# Warning Bells: The Growing Proficiency Crisis Among New York Students 

## Executive Summary

In New York and across the country, state assessments - annual exams used to measure students' academic readiness and proficiency - are under increased scrutiny, with some even calling for their elimination altogether. While assessments in New York State and elsewhere are far from perfect, these measures remain the only objective, comparable, and consistent statewide data to help show what our students know, where they are falling behind, and who needs more support.

A new analysis by The Education Trust-New York into the 2022-23 New York State Education Department (NYSED) assessments reveals troubling outcomes for New York's students overall, and inequitable results for students from low-income backgrounds and students of color. For example:

- Only 48\% of all New York students, grades 3 through 8, are considered proficient in English language arts (ELA) and only 52\% are proficient in math.
- Overall proficiency rates for third grade reading ( $45 \%$ ) and eighth grade math ( $42 \%$ ) raise concerns about the impact of the pandemic on students' foundational skills.
- Critically, when looking at ELA and math proficiency rates, student outcomes are even lower and more alarming for Black, Latinx, and students from low-income backgrounds.

These results are especially noteworthy when considering that the "cut scores" needed to score proficient on the NYSED assessment were significantly lowered. For instance, eighth graders could score proficient on the most recent math assessment by getting $53 \%$ of available points, compared to $65 \%$ for the 2021-22 exam. Reducing state standards can mask actual student performance, making it more difficult to support the needs of students. Even with these lowered cut scores, data from the 2022 National Assessment of Educational Progress (NAEP) rank New York 37 ${ }^{\text {th }}$ in the nation on fourth grade reading proficiency and $46^{\text {th }}$ on eighth grade math proficiency.

Finally, this analysis highlights the lack of timeliness and transparency in the release of NYSED's 2022-23 data, which came more than six months after the student testing window closed and four months into the subsequent school year. Our report concludes with recommendations to both improve assessments in New York, as well as raise student outcomes in math and ELA.

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> elsewhere are far from perfect, these measures remain the only objective, comparable, and consistent statewide data to help show what our students know, where they are falling behind, and who needs more support.

## The Importance of State Assessments

Assessment data released by NYSED play an essential role in understanding student performance trends across the state, particularly as students continue to recover from the impacts of the pandemic. State assessments in grades 3 through 8 , which are required under the federal Every Student Succeeds Act (ESSA), provide objective metrics that can be used to identify disparities and target resources to students, schools, and districts most in need. This is why nearly every civil rights organization in the nation supported annual assessments during the development of ESSA. These civil rights groups understand that data and transparency is needed to advocate for greater resource equity in schools and more fair treatment for students of color and those from low-income backgrounds, as well as other groups, such as students with disabilities and multilingual learners.

State assessments also provide parents and caregivers an additional source of information to monitor their child's academic progress, on top of grades and teacher feedback, which tend to be more subjective and difficult to compare across classrooms and schools. Indeed, recent research from Learning Heroes and Gallup shows that nine in ten parents nationally believe their child is at or above grade level in reading and math based on student report cards; yet other measures, such as standardized tests, demonstrate that less than half of students are at grade level.

Finally, state assessment results are more than just data points. They represent hundreds of thousands of students who, as a state, we are failing to prepare for success in school and in life. Poor outcomes are not the fault of students; they are the result of inadequate systems and school structures that have failed them. This new assessment data should serve as a wakeup call for state and district leaders to provide all students with the foundational math and literacy skills needed for success.

## A Deep Dive into New York State 202223 Assessment Results

The analyses below focus on third grade ELA and eighth grade math outcomes from the 2022-23 school year. We look at these two grades and subject areas because they are most strongly correlated with future success. Also, many of the students included in these assessments missed key reading and math instruction due to the impacts of the pandemic, underscoring the added importance of understanding their current academic needs and progress.

## Third Graders and ELA Proficiency

Research indicates a strong relationship between third grade reading proficiency and future academic achievement, high school graduation, college enrollment and retention, career readiness, and other indicators of success. When students are proficient in reading by the end of third grade, they are better able to engage in learning across all subjects and are more likely to experience continued success throughout their academic journey.

Unfortunately, less than half of all third graders in New York were proficient according to the NYSED 2022-23 assessment, and less than one-third of Black and Latinx third graders were. Outcomes were also alarmingly low for other historically underserved students, including students with disabilities (16\% proficient) and multilingual learners ( $15 \%$ proficient). Given the relationship between third grade ELA performance and future student success, these findings should sound an alarm bell.

Ed Trust-NY's analysis shows that:

- Only 45\% of all third graders tested proficient in ELA.
- Only 29\% of Black and Latinx third graders tested proficient in ELA.
...? Notably, these patterns of difference for students from low-income backgrounds and students of color in third grade mirror uneven outcomes across all grades.


## 2022-2023 NYS ELA Assessment Results — Third Graders




Note: Assessment results for third grade students from 2022-2023 NYSED 3-8 Assessments Database. Proficiency rates divide the total number of students counted proficient on the assessment by the total number of students tested.

Eighth grade math skills are also closely correlated with future student success, particularly for students considering careers in the STEM fields. Eighth grade math is the gateway to mathematics coursework in high school, and because high school mathematics is often cumulative, eighth graders must have the skills necessary for success in algebra to take higher-level math in high school.

Proficiency on the state math assessment is less than 50\% for eighth grade students overall. And the rates are even lower, under $30 \%$, for Black and Latinx students.

Ed Trust-NY's analysis finds that:

- Proficiency rates for students with disabilities (16\%) and multilingual learners (13\%) are lower than their peers.
- There is a 19 percentage-point gap on the grade 8 math assessment between eighth graders from low-income backgrounds and their more affluent peers.
- Less than 10\% of American Indian eighth graders were deemed proficient on the grade 8 math assessment, and less than $\mathbf{3 0 \%}$ of Black and Latinx students reached proficiency.

High school mathematics is often cumulative, thus eighth graders must have the skills necessary for success in algebra to take higher-level math in high school.


## NYS Students at Math Proficiency, Grades 8, 2022-23




Note: Assessment results for eighth grade students from 2022-2023 NYSED 3-8 Assessments Database. Proficiency rates divide the total number of students counted proficient on the assessment by the total number of students tested.

Eighth grade students in New York have the option of taking either the eighth grade NYS math assessment or a higher-level Regents exam which is most often the Algebra 1 course. Typically, schools select students with strong math skills to take Regents exams in eighth grade, which can exacerbate equity and access gaps, particularly for students of color and students from low-income backgrounds. Eighth grade math course selection is important because research indicates that eighth grade test scores can help predict academic success in high school among highachieving middle schoolers. When breaking down 2022-23 results by assessment type, we see that:

- Roughly one in two students (49\%) took the grade 8 state math assessment;
- Roughly one in three students (32\%) opted to take the optional, higher-level math Regents exam.

Looking more closely at eighth grade math, proficiency rates vary drastically depending on what type of assessment a student completed. Most notably, the rate of proficiency for students who took the math Regents exam was $83 \%$, compared to just 42\% proficiency among students who took the standard grade 8 math assessment. This is in part because most eighth graders that take a math Regents exam have been previously identified as having strong math skills.


Math Proficiency Rates for NYS Eighth Graders, by Assessment Type


However, when proficiency rates among Regents exam-takers are put in context with students' schools, we find that the schools with the highest share of students from low-income backgrounds had the lowest proficiency rates. The same holds true for schools with the highest shares of students of color.

In contrast, schools with a smaller share of students from low-income backgrounds and fewer students of color had the highest proficiency rates on math Regents exams. This underscores what decades of empirical evidence confirms: attending a lowresourced, high-poverty school hinders academic success, regardless of a student's background or underlying abilities.

Proficiency Rates of Eighth Graders on Math Regents, by School



Math Proficiency Rates for NYS Eighth Graders, by Assessment Type


Note: Assessment results for eighth grade students from 2022-2023 NYSED 3-8 Assessments Database. Enrollment data is from the final school level enrollment data by grade for 2022-2023. Proficiency rates divide the total number of students counted proficient on the assessment by the total number of students tested at schools in the same quartile. Quartiles are based on the share of students of color or the share of economically disadvantaged students at a school.

## When proficiency rates among Regents exam-takers are put in context with students' schools, we find that the schools with the highest share of students of color had the lowest proficiency rates.

## Opportunities to Improve New York Student Assessments

## Timeliness

The results of the 2022-23 assessments were not released by NYSED until December 2023, six months after the assessments were administered to students. This late release, which came without any guidance or public notice, dilutes the value of assessments and limits the ability of parents, caregivers, and other education stakeholders to fully understand their school's performance and hold state and district leaders accountable for student outcomes.

Late and non-transparent data releases also hinder the ability of schools to use these reports to inform their own instruction and target resources to students who need additional support. Ed Trust-NY urges NYSED to significantly expedite the data release process so that all scores are made public as soon as possible - well before the beginning of the following school year - and are accompanied by guidance from state leaders to inform the public of statewide data trends.

## Inclusiveness

A recent focus group study from The Education Trust found that students of color and their families were concerned that student assessments are biased because they fail to accurately reflect the knowledge and capabilities of students of color. Often, both academic learning content and assessments center around whiteness, despite research that shows inclusive content and assessments that reflect the rich diversity of students can increase student engagement.

As such, NYSED and assessment vendors should make changes to improve inclusivity. This might include, for example, incorporating a "windows-andmirrors" approach to curating assessment content, to focus on the five elements of racially and culturally inclusive assessments, as developed by The Education Trust. These criteria are as follows:

## Five Elements of Racially and Culturally Inclusive Assessments

Authentically reflect students' own cultures and identities (mirrors)
2 Authentically represent cultures and identities of others (windows)

Include important contextual and cultural information (ensure accuracy and clarity)

Reflect student interests and intersecting elements of identity (promote intersectionality) Honesty about students' realities both opportunities and challenges (cultivate awareness)

To be sure, NYSED has made progress in this area in recent years: the department currently works with a diverse group of teachers from across the state to help write and review assessment questions and has a longstanding practice of including works from diverse authors and highlighting different cultural experiences. Still, more can be done. We urge NYSED to review The Education Trust's report on inclusive assessment, and to create a task force comprised of curricular and assessment experts to ensure greater inclusivity and additional funding to develop inclusive assessment materials.

## Recommendations to Improve Outcomes for New York Students

## 1 <br> Ensure every district provides evidence-based early literacy instruction.

One of the main reasons why New York has such low assessment scores is simple: far too many students have not been taught to read. Ensuring that all students receive evidence-based early literacy instruction can help equip students with the tools they need to be successful in all subjects.

While the recent New York State budget includes several important early literacy provisions and is an important first step, much more needs to be done to support students and educators. NYSED should:

- Incentivize curriculum adoption aligned with the science of reading in all districts.
- Provide evidence-based training to all PreK-5 educators regarding science of reading instruction.
- Collect and report data on district-level progress on curriculum adoption, training, instruction and student outcomes to better monitor statewide trends.
- Invest in high-impact tutoring and targeted support for older students not reading on grade level.


## 2 Provide high-quality math instruction to improve student math skills.

New York fourth graders rank $46^{\text {th }}$ in the nation when it comes to math proficiency, highlighting the need for both instructional changes and increased student supports. Building on the recent recommendations of Educators for Excellence-New York, we urge district leaders to provide:

- Provide aligned professional learning to build educator capacity, including peer to peer coaching and mentorship.
- Address racism and implicit bias to increase access to advanced coursework for students of color and students from low-income backgrounds.
- Engage families and community stakeholders to support the transition to high-quality math curriculum and provide opportunities to build student math skills outside of school.
- At the state level, we urge state policymakers to consider creation of a state Numeracy Act that would include curriculum reporting requirements for districts, criteria for the selection of high-quality curriculum and instructional resources, and support for aligned professional learning for educators.
- Enhanced focus on building problem-solving skills, numeracy manipulation, and algebraic thinking to prepare students to succeed in Algebra.
- Automatic enrollment policies for eighth graders in Algebra 1, with the ability to opt out. Auto enrollment policies have been implemented successfully across the nation and can help address hidden systemic inequities by more equitably enrolling students who are ready to be in advanced classes based on multiple measures while preparing them to take advanced coursework in high school.

3 Provide tutoring and expanded learning opportunities to students in need of extra support.

As students recover from interrupted learning due to the pandemic, high-impact tutoring is an evidencebased intervention that can increase students' learning, on average, by an additional three to fifteen months across grade levels. Moreover, research shows that it is particularly effective for students from low-income backgrounds.

Another proven intervention is high-quality summer and afterschool programs, which blend academic content in math and reading with enrichment activities. These strategies can be especially helpful for older students that missed out on foundational reading skill development during the pandemic and may be struggling in upper elementary, middle, and high school.

## Conclusion

New York State's most recent student assessments represent a warning bell for us all - another reminder that our students, particularly our Black, Latinx, and students from low-income backgrounds, are falling behind. But the data also show us where, and how, we need to intervene. The recommendations included in this report help us move in that direction.

All data in this analysis are from the 2022-23 school year. The assessment results were not comparable to previous years' results because this was the first year the Next Generation Learning standards were used. Data on assessments are from the 3-8 Assessment database, which can be found at https:// data.nysed.gov/downloads.php.

All charts include all students in grades 3 or 8 unless they specify a subgroup. Similarly, all charts include all the tested students across the state. We utilized the third grade level aggregate wherever possible for ELA, but we utilized the disaggregated math assessment data for the eighth grade analysis. All proficiency rates are calculated by the total number of students counted "proficient" in the assessment category divided by all the students tested in the same category.

Charter schools are included in all statewide analyses. Data on the percentage or share of students from lowincome backgrounds and students of color by school was calculated using school-level enrollment data from the 2022-23 school year. Enrollment data can be found at http://www.nysed.gov/informationreportingservices.


