

9 Strategies for Mathematical Discourse

1. **Predictionary** – When students try to predict the outcome of a mathematical task, activity, or problem high order reasoning is initiated. Students are more likely to exert thinking to prove or disprove conjectures once reasoning is prompted.
2. **Notation Station** – Notating mathematical thought helps children communicate reasoning in a concrete manner. It also increases the opportunity to show connections in reasoning, which fosters and promotes creative intelligence.
3. **Day Court (Creating debate)** – Debate is the highest form of discourse in a classroom. Creating intentional debate forces children to form coherent arguments, prove their thinking, and articulate reasoning.
4. **Randomosity** – Small groups can be challenging, but adding a bit of randomness to the process can create accountability. Random selection creates an atmosphere for sharing and discourse (i.e. M-A-T-H groups and Magical Sticks of Destiny).
5. **Say It Again Sam (Reiteration and Revoicing)** – Ability is most often the product of experience. “Revoicing” incomplete or incorrect student statements builds confidence, while reiteration (among peers) creates flexible thinking.
6. **J-Factor (Increasing engagement levels)** – In the age of social media and ultra-interesting personal technology, student engagement has become quite a challenge. This strategy from Doug Lemov’s toolkit, allows creativity and fosters relevance.
7. **Words with Class** – Challenge children to use as many math words as possible during discourse, and create rewards for certain levels of usage. Understanding vocabulary is critical. Be intentional about tracking usage during discussion and small group time.
8. **Life Line (Inter-dependency and assistance)** – Encourage students to help each other when verbalizing reasoning. This famous strategy reinforces problem solving and helps students avoid teacher dependence. It also encourages children to work cooperatively.
9. **Math Walks** – Sharing math work increases flexibility in reasoning. Children can explain their own thinking, but explaining the work of a classmate increases divergent thinking.