



Norwalk Public Schools K–12 Mathematics Vision

In Norwalk Public Schools, we believe mathematics is essential to how students make sense of the world and fully participate in society, expanding access to opportunity and economic mobility.

Our goal is to ensure all students engage in rigorous, grade-level mathematics that builds deep understanding and accuracy, enabling them to apply their learning in meaningful, real-world contexts and prepare for an increasingly complex world. Students not only learn mathematics, they understand, do, and apply it as critical thinkers, problem-solvers, and decision-makers.

We cultivate confident, capable, and self-directed mathematicians by fostering a strong sense of belonging in every classroom. Learning environments are intellectually safe and inclusive, where student thinking is centered, productive struggle is valued as an asset, and misconceptions are surfaced and supported as part of the learning process.

Students do the thinking. Through problem-solving and rich discourse, including reading, writing, speaking, and listening, they explain, justify, and refine their ideas while building shared understanding and confidence in their mathematical reasoning.

To realize this vision, our system ensures equitable access through coherence, aligning curriculum, instruction, assessment, and supports across classrooms, schools, and grade levels. This coherence is reinforced through the consistent use of high-impact instructional strategies, ongoing feedback cycles, and sustained professional learning. Educators implement high-quality instructional materials with fidelity, while just-in-time supports ensure all students access the full depth and breadth of grade-level standards.

Across all schools, high expectations, culturally responsive practices, and coherent learning experiences ensure that every student thrives as a mathematician, develops a positive mathematical identity, and graduates prepared for college, career, and life.

Mathematics Instructional Priority Aligned to NPS Portrait of a Graduate Framework	Key Actions for Stakeholder Groups
<p>Equity, High Expectations, and System Coherence</p> <p>All students, including multilingual learners and students with disabilities, deserve access to rigorous, grade-level mathematics with necessary integrated supports. Educators maintain high expectations for every student's mathematical capability. Learning environments are safe and culturally responsive to foster student identity and agency. Instruction is grounded in consistent, structured routines that support access, discourse, and engagement for all learners. The system ensures aligned curriculum, instruction, and ongoing professional learning for educators. This belief ensures students are Global Citizens and capable Self-Directed Learners.</p> <div data-bbox="328 955 425 1054"> </div> <div data-bbox="563 955 660 1054"> </div>	<p>Students</p> <ul style="list-style-type: none"> • See themselves as capable mathematicians • Access grade-level mathematics with integrated supports • Experience consistent, high-quality learning across classrooms <p>Teachers/Support Staff</p> <ul style="list-style-type: none"> • Maintain high expectations for every student • Provide Tier 1 instruction with integrated just-in-time supports • Implement aligned curriculum and materials with consistency <p>Leaders</p> <ul style="list-style-type: none"> • Ensure alignment across curriculum, instruction, and assessment, and provide clear guidance and support for coaches to drive that alignment • Provide coaching structures, tools, and support that enable consistent, high-quality implementation across classrooms • Monitor access, expectations, and outcomes across schools, using coaching and feedback cycles to support continuous improvement <p>Families</p> <ul style="list-style-type: none"> • Reinforce high expectations and positive math identity • Partner with schools to support student success <p>Community</p> <ul style="list-style-type: none"> • Support a shared commitment to access, equity, and high expectations
<p>Student-Centered Discourse and Relevance</p> <p>Classrooms center student thinking through regular discourse and collaborative learning to explain and justify ideas. Instruction actively engages students in reasoning, problem solving, and sense-making, connecting mathematics to real-world and meaningful contexts. This belief directly develops skills for Effective Communicators and Synergistic Collaborators.</p> <div data-bbox="328 1774 425 1873"> </div> <div data-bbox="563 1774 660 1873"> </div>	<p>Students</p> <ul style="list-style-type: none"> • Actively participate in class discussions and listen to peers • Justify reasoning and solutions with evidence • Explain, refine, and build on ideas through discourse • Connect mathematics to real-world contexts <p>Teachers/Support Staff</p> <ul style="list-style-type: none"> • Structure classroom time for peer discussion • Create opportunities for all students to share, justify, and clarify thinking • Center and prioritize student thinking in instruction <p>Leaders</p>

	<ul style="list-style-type: none"> • Observe instruction to ensure student voice and discourse are central • Support the use of relevant, real-world problems <p>Families</p> <ul style="list-style-type: none"> • Ask students about their math conversations and how they see math used outside of school <p>Community</p> <ul style="list-style-type: none"> • Reinforce communication, reasoning, and real-world application of mathematics
<p>Productive Struggle and Misconceptions as Assets</p> <p>Students engage in meaningful, challenging tasks that promote productive struggle and perseverance. Misconceptions and errors are anticipated, surfaced, and used as opportunities for learning. This belief develops skills for a Self-Directed Learner and Critical Thinker.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>	<p>Students</p> <ul style="list-style-type: none"> • Engage in challenging tasks and persist through struggle • Use mistakes to refine and deepen understanding <p>Teachers/Support Staff</p> <ul style="list-style-type: none"> • Design tasks that promote productive struggle • Anticipate, surface, and use misconceptions to drive learning • Create safe environments where risk-taking is expected • Provide students with frequent and clear feedback to support growth <p>Leaders</p> <ul style="list-style-type: none"> • Support instruction that values struggle and learning from errors • Use student work to guide feedback and improvement <p>Families</p> <ul style="list-style-type: none"> • Encourage persistence and problem solving without immediate answers <p>Community</p> <ul style="list-style-type: none"> • Value effort, perseverance, and growth through challenge
<p>Conceptual Understanding and Fluency</p> <p>Instruction develops deep conceptual understanding alongside procedural fluency, enabling students to explain, apply, and transfer their mathematical thinking. This belief reinforces the development of students who are Critical Thinkers and Effective Communicators.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>	<p>Students</p> <ul style="list-style-type: none"> • Develop deep understanding and accuracy • Apply mathematics across contexts • Explain and transfer their thinking <p>Teachers/Support Staff</p> <ul style="list-style-type: none"> • Balance conceptual understanding and procedural fluency • Connect multiple strategies and representations • Design instruction that supports explanation and application • Understand vertical alignment and coherence <p>Leaders</p> <ul style="list-style-type: none"> • Ensure instruction reflects depth, accuracy, and transfer • Support use of high-quality materials that

	<p>build coherence</p> <p>Families</p> <ul style="list-style-type: none">• Support students in explaining their thinking and making sense of mathematical concepts. <p>Community</p> <ul style="list-style-type: none">• Reinforce the importance of mathematical thinking and application
--	--