

## Math Solutions Professional Learning

FOLLOW-UP TOPIC	ESSENTIAL QUESTION, COURSE DESCRIPTION, AND LEARNING OUTCOMES
<p><b>Create an Effective Learning Environment</b></p>	<p><i>How can I create an environment where my students are accountable for their learning and feel confident, safe and respected?</i></p> <p><b>Course Description:</b> Participants will evaluate and refine their learning environment to ensure students are accountable for their learning and feel confident safe and respected.</p> <p><b>Learning Outcomes:</b></p> <ul style="list-style-type: none"> <li>• Establish clear expectations that support the Helping Community for math instruction.</li> <li>• Identify student and teacher actions that support the Helping Community</li> <li>• Effectively engage Student Leaders during math instruction.</li> </ul>
<p><b>Make Math Accessible for all Learners Through Differentiation</b></p>	<p><i>How can I make math accessible to each of my unique learners through the use of data and differentiation structures and resources?</i></p> <p><b>Course Description:</b> To ensure equity, participants will explore the powerful teaching support and differentiation options in <i>Into Math</i> to help all students access the mathematical content.</p> <p><b>Learning Outcomes:</b></p> <ul style="list-style-type: none"> <li>• Use strategies to support instruction before, during and after math to provide access to all learners.</li> <li>• Encourage the use of math tools, math drawings, math explaining, and sense-making as students move through the Inquiry Learning Path.</li> <li>• Plan instruction that explicitly addresses varying needs and supports for all learners (striving learners, learners with disabilities, English learners, advanced learners).</li> </ul>
<p><b>Create a Math Talk Community</b></p>	<p><i>How can I create a community of students who use Math Talk to share and discuss mathematical ideas and strategies?</i></p> <p><b>Course Description:</b> Participants will understand and implement the Math Talk structures to create a community of students who confidently share and discuss mathematical ideas and strategies.</p>

**Learning Outcomes:**

- Understand the Math Talk Structures.
- Identify when and how to use Math Talk.
- Practice and apply the Solve and Discuss structure.

**Maximize Learning with Digital Resources**

*How can I use digital resources to maximize retention of content through application of mathematics?*

**Course Description:**

Participants will identify and integrate digital resources to enhance learning.

**Learning Outcomes:**

- Understand current research around Blended Learning.
- Explore *Math Expressions* digital resources to determine how they can support instruction.
- Prepare lessons that meaningfully integrate digital resources.

**Plan Effective Math Learning Experiences**

*How can I apply the Five Core Structures and program resources to develop lesson plans?*

**Course Description:**

Participants will learn to plan effective, student-centered learning experiences that increase learner engagement throughout instruction.

**Learning Outcomes:**

- Understand each of the Five Core Structures and their impact on learning in the *Math Expressions* Classroom.
- Practice and apply strategies to increase student engagement.
- Structure instruction to support students as they move through the Inquiry Learning Path.

**Build Fluency and Conceptual Understanding through Quick Practice Routines**

*How do Quick Practice routines build fluency and conceptual understanding.*

**Course Description:**

To build fluency and conceptual understanding, participants will learn to effectively implement Quick Practice routines.

**Learning Outcomes:**

- Establish structures for Quick Practice in your classroom.
- Effectively engage Student Leaders during Quick Practice.
- Explore the progression of learning in the Quick Practice routines.

**Teach the Language  
of Mathematics to  
Support English  
Learners**

*How can I support my English Learners with language development?*

**Course Description:**

Participants will learn strategies to promote the use and development of math language for all learners, especially English Learners.

**Learning Outcomes:**

- Understand the stages of English language development.
- Explore *Math Expressions* resources that support language development at each stage.