

Clayton County MathTalk Math Trails

August 23, 2023

Making Math Matter in the Community

The goal of this project is to use MathTalk and Sidewalk Math overlays along with student designed overlays to enhance mathematical literacy in Clayton County by creating opportunities for community members, including parents and students, to engage in mathematical discussions, games, and applications while at play in the community.

The Math Talk Math Trails are a collaboration between Clayton County Public Schools, the Gates Foundation, and the various Clayton County municipalities. The various Math Trails will use community spaces to maximize opportunities for students and community members to engagement in mathematics activities while at play in our local parks. Students will be engaged in designing and developing each trail. Student committees will support the implementation of the trails. Clayton County High School Math Literacy Workers will be tasked, and paid, to support the trail projects by developing activities that increase the use of the trails. Preschools, elementary students, and secondary students will be encouraged to interact with the trails while playing in the park, walking on trails, or visiting local businesses. Educators will leverage trail interactions to make content connections that bring relevance and close gaps in mathematics achievement. Research shows that when parents and young children take time to explore, enjoy, and talk about math together, it sets the stage for positive early math experiences and helps young children view themselves as capable math learners (Casey et al. 2018). Additionally, interacting with logic puzzles, problem solving games, and math riddles encourages problem-solving and logical thinking. They inspire students to tackle problems they might have previously seen as too difficult (Kampen, 2019). The math trail designs will engage young children in exploring and discussing mathematical games, riddles, puzzles, patterns, terminology, expressions, and symbols. Combining the trail with the use of the Measure Everything App, an electronic application that overlays augmented reality images onto the trail designs and engages students in digital games related to the trail, will extend the student's interactions while providing a method for extending and measuring trail usage. The goal is to establish mental schemas that can be leveraged during high quality instruction to improve mathematics understanding and better position our students for tomorrow's job expectations. Clayton County's MathTalk Math Trails will catalyze mathematical literacy in our community by promoting awareness of the importance of early and continuous numeracy development.

Respectfully submitted by, Dr. Tonya Clarke, Coordinator of Secondary Mathematics Tiffanie Nealy, Coordinator of Elementary Mathematics

