

The National Council of Teachers of Mathematics (NCTM) recognizes that as a mathematics leader, you work with classroom teachers to implement high-quality mathematics instruction for each and every student. Below are recommendations for mathematics education for the next school year. NCTM also has recommendations for your building and district administrators as well as your mathematics teachers.

No Standardized Testing for the 2020–2021 School Year

- Equity: With so many students having inadequate access to education during the pandemic, the results would highlight opportunity gaps rather than opportunities for learning.
- Time: The time spent taking and preparing for standardized tests would be better spent teaching grade-level concepts and building students' mathematical reasoning.
- Finances: Many districts are facing significant financial cuts. The money spent on standardized testing could be spent to support student learning and teacher instruction to help avoid some painful cuts in services and learning opportunities that directly benefit students.

General Recommendations for Math Leaders

- Ensure a strong focus on high-quality mathematics instruction for each and every student, so that we do not perpetuate tracking or ability grouping.
- Advocate for needs of teachers and students, ensuring their voices are heard. Serve as a bridge between administrators and teachers.
- Help teachers plan for and prepare for online teaching and learning, both synchronous and asynchronous
 - Translate good classroom teaching into online strategies—for example, how to do number talks, how to do the 5 Practices and the Mathematics Teaching Practices, collaborative and cooperative group work.
 - Use technology to promote classroom discourse—for example, using breakout rooms, web-based applications, virtual manipulatives, strategies for asynchronous discussions.
- Support teachers in the transition to returning to face-to-face instruction.
- Work to increase and support teacher collaboration, including in remote contexts if needed.
- Support teachers in implementing a culture of formative assessment and qualitative feedback. Acknowledge the challenge of doing so when in remote contexts, but provide needed supports to teachers.
- Facilitate or support teachers in effective communication with families.
- Encourage teachers to help students play, explore, and experience the joy, wonder and beauty of mathematics.

Recommendations and Positive Strategies

- Avoid starting the year by giving diagnostic assessments; instead use formative assessment strategies.
- Encourage teachers to begin teaching grade-level content and fill in the missed content, in context, along the way.
- Avoid grouping by perceived ability so that we do not fall into de-facto tracking.

- Help teachers develop increased knowledge of the progressions of key concepts so that prerequisite skills are reviewed directly before building on them rather than teaching missed content in isolation.
- Facilitate vertical collaboration between grade levels to help identify possible areas of additional learning, especially when transitioning between and within schools.
- Lead the development of instruction to deeply engage students rather than merely “covering” the content. Students need to engage with mathematical processes and practices to build the mathematical knowledge, identity, and agency required for future success.
- Recommend curricular resources to teachers that support effective learning progressions.
- Help develop effective tier 2 and tier 3 interventions to supplement rather than replace core mathematics instruction.

Resources

- [“Moving Forward: Mathematics Learning in the Era of COVID-19”](#)
- [Mathematics Teacher: Learning and Teaching PK–12](#)
- [Catalyzing Change](#), including the book club
- [Principles to Actions: Ensuring Mathematical Success for All](#), including the [toolkit](#)
- [Strengths-Based Teaching and Learning in Mathematics](#)
- [The Math Pact](#) (3 volumes), (in press now)

Webinars from 100 Days of Professional Learning

- *Catalyzing Change* Series
 - May 26: “*Catalyzing Change* across All Grade Levels: Opportunities and Challenges”
 - May 27: “*Catalyzing Change: An Overview of the 4 Key Recommendations for Early Childhood and Elementary Mathematics*”
 - May 28: “*Catalyzing Change in Middle School Mathematics: Initiating Critical Conversations Centered on the 4 Key Recommendations*”
- The *5 Practices* Series
 - April 8: “Orchestrating Productive Mathematics Discussions: Overcoming the Challenges (Grades 6–8)”
 - April 9: “*The 5 Practices in Practice: Orchestrating Productive Mathematics Discussions in High School*”
 - April 29: “*The 5 Practices in Practice: Taking on Classroom Challenges (Grades 3–5)*”
- April 23: “How We Move from Equality to Equity and Justice in Mathematics Teaching”
- April 30: “Challenging Dis/Abilities: Leveraging the Potential of All Students as Math Problem Solvers”
- May 7: “Is 2020 Vision Good Enough? Looking ahead to What Comes Next”
- June 9: “Building Agency, Fostering Identities, and Promoting Social Change via Social Justice Contexts
- June 18: “Promote Equitable Teaching Practices AND Focus on Content and Connections—Don’t Settle for Only One!”

- June 22: “Supporting Students’ Voice in the F2F and Virtual Mathematics Classroom”
- June 25: “Talk Talk Talk Talk Talk: Routines for Math Workshop”
- July 29: “Mathematics Leadership in Times of Unprecedented Change: Catalyzing, Building, and Sustaining Positive Change (Mathematics Education Leaders)”

Webinars about Online Teaching

- “Making the Shift to Online Math Instruction: Supporting PreK–16 Educators in Online Pedagogy”
- “Taking Your Online Instruction to the Next Level: Exploring How Effective Instructional Strategies Work in Online Environments”