8 Habits of Math Teachers Who Value Productive Struggle

1. Call on students who may not have the correct answer
   Then guide students in the process of questioning their thinking

2. Praise students for perseverance in problem solving, not for being smart
   They’ll be more motivated to face challenging problems

3. Display work that shows creative problem solving, not the highest scores
   Students will learn to value the struggle toward a learning goal

4. Provide non-routine problems that can’t be solved with a memorized formula
   This challenges students to make sense of the problem then figure out the math needed to solve it

5. Give students informative feedback
   Provide context to help students course correct toward the solution

6. Don’t give easier work to struggling students
   This gives the message that some students can’t handle challenging work

7. Allow students time to ask questions and tinker with ideas
   Slowing down the learning process optimizes retention

8. Encourage having a growth mindset
   Remind students that everyone has the ability to be mathematical problem solvers

To learn more, go to mindresearch.org/blog and search “productive struggle.”

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