

The Top 5 Benefits of Rich Math Tasks

1 Deepen Understanding through Real-World Situations

It's crucial to provide students with an understanding that the math they are learning in school is meaningful and relevant. A rich task helps students make connections and develop deeper understanding, rather than seeing math as a series of unrelated facts and calculations.

2 Make Math Accessible to All Students

A good task is accessible to all learners and allows them to attempt the problem with confidence. Students make sense of the task as a class and then persevere in solving the problem in ways that build on their previous knowledge and make sense to them individually.

3 Allow for Multiple Solution Strategies

Rich tasks lend themselves to a variety of solution strategies and representations, including concrete, visual, mathematical, and numerical approaches. When teachers welcome and celebrate a variety of approaches and strategies, students see there is more than one way to approach a problem. This helps them become more confident in their abilities, learn from one another, and develop a growth mindset.

4 Integrate Student Collaboration and Discussion

After making sense of the task as a group, students work independently, with encouragement from the teacher as needed. After students have attempted a solution strategy, they discuss the similarities and differences in their approaches and representations with a partner and then with the whole class. Students learn from their peers, seeing strategies similar to and different from their own, and those that may be more efficient. Struggling students also gain confidence in their ability to solve problems when they are given an opportunity to explain their strategies and critique the reasoning of others.

5 Engage Students in Learning and Persevering

When students are engaged in learning and encouraged to think, they persevere in solving problems. Students learn to persevere and creatively seek out ways to apply what they know to solve a difficult problem, rather than give up. A rich task will allow students to try another way or use pictures or concrete tools to help support them.

