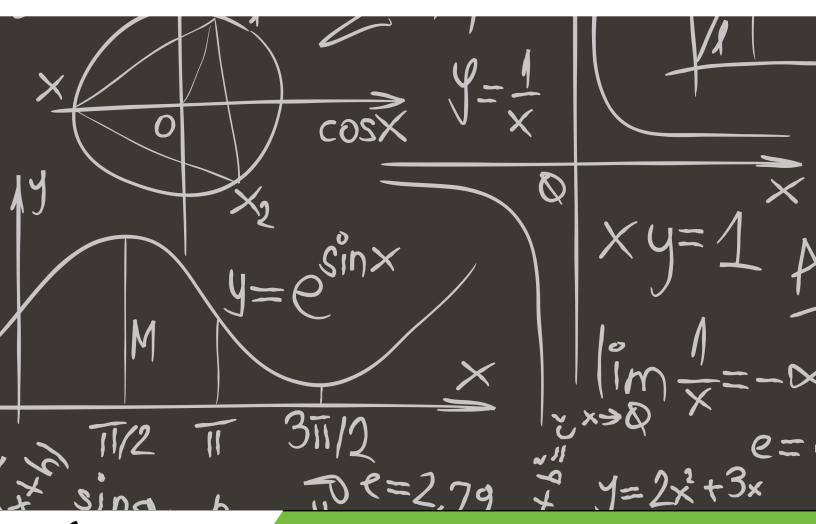


Every Student Counts

HIGH-QUALITY MATH
INSTRUCTION RECOMMENDATIONS





Overview: E4E High-Quality Math Curriculum Focus Group

The NYC Reads Initiative of New York City Public Schools (NYCPS) marked a historical investment in high-quality K-5 literacy curriculum. Now, it's time for a similar commitment to support NYC educators and students in implementing high-quality math curriculum and instruction in all middle schools. Last year's NAEP scores revealed a concerning reality: only 18 percent of New York City's fourth-graders were proficient in math, with even lower proficiency among Black and Hispanic students. As these students prepare to enter middle school, urgent action is necessary to help ensure their success. We, as NYC educators, administrators, and E4E-NY leaders, believe that NYC Public Schools must implement substantive measures that enhance support for math teaching and learning in all middle schools district-wide.

To begin, NYCPS should assemble a team of educators and other community stakeholders to determine the metrics and parameters for high-quality math curriculum and instructional materials. One of the metrics must be the cultural responsiveness of the curriculum. A team consisting of current educators with diverse classroom contexts should be formed to review and rate curriculum options according to these metrics. The reviews should be made public to educators, and funds for purchasing one of the highly rated, quality math curricula should be made available to every school.

Any curriculum chosen by a school or district should provide guidance on assessing and addressing relevant prerequisite skills at the appropriate time over the year to ensure Learning acceleration is happening when needed. NYCPS should provide a list of recommended supports that could be utilized to ensure access to grade-level instruction by addressing the needs of students who enter middle school and need additional support with whole number fact fluency.

During the implementation process, it is crucial that NYCPS support district superintendents in centering the feedback of experienced, current educators with content and pedagogical expertise. Throughout the NYC Reads curriculum selection process, districts were given little to no support on how to do so. NYCPS should provide a clear pathway for each superintendent to engage school leaders and community members—especially current math educators with leadership roles such as Peer Collaborative Teachers or Instructional Coaches—so that specific classroom contexts and experiences at the local level inform district-based curriculum choice.



The following recommendations may not solve every challenge, but they are each a critical step toward ensuring we are supporting our teachers and setting our students up to succeed. NYC Public Schools should:

- 1
- Curate a set of high-quality middle school math curricular options that local superintendents must select through deep engagement with the community and with educators, setting students up for success in 9th grade Algebra 1:
 - a. Leverage current educators to assess curricular options and inform districtwide selections by utilizing the following frameworks: <u>NYSED Culturally</u> <u>Responsive Sustaining Education</u>, <u>Massachusetts Department of Education</u>, and <u>EdReports</u>;
 - b. Utilize data for informed decision-making on the degree of curricular shifts needed;
 - c. Publically release the metrics used for curriculum assessment and ratings for curriculum options reviewed; and
 - d. Allocate funding for districts to purchase the curriculum options that received high marks for standards alignment and cultural responsiveness





- 2
- Make bold investments in 3-5 years of aligned professional learning, comparable to NYC Reads, that builds the capacity of NYCPS educators by making curricular and pedological shifts without high-stakes accountability tied to them:
 - a. Every teacher should have access to a Peer Teacher Collaborator and Instructional Coach trained by external PL providers, ensuring that these mentors:
 - i. Reflect our diverse student and teaching population;
 - ii. Show empathy for, and know how to counteract "math aversion" and the generational anxiety in teachers and students; and
 - iii. Understand the specific school context and resources
 - b. Invest in developing knowledge of strong instructional math practices and awareness of curriculum design and intent for building administrators and instructional coaches;
 - c. Invest in math educator teacher leadership and work with the union to ensure math teachers, especially those of color, are empowered to train and become PTCs and ICs:
 - d. Increase peer-to-peer coaching and mentorship by setting aside time for and embedding peer classroom visits for all teachers;
 - e. Support teachers in leveraging grade-level curriculum that:
 - i. Engages students in rigorous standards-aligned exploration of mathematics; and
 - ii. Allows students to make connections to real-world scenarios through relevant and relatable contexts
 - f. Ensure students have access to high-quality instructional support outside of the school day:
 - i. Invest in <u>high-impact math tutors</u> for libraries and other community or after-school programming; and
 - ii. Create and fund opportunities for parents/caregivers to support student math learning and needs.



- 3
- Address racism and bias in school culture and policies leading to inequitable student math outcomes and lack of access to <u>advanced coursework</u> for students of color and students from low-income backgrounds:
 - a. Invest in and scale implicit bias training specific to math education for math educators, in addition to implicit bias training for academic placement counselors;
 - b. Expand access to advanced math for 7th and 8th-grade students;
 - c. Increase investments in social workers, counselors, and restorative justice training to mitigate loss of instructional time due to suspensions and chronic absenteeism; and
 - d. Enact universal safety and culture norms across all NYC public schools.
- 4
- Build supportive relationships and systems for other community stakeholders—beyond teachers—that impact students' educational outcomes:
 - a. Robust communication and engagement plan to ensure families, caregivers, and community organizations can support the transition to a higher-quality math curriculum; and
 - b. Provide parents and caregivers with accessible workshops such as the <u>Oakland REACH Math Liberator Fellowship</u> to develop the skills needed to help NYC students become confident math learners, repairing generations of inequitable access to math education



