



Mathigon Professional Development

Inspiring students and educators!

Mathigon is a **multi-award-winning** online platform for learning mathematics, with a vast collection of virtual manipulatives, engaging games and activities, as well as rich, personalised courses. Mathigon’s unique content format makes online learning more interactive than ever before: students can actively **explore and discover**, be creative, learn **problem-solving** and **critical thinking**.

Mathigon is **completely free to use** for students and teachers, works on all browsers and devices, and seamlessly integrates with Google Classroom. We are excited to start offering professional development workshops for individual schools or districts, led by David Poras, Mathigon’s Head of Content. These sessions will familiarise teachers with the many tools and resources available on Mathigon and show how they can be used in practice.



Polypad – Virtual Manipulatives

Grades K-8

Using manipulatives to engage students in mathematical discovery

Mathigon’s Polypad is the most advanced collection of manipulatives available on the internet, and the ultimate “mathematical playground”. In this workshop, we will explore the dozens of available tools and features in-depth.

Teachers will learn how to engage students in mathematical exploration, sense-making, and problem-solving, and how virtual manipulatives can support complex interactions that are often not possible with physical manipulatives.

We will show examples from our library of free lesson plans and teaching ideas, and explain how teachers can create and share content with students to promote collaboration and discovery in their classroom. The full-day version of this workshop will focus especially on helping teachers create and publish their own activities and worksheets.

Multiplication by Heart

Grades K-5

The best way to learn multiplication facts, using spaced repetition

Multiplication by Heart is the best way for students to learn multiplication research: fun, colourful, personalised and based on cutting-edge research. We will explore the science behind spaced repetition, as well as our teacher dashboard for reviewing students’ work.

Mathigon Deep Dive

Grades 6-10

Explore the "Textbook of the Future" and other activities

Mathigon is much more than a platform for virtual manipulatives. In this workshop, teachers will explore the rich, interactive courses in our "Textbook of the Future" and how these can be integrated into the existing middle and high-school school curriculum.

We will explore games like Factris, our "Timeline of Mathematics", challenging puzzles, beautiful Origami, the Almanac of Interesting Numbers, and much more. Teachers will learn how to set up their dashboard, create classes, set assignments, and provide feedback.

Storytelling and Diversity in Mathematics

All Grades

Using virtual manipulatives to engage students in mathematical discovery

Mathematics has important applications in almost every part of life, and its history is filled with fascinating stories, personalities, and discoveries. Storytelling can make math education more accessible, engaging, and memorable. In this workshop, we will use Mathigon's tools to explore how creativity and problem-solving can make learning more fun and interactive for students, and how to show them the great power and surprising beauty of mathematics.



Pricing

Workshop	Grades	Duration	Price
Polypad - Virtual Manipulatives	K-8	2 hours	<i>Please contact us!</i>
		4 hours	
		Full day	
Multiplication by Heart	K-5	1 hour	
Mathigon Deep Dive	6-10	2 hours	
		4 hours	
Storytelling and Diversity in Mathematics	All Grades	2 hour	

All workshops are delivered virtually. They will be tailored to the interests and grade levels of participating teachers, and allow ample time for individual questions and group work.

You can combine multiple workshops to create a full day of professional development. Every workshop has a capacity of 60 teachers, and everyone will receive a certificate afterwards.

To schedule a workshop for your school or district, please email pd@mathigon.org.

Workshop Leader

David Poras is a middle school teacher with the Weston Public Schools in Massachusetts and the Head of Content for Mathigon. He studied mathematics at Vassar College and education at the University of Massachusetts. In his 20+ years of teaching, David has held a variety of leadership roles. In 2017, he was selected as a runner-up for the *Rosenthal Prize for Innovation and Inspiration in Math Teaching* by the Museum of Mathematics in New York City.