

## Worthington Hooker School

180 Canner Street  
New Haven, CT 06511  
Principal: Sheryl Hershonik

---

Worthington Hooker, a small K–8 school, serves the most diverse student population in urban New Haven, Connecticut. The changes in Worthington Hooker’s math program over the past few years reflect the district’s commitment to a deeper focus on important topics. District math supervisor Ken Mathews says Worthington Hooker stands out within the district in terms of teacher quality and

high expectations for student success. The school, which is a Connecticut higher-order thinking school (HOTS), follows the Comer model of culturally responsive schools with a strong commitment to equity and belief that urban students can excel in STEM subjects. According to Mathews, “From a district level, we obviously want to prepare all students for algebra. But in a more global sense, we want to get our students excited, motivated, and prepared for STEM careers — science, technology, engineering, and mathematics — and to help them chart a path for themselves to navigate through high school and college mathematics, so that they can have access to STEM careers and the quality of life that is afforded by them.”

- ◆ Elementary/Middle (K–8)
- ◆ 50% White
- ◆ 22% Black
- ◆ 21% Asian
- ◆ 6% Hispanic
- ◆ 18% Free or Reduced-Price Lunch

The district uses benchmarks to guide instruction and ensure students meet the various grade-level standards. Mathews explains the reasoning behind the progression of standards: “Well, if kids are going to be successful at fractions, they need to know their addition facts by the end of grade 1, their subtraction facts by the end of grade 2, and multiplication by the end of grade 3. They need to be able to do long division by the end of grade 4 without a calculator. And then, they need to also have conceptual understanding of those areas by being able to take those skills and facts and apply them to problem-solving situations. If we can achieve that, then the fractions should come very naturally in grades 5, 6, and 7. And then students will be algebra-ready by grade 8. So, I think it’s a pretty simple plan, a model. Implementing it for 22,000 kids in an urban center isn’t always that easy, but I think we do have the blueprint down.”

Worthington Hooker uses a core mathematics program at each level and teachers have access to many supplementary materials, including significant tasks which are rich problems developed around major concepts and topics. There is one hour of protected math instruction time daily at the K–6 level and 50 minutes per day at grades 7–8. Worthington Hooker administers district-developed common benchmark assessments four to six times per year depending on grade level. Teachers also frequently conduct formal and informal formative assessments to track students’ proficiency and progress. In weekly data team meetings, Worthington Hooker teachers examine student work and formative assessment results, sharing ideas for improvement. All data are available online, facilitating access and analysis. Teachers tailor interventions needed for individual students, often using online practice materials.

Teachers have received a great deal of professional development in problem solving/pre-algebra topics in recent years and, in the spirit of building a culture of math literacy in the school, teachers in all subject areas have received professional development in ways to support math practice.

This project has been funded at least in part with Federal funds from the U.S. Department of Education under contract number ED-PEP-11-C-0068. The content of this publication does not necessarily reflect the views or policies of the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.