



## ***Best Practices for Fostering Strategy Sharing in Math***

### **“Strengthening Discussions”**

**Summary:** Strategy sharing can be defined as student led discussions where children present their approach to a problem and explain how they solved the problem. There are a variety of things teachers can do to strengthen these discussions and enhance student ownership of strategies and understanding of math.

### **Background:**

This study centered on a first and fourth grade classroom where the author observed for a year and collected data for a week each trimester. This included videotaping sharing lessons and student interviews.

### **Practical Applications:**

*Sharing Mistakes* - During effective strategy sharing students are expected to discuss mistakes, both their own and their classmates. Finding errors is a chance for the class to investigate flawed thinking and move together toward a solution. Sharing mistakes sounds like, “I’d like to revise my thinking.” “That’s a desirable contribution.”

*Sharing Strategies* – When a student is a “sharer” they can draw on a wide range of tools to explain their strategy and thinking. These can include words, actions, written numbers, mathematical representations, and so on. The expectation is set that they share publically. Teachers often probe deeper sharing with questions. The more exposure students have to sharing the more they know how and what to share. Sharing Strategies sounds like, “When you tell us how you solved, tell us how you got your answer and why you chose to solve it that way.”

*Listening to Peer Conversations* – The way students learn during a strategy sharing discussion is by listening. In order to follow the mathematical thinking of their peers, students must be active listeners. This student role can add to their own toolbox of strategies and may present a way of understanding the problem they had not arrived at on their own. Students are directly asked to put their own thinking aside as someone shared their strategy and try to understand their peer’s strategy. The student is asked to consider the logic shared and possibly incorporate it into his own repertoire of strategies. Listening to Peer Conversations may sound like, “I’m going to give you another problem and I want you to try her strategy.” “Why did both of these strategies work?” “How is your strategy the same or different?”

**Conclusion and Citation:** Strategy sharing can be done in any grade level with any strand of mathematics. It fosters important discussions as students learn to evaluate their own, and their classmate’s, thinking.

Hintz, A., “*Strengthening Discussions*” Teaching Children Mathematics, 20.5 (Dec 2013/Jan 2014) pp. 318-324 <http://bit.ly/1aZPIsB> (subscription only).