

Take Number Talks to the Next Level with Purposeful Talk Moves

Many students seem to lose number sense as they learn algorithms. Number talks encourage students to think flexibly and develop strategies that help them build number sense. Purposeful talk moves can take number talks to a higher level by helping students effectively communicate their reasoning as they share their strategies.

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Goals:

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- I can describe Talk Moves and how to effectively implement them.
- I can utilize Talk Moves during Number Talks to enhance student engagement.

Review: Number Talks

Turn and Talk:

Get with a partner (or 2) and discuss how Number Talks are used in your classroom.

Think time: 1 minute

Talk time: 4 minutes



Things to discuss:

What do you know about Number Talks?

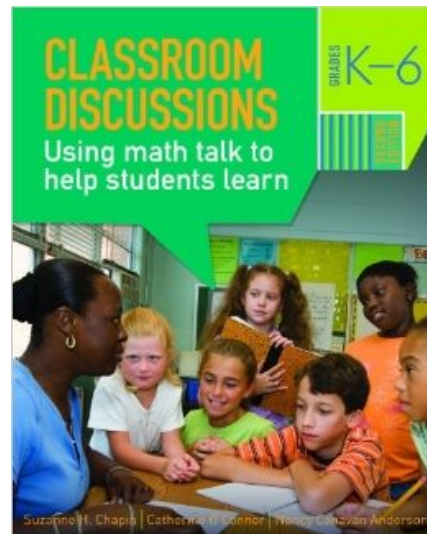
What do you already do? How is it going?

How do students respond to Number Talks?

Do you have any Number Talk ideas you are confused about or have questions about?

What are Talk Moves?

- “Talk in action”
 - Tools that teachers use to implement classroom talk
 - Support mathematical thinking
 - Different ways to organize students for conversations
 - Create a classroom of respect and equal access to participation



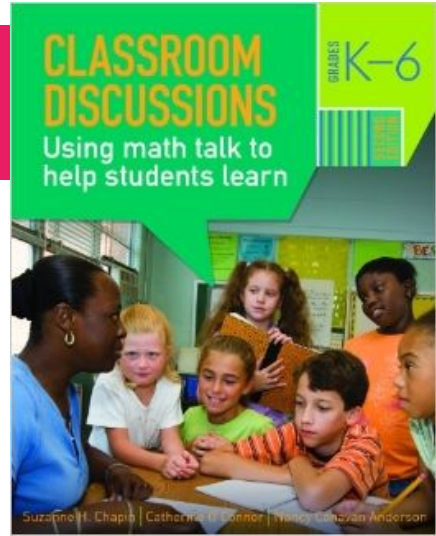
Chapin, S. H., O'Connor, M. C., & Anderson, N. C. (2009). *Classroom discussions: Using math talk to help students learn, grades K-6*. Sausalito, CA: Math Solutions Publications.

Jigsaw:

Expert Groups

Divide into 7 Groups, read your section from Chapter 2 and discuss your Talk Move:

- What is your Talk Move? And what does it mean?
- What are questions or sentences starters teachers can use to encourage discussion?
- When and why would you use your Talk Move?



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Talk Moves:

1. Say More
2. Revoicing
3. Repeating
4. Press for Reasoning
5. Agree or Disagree
6. Add On
7. Wait Time



Jigsaw:

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Mix It Up

Change groups. You will now teach your new group about your Talk Move.



Let's take a look:

Before Watching:

Pay attention to the questions or statements that the teacher uses to get her students to engage in mathematical communication.

After Watching:

- How do the talk moves encourage students to make connections with each other?
- What can you learn from Ms. Simpson about encouraging students to change their minds?



Watching and Analyzing Talk Moves:

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Kindergarten- [“Quick Images: Visualising Number Combinations”](#)

- What talk moves do you see, and what do you think the teacher is trying to accomplish by using these talk moves in this combination?
- How could we apply what we saw to number talks?

Let's Practice:

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$$4 \times 28 =$$

$$23 - 19 =$$

Talk Formats:

— — —

Whole Class Discussion:

Teacher is a facilitator.

Small Group Discussion:

Teacher is a monitor.

Paired Discussion:

Teacher is an observer.

Supporting ALL learners:

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What are the implications for differentiation?

English Language
Learners

Gifted
Learners

Reluctant Learners

Distracted
Learners

Students with Disabilities

How do you start incorporating talk moves?

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- Establish and maintain a safe space
- Provide for equitable participation in number talks
- Be explicit with your expectations about new forms of talk
- Try only one new challenging talk move at a time

Keep in Mind:

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The development of the community may take several months.

The classroom will transform as the children and teacher take on new roles and responsibilities.

The ultimate goal is for the teacher to be the facilitator of the number talk and the students should discuss their thinking/reasoning.

What's the end goal?

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Mrs. Augustus' First Grade Classroom

Questions about the video:

What does the teacher say?

What sentence starters are used by the students?

What do you think had to happen in this classroom to get students to this point?

Putting It All Together:

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Think-Pair-Share

***Think** for 1 minute.*

***Pair** up with someone around you.*

***Share** your thinking*

How will you use what you've learned today to get students more engaged during Number Talks?

Share ideas whole group.

Closure:

- I can describe Talk Moves and how to effectively implement them.
- I can utilize Talk Moves and other structures during Number Talks to enhance student engagement.

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Talk Moves and the 4 Cs:

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Communication, Collaboration, Critical Thinking, Creativity

Timed-Pair-Share

Partner A and Partner B both take turns speaking for 45 second rotations.

Which of the 4 Cs are evident in Number Talks?

You can try some Talk Moves:

“So what I heard you say was... is that correct?”

“I agree/disagree with you because ____.”

“I’d like to add-on to you thought about ____.”

How do we begin?

— — —

“Talk is productive in math class when it is used to strengthen students’ mathematical thinking and reasoning. Student talk must be respectful, engaged, and focused on mathematics; only when both the social and the mathematical aspects of communication are in place do we find that classroom talk offers maximum support for learning.”

What do we need to have productive talk in our classrooms?



Purposeful, Productive Talk Moves:

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“Although we rarely stop to think about our most common conversational prompts, they are among our most important instructional tools.”

- Chapin, S. H., O'Connor, M. C., & Anderson, N. C. (2009). *Classroom discussions: Using math talk to help students learn, grades K-6*. Sausalito, CA: Math Solutions Publications.

Jot Thoughts about Talk Moves: (part 2)

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- With your table group, sort your thoughts into 2 categories: know and want to know.
 - Discuss.
 - Place sticky notes on appropriate posters.
 - Be prepared to share an idea or two with the whole group.
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- Whole Group Share