

Math Talk Learning Community

What Is Math Talk?

The **NCTM Standards** emphasize the importance of developing mathematical language and communication in order to understand concepts rather than merely following a sequence of procedures. *Math Expressions* seeks to build a community of learners who have frequent opportunities to explain their mathematical thinking through Math Talk and thereby develop their understanding. Children are asked to solve problems, explain their solutions, answer questions, and justify their answers. They use proof drawings as a reference for their explanations.

The dialogue that takes place helps everyone understand math concepts more deeply, and it helps children to increase their competence in using mathematical and everyday language. While children engage in dialogue, the teacher acts as a guide to maintain the focus of the discussion and to clarify when necessary.

Multiple Benefits

Children gain greater understanding and ownership of mathematical concepts as they develop and express their own ideas. Describing one's methods to others can clarify one's own thinking. Similarly, hearing and analyzing others' approaches can supply one with new perspectives; and frequent exposure to different approaches engenders flexible thinking. Math Talk provides opportunities for children to understand errors they have made and permits teachers to assess children's understanding on an ongoing basis. By building understanding, Math Talk also prepares children for taking tests. When children encounter complex problems in testing, they can rely on their knowledge of the underlying mathematical concepts, developed through Math Talk activities, to successfully unravel and solve the problems. Math Talk also helps with test items that require explaining an answer.

Math Talk

Math Talk is not just taking turns telling your method or meandering undirected talk. It is an instructional conversation directed by the teacher but with as much direct child-to-child talk as possible. Math Talk is focused on developing understanding for all children in the class.

