

# Professional Learning from **ORIGO** Education



ORIGO Education provides dynamic professional learning to help teachers create meaningful learning experiences for their students. Each engaging session is delivered by curriculum and content specialists.

Additional planning and instructional support services are available for districts seeking multiple-day packages. These services may be customized to suit your district's unique needs. Customizable services can include:

- demonstration lessons
- parent nights
- classroom walkthroughs
- lesson planning and instructional coaching for teachers
- support for district coaches and administrators

[origoeducation.com](http://origoeducation.com)  
888-674-4601

# 3-Hour Professional Learning Sessions

## SESSION TITLE

### Foundational Beginning Processes of Mathematics

## GRADE LEVELS

Pre-K-K

## SESSION DESCRIPTION

This session focuses on the mathematical background and research base of children using initial mathematical reasoning skills. The goal of this session is to help young learners strengthen their abilities to represent, reason, communicate, and problem solve. This is done by developing five important beginning processes: identifying and describing attributes, matching, sorting, comparing, and ordering. As children engage with these processes, they are laying the crucial foundation necessary for elementary mathematics success.

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## SESSION TITLE

### Early Measurement and Geometry Concepts

## GRADE LEVELS

Pre-K-K

## SESSION DESCRIPTION

This session focuses on the mathematical background and research base of measurement and geometry concepts. The goal of this session is to help young learners develop a foundation for understanding direct comparison and ordering concepts in length, mass, and capacity. The second goal is to understand the trajectory of learning geometry concepts starting at three-dimensional objects leading to two-dimensional shapes. This interactive session will give you many activities and ideas you can take back to your classroom.

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## SESSION TITLE

### Developing Number Concepts and Skills

## GRADE LEVELS

Pre-K-2

## SESSION DESCRIPTION

Young students need multiple models to develop concepts and skills with whole numbers. This session explores the sequence of teaching early number concepts, which begins with the skills of subitizing and counting, continuing with the concept of place value. The set, length, and number line models are used to show how place value of two- and three-digit numbers is developed, along with the essential skills of comparing, ordering, and rounding.

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## SESSION TITLE

### Developing a Deep Understanding of Number and Base-10

## GRADE LEVELS

3-5

## SESSION DESCRIPTION

Students need multiple models to gain a deep understanding of number and to develop proficiency with skills. This session explores these models and reveals simple resources to help students better understand place value with whole numbers and decimals and to operate using the base-10 system.

# 3-Hour Professional Learning Sessions

## SESSION TITLE

**Using Powerful Models in the Classroom**

## GRADE LEVELS

Pre-K-2, 3-6, K-6

## SESSION DESCRIPTION

This session highlights the importance of using multiple models in the mathematics classroom. Participants explore the perceptual features of various models and consider the strengths and weaknesses of each model. They will be able to determine how well a model fits the mathematical ideas it intends to convey and begin monitoring how their use of models in the classroom supports or interferes with student understanding of mathematical ideas.

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## SESSION TITLE

**Developing Thinking Strategies for Addition and Subtraction**

## GRADE LEVELS

1-2 (also available in Spanish)

## SESSION DESCRIPTION

This session shows participants how computational fluency develops from a deep understanding of the concepts of addition and subtraction. It includes a demonstration of important visual aids for developing powerful mental strategies that begin with number facts and broaden as they extend to greater numbers. This interactive workshop will be hands-on and participants will leave with a range of practical activities and games to use immediately in the classroom.

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## SESSION TITLE

**Developing Thinking Strategies for Multiplication and Division**

## GRADE LEVELS

3-4 (also available in Spanish)

## SESSION DESCRIPTION

This session shows participants how computational fluency develops from a deep understanding of the concepts of multiplication and division. It includes a demonstration of important visual aids for developing powerful mental strategies that begin with number facts and broaden as they extend to greater numbers. This interactive workshop will be hands-on and participants will leave with a range of practical activities and games to use immediately in the classroom.

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## SESSION TITLE

**Developing the Concepts and Skills of Fractions**

## GRADE LEVELS

3-5

## SESSION DESCRIPTION

Elementary students need experiences with multiple models of fractions in order to gain a deep understanding of the concepts and to develop proficiency with skills. This session explores different representations and interpretations of fractions and why they are so critical and challenging to teach. Participants will leave with instructional strategies for developing the concepts and skills involving equivalence and comparison.

# 6-Hour Professional Learning Sessions

## SESSION TITLE

### Fostering the Mathematical Practices in the Classroom

## GRADE LEVELS

K-2, 3-6, K-6

## SESSION DESCRIPTION

Mathematically proficient students make sense of problems and reason logically as prescribed by the eight Mathematical Practices of the Common Core State Standards. In this session, student examples and videos are used to help participants uncover the meaning of the Mathematical Practices and how they apply in a classroom.

## SESSION TITLE

### Focus and Coherence of the Mathematics Standards

## GRADE LEVELS

By grade level

## SESSION DESCRIPTION

These sessions highlight the content found in the major clusters of the Common Core State Standards. Each sub-session is grade specific and develops the coherence of standards within and across grade levels. Participants will learn instructional strategies such as using visual models and developmental teaching sequences to promote deep understanding of mathematics. Participants will focus on using appropriate language to support concept development and on identifying gaps in students' knowledge by relating the relevant standard through its logical prerequisite. Participants will leave with practice activities, games, and a concept map connecting content to their individual grade level.

## SESSION TITLE

### Strategies to Support English Language Learners (ELL) in the Classroom

## GRADE LEVELS

K-2, 3-6, K-6

## SESSION DESCRIPTION

Participants in this session will develop a strategic toolkit which offers ways to enhance and improve instruction for English language learners in the mathematics classroom. Pedagogical frameworks discussed in the session will include ORIGO's teaching model and language stages.

Topics will include:

- developing student discourse using talk moves
- utilizing powerful visual models
- creating a classroom culture supporting ELL
- using anticipatory guides, guided notes, sentence frames, and graphic organizers
- developing the academic language of mathematics

# Bundled Professional Learning

Each session is up to 2.5 hours

## Computational Fluency

### SESSION TITLE

**Teaching Number Fact Fluency with Understanding, Not Gimmicks**

### BUNDLED RESOURCE

Each participant will receive one set of *The Book of Facts*. Each district will receive up to 15 sets of *The Box of Facts*.

### GRADE LEVELS

1-4

### SESSION DESCRIPTION

Learn how you can increase student engagement and confidence with computational fluency using *The Box of Facts* and *The Book of Facts*. This session includes a demonstration of important visual aids for developing powerful mental strategies that begin with number facts and broaden as they extend to greater numbers. Leave this session with a range of practical activities and resources to use in the classroom. Integrate these resources immediately in your mathematics classroom.

### SESSION TITLE

**Great Games Lead to Great Gains**

### BUNDLED RESOURCE

Each participant will receive one grade-level book of the *Fundamentals* series and a one-year subscription to the *Fundamentals* digital resource.

### GRADE LEVELS

1-6

### SESSION DESCRIPTION

A lively session where participants engage in group games designed to motivate students, improve problem-solving abilities, and increase computational fluency with all four operations. Cooperative games foster discussion among students which is essential for developing mathematical language. Leave this session with instructional strategies that promote student discourse.

## Counting and Cardinality

### SESSION TITLE

**Dominoes: A Powerful Tool for Teaching Young Learners of Mathematics**

### BUNDLED RESOURCE

Each participant will receive:

- *ORIGO Dominoes Activity Book*
- *Five- and Ten-Frame Dominoes*
- *Word, Symbol, and Dot Dominoes*

### GRADE LEVELS

K-2

### SESSION DESCRIPTION

All domino games involve thinking strategies that makes them ideal resources for teaching early number concepts. Engage in activities that can be used to support the development of mathematical ideas with young children, particularly number representations, matching, sorting, and aspects of basic addition.

# Bundled Professional Learning

Each session is up to 2.5 hours

## Mathematics and Literacy

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### SESSION TITLE

#### Big Book Fun for Everyone

### BUNDLED RESOURCE

Each participant will receive one grade-level set of the *ORIGO Big Books* series and a one-year subscription to *ORIGO Big Book Tools*.

### GRADE LEVELS

K-2

### SESSION DESCRIPTION

The language that children use in the world around them is the source for their mathematical ideas. *ORIGO Big Books* use children's natural language to develop mathematical concepts. This session outlines four distinct stages of language development. Learn how to use *ORIGO Big Books* and *Tools* to engage students in effective discourse while making real-world connections.

## Problem Solving and Reasoning

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### SESSION TITLE

#### STaRT Thinking: Teaching Students How to Think

### BUNDLED RESOURCE

Each participant will receive a one-year subscription to *STaRT*.

### GRADE LEVELS

1-5

### SESSION DESCRIPTION

Discover effective strategies for teaching students how to think using *STaRT* tasks. Learn how discourse, visual models, open questions, and rich mathematical tasks can be used to stimulate thinking and reasoning skills and develop deeper understanding of concepts.

### SESSION TITLE

#### Let's Talk! Creating and Maintaining a Supportive Environment for Problem Solving

### BUNDLED RESOURCE

Each participant will receive one grade-level box from *The Think Tanks* Problem Solving series.

### GRADE LEVELS

1-6

### SESSION DESCRIPTION

Engage in rich mathematical tasks from *The Think Tanks* Problem Solving series and discover how to support students as they make sense of problems and persevere in solving them. Explore instructional strategies that foster student discourse and critical thinking skills. Leave this session with the tools needed to create and maintain a supportive environment for problem solving.