



High School PROBLEM STRINGS

with Pamela Weber Harris

We specialize in helping teachers teach mathematics in a powerful way. We facilitate opportunities for teachers to construct mathematical relationships and connections. We invite teachers to re-examine their underlying assumptions about teaching and learning so that teachers can make choices that align with their core beliefs. Each workshop has a particular focus, but all provide opportunities to shift teachers' paradigms about what it means to teach and learn math powerfully. Author, teacher, and speaker Pam Harris personally leads every workshop.

In this course, you'll learn the powerful instructional routine of Problem Strings to use in a middle or high school class. You will engage in algebra, geometry, algebra II, and precalculus problem strings. A problem string is a series of related problems purposefully sequenced to help students construct mathematical relationships so that powerful strategies become their natural instincts. You will analyze important teacher moves so that you can use high leverage teacher moves to facilitate learning. You will examine progressions of problem strings so that you can use them to complement your curriculum.

Course Objectives

Participants will have the opportunity to:

- Construct powerful algebra strategies to solve equations and systems of equations, graph functions, connect representations, and more
- Examine the difference between Problem Strings and Problem Talks, how to use each, how often, and how these lesson structures work together
- Analyze and plan lessons for teaching students using Problem Strings
- Learn how to model student thinking



In addition to a live, interactive session, each week, participants will receive:

- Access to short, proprietary videos introducing the next session
- Brief assignments to do during the week including implementation steps in the participant's classroom
- Support in implementing the assignment in their teaching
- Feedback in a private facebook group

Course Completion:

The course has 6 hours of instruction time. You must log in to each 1.5 hour session in order to receive a course completion certificate for the 6 instruction hours. Upon completion of the course evaluation after the last session, you will be sent the course completion certificate.

Based on:

Harris, Pamela Weber. Algebra Problem Strings. KENDALL HUNT, 2017.

Harris, Pamela Weber. Advanced Algebra Problem Strings. KENDALL HUNT, 2017.