

## EPISODE 2

# EXPLICIT INSTRUCTION & MATH THINK ALOUDS

*What does explicit instruction look like in the your classroom? Is it effective?*

### SUMMARY

- Explicit instruction is a systematic teaching approach to modeling, guided practice, and feedback
- It provides high-quality interaction between teachers and students
- Listing steps and showing examples isn't sufficient for all learners
- Use a Think Aloud to make the thought process behind problem-solving visible to students

### RESEARCH

- Explicit instruction is one of the most effective methods to meet the needs of students with math difficulties
- It is critical for teaching new math concepts to all learners
- Thinking aloud while demonstrating how to solve a problem is an effective way to provide cognitive support

### PLAN A MATH THINK ALOUD

- Choose the problem to be modeled
- Write out the steps and solution to the problem
- Ask and answer the planning prompts (more prompts on detailed checklist)
  - *PLAN: What is the problem asking me to do? Which information is important? What rules or properties will help me solve this problem?*
  - *MONITOR: Is this strategy working? I know \_\_\_ mistake is common, did I double check my calculations?*
  - *EVALUATE: Looking back, have I made any mistakes? Does my answer make sense?*
- Add a total of 6-9 questions and the corresponding answers to your script
- Type the think aloud scripts in *italics* in your lesson, or add sticky notes to the side of a handwritten lesson

[CLICK FOR A DETAILED IMPLEMENTATION CHECKLIST](#)





## EPISODE 2

# EXPLICIT INSTRUCTION & MATH THINK ALOUDS



## DISCUSSION

- What does “explicit instruction” look like in your classroom? Is it effective?
- How and when do you incorporate modeling, guided practice, and feedback?
- If you planned and delivered a “Think Aloud,” how might that change outcomes for students?
- What challenges do you anticipate in implementing this strategy?
- What adaptations would you make for your classroom?

## SOURCES

- Archer, Anita, and Charles Hughes. *Explicit Instruction: Effective and Efficient Teaching*. New York, Guilford Press, 2010.
- Cohen, Julie. “Practices That Cross Disciplines?: Revisiting Explicit Instruction in Elementary Mathematics and English Language Arts.” *Teaching and Teacher Education*, no. 69, Jan. 2018, pp. 324–335, <https://doi.org/10.1016/j.tate.2017.10.021>.
- Doabler, Christian T., and Hank Fien. “Explicit Mathematics Instruction: What Teachers Can Do for Teaching Students with Mathematics Difficulties.” *Intervention in School and Clinic*, vol. 48, no. 5, 5 Feb. 2013, pp. 276–285, <https://doi.org/10.1177/1053451212473151>.
- Mullholland, Kirstin. “Thinking Aloud to Support Mathematical Problem-Solving.” Education Endowment Foundation, 1 Feb. 2022, [educationendowmentfoundation.org.uk/news/eef-blog-thinking-aloud-to-support-mathematical-problem-solving](https://educationendowmentfoundation.org.uk/news/eef-blog-thinking-aloud-to-support-mathematical-problem-solving).
- Ness, Molly K. *Think Big with Think Alouds, Grades K-5 : A Three-Step Planning Process That Develops Strategic Readers*. Thousand Oaks, Corwin, 2017.