



MATH STRATEGY: Student-Generated Problems



The Learning Benefits:

When students create their own math problems, they connect new concepts to prior background knowledge and lived experiences. Studentgenerated problems apply both conceptual and procedural knowledge. Moreover, the creative process inherently promotes metacognition.

Implementation Use Case:

Math Puzzle Maker is a student-generated problemmaking activity that is part of the Speak Agent Math platform. It enables students to create interactive word or number problems with teacher guidance. After a one-click approval, each math "puzzle" is randomly assigned to a classmate. She or he solves the puzzle and compares solutions with its creator.

Favorite Teacher Feature

Math Puzzle Maker stores the student-generated problems and solutions in a digital portfolio to provide evidence of learning.

Distance Learning Tips

- Use activities like Math Puzzle Maker to create an authentic purpose that will keep students motivated and engaged.
- Provide safe, positive Math Communication opportunities.
- Problem creation and solution do not require real-time chat, so you can avoid such distractions.
- Random problem assignments can mitigate social pressure and bias, fostering deeper learning.

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