 4 shows the median end-of-year achievement percentile ranks of a “typical” year compared to the median end-of-year achievement percentile ranks for spring 2021 in math for high- and low-poverty schools. Poverty level is based on the school-level percentages of students experiencing poverty—with low-poverty schools having less than 25% of students experiencing poverty and high-poverty schools having more than 75% of students experiencing poverty.⁶ Students in high-poverty schools (right panel) had a greater decline in median achievement percentile points, on average nearly double that of low-poverty schools, from 2019 to 2021.

⁶ This is based on students receiving free and reduced-price lunch.

Fourth-graders in high-poverty schools experienced a median percentile score that was 14 percentile points lower in spring 2021 compared to a “typical” year. Their peers in low-poverty schools experienced a decline of 6 percentile points as compared to a “typical” year.

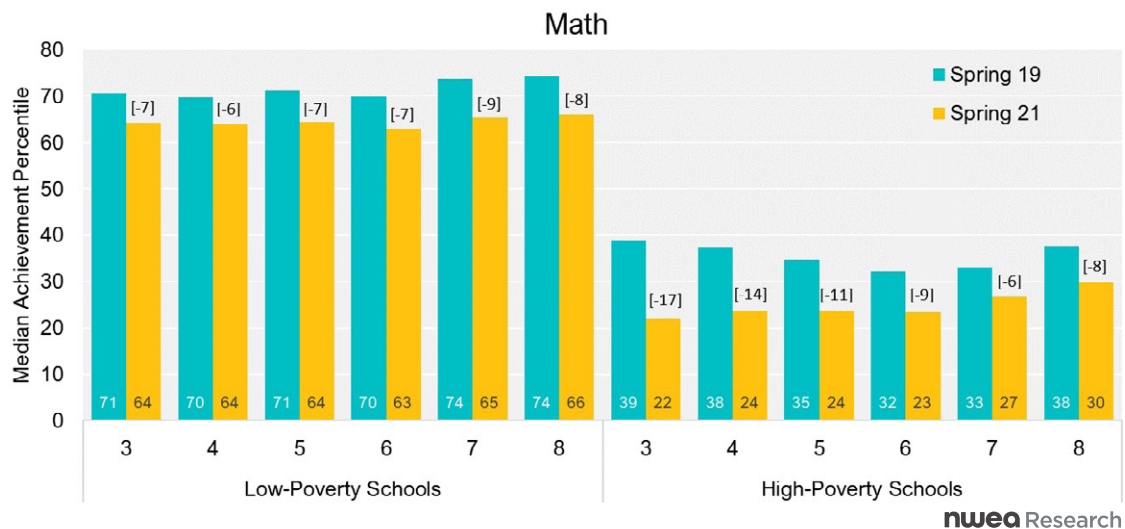


Figure 4. Spring 2019 and 2021 achievement comparisons in math by school socioeconomic status and grade

CALL TO ACTION

These results reveal a complex story of the past school year and highlight the important work ahead for recovery. As policymakers and education leaders review these results, as well as data on their local context of student success, it is important to reflect on the pre-pandemic existence of significant inequities in opportunity and achievement. We must not rebuild our system with pre-pandemic structures in mind. To break the systemic inequities in the education system, we must use this moment to heavily invest in the transformation of national, state, and local education systems. Our collective call to action is clear: **“next year cannot be a ‘normal’ year.”** We must strategically invest federal funding to develop and implement policies and programs that build a stronger, equitable education system for students, families, and educators.

Policy recommendations to support recovery

As students return to in-person learning this fall, education leaders must continue to attend to the health and well-being of students and families while renewing efforts to accelerate learning and expand access to excellent educational opportunities. The following recommendations for federal, state, and district leaders include strategies to help support learning recovery for all students, especially those most impacted by the pandemic, and lay a stronger foundation for student success.

Re-engage all students, with a focus on historically underserved students. The pandemic has disrupted learning on an unprecedented scale, most acutely for students of color, low-income students, and students with disabilities. States and districts must make similarly unprecedented investments to reconnect students to their school communities.

- Deploy [intentional strategies](#) with compassion to identify and re-engage students and families who were [disconnected or “missing”](#) during the pandemic.
- Thoughtfully expand [instructional time](#) and [opportunities](#) for learning that will ensure students are prepared for grade-level content, such as [summer programs](#), [high-dosage and small-group tutoring](#), and [mentoring](#).

- Ensure students have [access to grade-level instruction that will support learning](#) in math and reading.
- Maintain a [well-rounded](#) curriculum that includes instruction in science, social studies, and art.
- Provide [students with disabilities](#) and [English learners](#) with targeted supports as they may have suffered disproportionately due to decreased instructional time and disruption in services.
- Support students in transition that experienced particular disruption last year—[students entering kindergarten](#), elementary to middle school, middle to high school, and [high school to college](#).

A topic of great concern over this past year has been the potential number of “[missing](#)” students in schools and data. In fall 2020, NWEA Research reported on [patterns of missingness](#) in our test data—revealing that there were differences across subjects and grades in the representation of student groups in fall 2020 compared to fall 2019. From this research, we found that students of color were more likely to be missing from our data. Due to this, the impacts of the pandemic on learning may be underestimated.

Continue to support access to remote learning technology for students and families. Before the pandemic, the “Homework Gap” left nearly [17 million children offline](#). With virtual instruction, activities, and family engagement likely to continue well into the future, it is essential for states and districts to adapt to support the technological needs of schools, families, and students.

- Provide all students with [high speed internet](#) at school and at home ([at necessary upload/download speeds](#)), sufficiently powered devices, and technical support.
- Develop programs that train and support families on “[digital literacy](#),” particularly for families of vulnerable students.
- Evaluate the efficacy of [remote instruction](#) compared to in-person learning—differentiating by factors like student grade level and race—and ensure that every student is getting access to an equitable and excellent education.
- Ensure that virtual [parent and community engagement](#) platforms give families user-friendly access to educational tools and school information.
- Offer remote and in-person options for [extracurricular activities](#), support services, and family engagement to maximize access for vulnerable communities.

Attend to physical, social, and mental health needs of students and families. Even as the pandemic wanes in its intensity, the effects are ongoing. Students and families need support for addressing basic needs and coping with everything from stress and anxiety to [trauma](#) arising from major life and family disruptions, including the loss of loved ones.

- Continue to make [school meals](#) available to all students and maintain reduced burdens on families in applying for meal programs beyond the 2021–2022 school year.
- Partner with [community organizations](#) to connect with and [support underserved communities](#) through

joint activities like hosting evening and online information sessions and providing services (e.g., free counseling, grants) to family members.

- Make [mental health services](#) available in [schools](#), including increasing access to school nurses and [counseling services](#), as well as conducting comprehensive, “[systematic screening](#)” for early identification with all students.
- Foster and incentivize the creation of an affirmative and uplifting school climate by providing [resources](#) to educators and leaders on how to build a positive school culture.

Measure student progress, rethink assessment systems, and use data to support recovery. The pandemic has disrupted student learning unevenly across student groups, subjects, and grade levels. To understand the impacts and inform effective recovery, it is essential that educators and parents, as well as school and system leaders, have ongoing and high-quality data on student progress and achievement at the student, classroom, school, and system levels.

- Evaluate student needs and progress continuously through the 2021–22 school year using a variety of [balanced assessment measures](#) (summative, interim, and formative) and holistic measures of student success (e.g., opportunity to learn, school culture, etc.).
- Use district- and [school-level](#) data continuously to measure academic recovery, strategically target resources, and scale promising practices.
- Give students, teachers, and school and district leaders timely and actionable information—creating effective feedback loops—to guide their practice and strategies during the school year.
- Report de-identified aggregate data on student progress publicly—[particularly to parents](#)—to ensure transparency and enable action and advocacy to improve student success.
- Plan for the future by developing a multi-year innovative and equity-focused comprehensive assessment plan that will give educators and policymakers the data they need to make informed decisions to guide COVID recovery.

Support and train teachers and leaders. Educators have been heroes of the pandemic, but the hard work is far from over. With [indications](#) that the pandemic has significantly impacted the teacher pipeline, states and districts must support teachers and school leaders with effective and real-time training, coaching, and professional development to improve instruction and teaching.

- Invest and build a [strong teacher pipeline](#) through targeted [recruitment](#), [preparation](#), and [retention](#) programs.
- Build the skills of the educator workforce through activities such as [leadership development](#) and [instructional coaching](#) focused on meeting the needs of students.
- Attend to [educators’ mental and physical health needs](#), including by acknowledging the difficulties teachers encountered and celebrating successes over the past year.
- Provide targeted and purposeful [professional development](#) opportunities to educators, including coaching on how to evaluate data on student progress to help all of their students succeed.

Move from restarting to reimagining accountability and school improvement. After the disruption of the past two years, states should leverage the flexibilities provided to [reevaluate and update accountability](#) and reporting systems to drive equitable learning recovery, support continuous school improvement, and support holistic student success.

- [Align system indicators](#), in the short-term, to state-specific COVID impacts and state recovery plans (e.g., [state plans](#) to use American Rescue Plan Elementary and Secondary School Emergency Relief).
- Explore how to provide [additional insight](#) on how [student groups](#) have been impacted by the pandemic and how they are recovering academically over the next 2–3 years.
- Evaluate the continued relevance of [current accountability indicators](#) in driving recovery and moving towards more equitable, holistic, and innovative state accountability systems.
- Upgrade state data systems from P-16 that “[collect and connect](#)” data on access to opportunities to learn and student outcomes, from kindergarten readiness and high-quality preschool attendance to access to advanced coursework and college-going rates.

**For additional information on NWEA Policy and Advocacy,
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Questions or comments about this resource? Contact the authors.

Lindsay Dworkin

Vice President

Policy and Advocacy

lindsay.dworkin@nwea.org

Katie Carroll

Director

Policy and State Engagement

katie.carroll@nwea.org



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