



How To Build Powerful Reasoning Using Problem Strings

by Pam Harris

\$49.00

(\$58.80 for 12 months access)

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Subject: Mathematics

Start Date: Immediate access

Access: 4 months

Timing: Self-paced with no set meeting time

PD Hours: 2 Professional Development Hours

Credits: 1 Graduate Level PD Credit Available

Topics Covered:

- Instructional routines
- Problem Strings
- Additive Thinking
- Multiplicative Reasoning
- Proportional Reasoning
- Functional Reasoning
- Number Talks
- Remote instruction
- Representing Student Thinking
- High-leverage Teacher Moves

One tree will be planted per registration (partnership with One Tree Planted).

About This Workshop

Do you believe that learning math should be more than memorizing facts and formulas? Like you, I think that learning math is about changing our brains to have more and more connections, and increasing in mental sophistication. Learning is also using what you know to build new relationships. Want that to happen more in your classroom?

Welcome to Problem Strings, an instructional routine that moves students from where they are and helps them build relationships and sophisticated strategies. A purposefully crafted string of problems, interspersed with a teacher-led discussion, moves students from their current understanding to new ideas in a way that is student centered and feels organic.

In this mini workshop we'll begin by experiencing a Problem String (from your grade band) as a participant. Next, we'll watch an experienced teacher facilitate a Problem String with students (again, from your grade band), and then study three Problem Strings for your grade band. Finally, we will review high-leverage teacher moves to help you get the most out of this incredible instructional routine, and learn how to fit Problem Strings into your current teaching.

There is even a BONUS lesson on how to teach remotely with Problem Strings.

About the Instructor



Pam Harris

I'm Pam Harris and I empower math teachers to be the teacher they want to be. I have been working with educators for over 20 years as a classroom teacher, university instructor, and teacher trainer, as well as writing books and creating resources for teachers. As a beginning teacher, I worked hard to make lessons understandable and interesting, but I didn't realize how much I relied on rote memorization and repeating procedures until I immersed myself in math research. This fundamentally changed the way I do and teach mathematics so that students work toward making sense of math, develop deep conceptual understandings, and are no longer robots.

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