

enVisionMATH® Common Core © 2015 Pearson Realize™ Edition: Problem-Based Interactive Learning

Explore enVisionMATH® Common Core © 2015 Pearson Realize™ Edition strategies that help students develop a deeper understanding of concepts through interacting with each other and their teachers. Participants engage in activities that enhance their knowledge of problem-based instruction as they explore how it develops conceptual understanding in elementary students. Participants walk away with effective strategies for using problem-based instruction to enhance students' learning and tools to engage students in interactive learning.

OUTCOMES:

By the end of the workshop, participants will be able to:

- Incorporate problem-based learning strategies within the enVisionMATH® Common Core Pearson Realize™ Edition classroom.
- Describe strategies to engage a range of learners through lesson modification and activity-based instruction.
- Implement an interactive instructional model that supports in-depth conceptual development.

AGENDA:

(See the following page for extended agenda.)

Introduction

Section 1: A Problem-Based Approach to Mathematics Instruction

Section 2: Mathematical Practices and Problem Solving

Section 3: Problem-Based Interactive Learning in enVisionMATH®

Section 4: Assessment in Problem-Based Interactive Learning

Section 5: Differentiated Instruction within Problem-Based Interactive Learning

Section 6: Planning for Problem-Based Interactive Learning

Reflection and Closing

SECTION	TIME	AGENDA ITEMS
Introduction	45 minutes	Introduction and Welcome Agenda Outcomes Icebreaker <i>Activity: Reflection</i> Math Warm-Up <i>Activity: Student Strategies</i>
1: A Problem-Based Approach to Mathematics Instruction	45 minutes	Section 1 Big Questions Teaching through Problems A Three-Stage Format <i>Activity: A Three-Stage Format</i> Revisit the Section 1 Big Questions
2: Mathematical Practices and Problem Solving	45 minutes	Section 2 Big Questions Overview of the Common Core State Standards for Mathematics (optional) The Standards for Mathematical Practice (optional) A Closer Look at the Mathematical Practices <i>Video: Jane Schielack on the Standards for Mathematical Practice</i> <i>Activity: Categorizing the Mathematical Practices</i> Problem-Based Instruction and the Standards for Mathematical Practice A Classroom Environment That Supports the Mathematical Practices <i>Activity: A Classroom Environment That Supports the Mathematical Practices</i> Revisit the Section 2 Big Questions
Break	15 minutes	
3 Problem-Based Interactive Learning in enVisionMATH®	75 minutes	Section 3 Big Questions Problem-Based Interactive Learning <i>Video: Problem-Based Interactive Learning</i> Four Instructional Phases Sample Problem-Based Interactive Learning <i>Activity: Participating as a Student or Observational Notes</i> Teacher Questioning <i>Activity: Questions That Promote the Standards for Mathematical Practice</i> Revisit the Section 3 Big Questions
Lunch	30 minutes	
4: Assessment in Problem-Based Interactive Learning	45 minutes	Section 4 Big Question Developing Expertise Using a Proficiency Matrix <i>Activity: Developing Benchmarks for a Proficiency Matrix</i> Strategies for Collecting Assessment Data Additional Assessment Resources Revisit the Section 4 Big Question
5: Differentiated Instruction within Problem-Based Interactive Learning	45 minutes	Section 5 Big Question Reflecting on Differentiated Instruction <i>Activity: Reflecting on Differentiated Instruction</i> Differentiating Instruction Instructional Strategies for Differentiating Instruction during Problem-Based Interactive Learning <i>Activity: Strategies for Differentiation</i> <i>Activity: Applying the Strategies for Differentiation</i> Using Questioning to Differentiate Instruction Additional Resources Revisit the Section 5 Big Question
Break	15 minutes	
6: Planning for Problem-Based Interactive Learning	30 minutes	Section 6 Big Question Resources for Lesson Planning <i>Activity: Planning for Problem-Based Interactive Learning</i> Revisit the Section 6 Big Question
Reflection and Closing	30 minutes	Reflection and Next Steps <i>Activity: Reflection and Next Steps</i> Outcomes Review Closing
Total	6 hours	