

How do Number Talks Benefit My Students?

1. Efficiency and Fluency

As students begin to participate in number talks, they try to think of ways to become more efficient when using operations with numbers. They become more fluent when solving problems because they are being exposed to various strategies shared by their classmates. They are able to apply this to other problem solving activities and decide which strategy to use based on how efficient it may be.

2. Using Mathematical Language

Students are verbalizing daily the steps that they are making in their thought processes. They also hear language that is used by the teacher and other students and begin to incorporate as they speak about their own thinking.

3. Making Mathematical Connections

Students also begin to make connections between operations. They form generalizations about numbers and realize that strategies for some operations may or may not work when performing other mathematical operations.

Problems You May Encounter

Q: I have students who just put up their thumb, but really have come up with a solution. How do I hold them accountable?

A: Talk with them about their thinking quietly while others are solving. Call on them to share how they would "start to solve".

Q: I have students who can develop several strategies, but when they share them they confuse others. What should I do?

A: Be sure to focus on efficiency when students are sharing solution strategies. You may even want to count the steps in each student's thinking as listed on the board. Then you may want to challenge students to develop a more efficient strategy that requires even fewer steps.

Q: All of my students want to share their solution strategies. How do I handle this?

A: There are two ways to address this. You may want to put student names on popsicle sticks and pull different sticks each day to ensure that all students are sharing. This also helps those that do not want to share know that they are eventually going to be called on even if they don't volunteer. You may also want to give students the opportunity to turn and talk with a neighbor to share their solution strategy before or after some have been highlighted whole class. This gives everyone the opportunity to share.

How do I Plan for Number Talks?

If you are just beginning with number talks and your students have not used them before, you may want to start with some dot images. Then move into strategies for adding and subtracting single digit numbers. As students progress, begin to include larger numbers in your expressions and select numbers based on the strategy you want students to use. Depending on the grade level that you teach you may want to then move into multiplication and division and working with fractions and decimals. If you feel that you need a guide to help you plan there are a lot of resources available.

The book, Number Talks: Helping Children Build Mental Math Computation Strategies, K-5 by Sherry Parrish is a great resource. It explains the different strategies you may

want to highlight in your number talks. It also lists number strings for each grade level. Be mindful that there are usually 4 number expressions referred to and you may not get to each one each day. You want to spend around 10-15 minutes each day on number talks.

I hope that you are now ready to begin, or continue your number talk learning journey with your students! You will find delight in seeing how their thinking grows.

