The MDE, in partnership with Catapult Learning, presents a professional learning opportunity for Mathematics educators, just in time for the Back to School season!

Four math-focused sessions, facilitated by Catapult Learning Math Coaches from our Mississippi team, are being offered as LIVE two-hour virtual sessions. All sessions are available at various times to allow for maximum flexibility. All sessions are aligned to the MS CCRS for Mathematics and are suitable for teachers, support staff, and educational leaders in grades K-12.

To register for sessions, please visit https://catapult-mdepd.eventbrite.com.

For questions for the MDE, please contact:
Dr. Tenette Smith (tenette.smith@mdek12.org) or Dr. Marla Davis (mdavis@mdek12.org)

For questions for Catapult Learning, please contact:
Christin Nichols (christin.nichols@catapultlearning.com)

For information on the Catapult Learning Mississippi Math Coaching Team:
www.catapultlearning.com/mississippi-math-coaching/
**Introduction to a Core Instructional Model**

Academic learning time is evident when all students are actively manipulating content in a variety of modalities. It is imperative that teachers create opportunities for students to discuss their thinking, practice new skills, and reflect on their learning. This workshop explores the notion of “time on task” and the kinds of active learning strategies teachers can incorporate to ensure that classroom time is used productively. Participants will:

- Define academic learning time
- Understand the components for the "anatomy of a lesson"
- Learn a framework for planning instruction
- Explore ways to engage students with the content and reflect on their own learning

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**Facilitation Team:**

Amy Marchbanks  
Courtni Patterson  
Jennifer Foshee  
Victoria Wheeler  
Yolanda Jackson

**Leading Problem-Solving Workshops**

When students know how to manage the process of problem solving, a teacher can leverage these skills in many ways. Yet some textbooks water down problem solving for students and teachers. In this workshop, participants will:

- Define an effective lesson flow for rich problem solving experiences
- Choose problems that address both topical goals and mathematical practice
- Do fewer problems, making them more engaging and digging deeper into them
- Guide students as they compare and contrast multiple solutions to the same problem
- Leverage problem “remixes” to efficiently extend learning from problems

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**Facilitation Team:**

Jennifer Foshee  
Katie Williams  
Lana Price  
Malak Mustafa
Representing Math Problems with Pictures, Tables, and Actions

One step of problem solving commonly skipped by both students and teachers is the representation of problems. Reformulating a problem as a picture, table, or actions not only can clarify the problem itself but also lead to better strategizing. To improve this practice, participants will:

- Justify representation as a key step in problem solving
- Represent a variety of word problems using pictures, tables, and actions
- Pose purposeful questions to help students represent problems independently
- Use representations to choose solution strategies
- Commit to connecting representations in day-to-day problem solving

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Facilitation Team:

- Ayana Hudson
- Courtni Patterson
- Katie Williams
- Victoria Wheeler
- Yolanda Jackson

Teaching Math for Deep Understanding

Today’s math standards emphasize conceptual understanding as the foundation for procedural fluency and application. To address this important component of math teaching, participants in this workshop will:

- Break down what “deep understanding of math” really means and why it matters
- Structure math learning as a sequence of stages
- Represent math using concrete, representational, and symbolic forms for a range of topics
- Build fluency out of conceptual understanding instead of in spite of it
- Self-assess and plan to improve the depth to which they teach each grade-level topic/standard

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