





# MATHia®

### The 1-to-1 math coach powered by AI.



**Program Overview** 

# What is MATHia?

Give your students a successful math experience while you get all the real-time feedback and data you need to understand where they're at and where they're headed. MATHia, an award-winning, 6-12 math software powered by artificial intelligence (AI), provides individual student support and insightful data.

MATHia adjusts to every action students take to meet them where they are, give them the skills practice they need, and help them progress toward proficiency.

### Smarter adaptivity

While most personalized learning software can only adapt based on right and wrong answers, MATHia is unique because it adapts based on a student's content knowledge and *how* they solve a problem. It's like working with a real math coach who can adjust support based on how each individual student learns.

**Content knowledge** Did you get the correct answer? **Problem solving process** How did you solve the problem?

# Give each student their own personal math coach

With AI that provides personalized, adaptive support, MATHia isn't a one-size-fits-all solution—every student gets what they need every time, no matter where they start. MATHia adjusts to every action students take in the software to meet them where they are and help them progress.

### Workspaces support students in mastering grade-level content.





The **Concept Builder** workspaces foster conceptual understanding through exploration and classification tools, animations, and worked examples. This is where MATHia's AI understands how students learn and how to adapt based on individual needs.

The **Mastery** workspaces offer personalized instruction as students learn and practice, adjusting the number of problems based on students' mastery of skills.



"Most companies use AI to make computers smarter; we use AI to make students smarter."

Dr. Steve Ritter, Co-Founder of Carnegie Learning, Chief Scientist

"AI [in] the MATHia platform provides individualized instruction based on my students' needs as they progress through mastery of each skill level. MATHia provides just-in-time support and gives students hints when they are stuck."

Sofiya Padela 6th grade math teacher, Massachusetts

## MATHia's AI helps students learn

MATHia uses AI to build students' conceptual understanding—not just tell them if their answer is correct.

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These screens portray two students solving the same problem in two different ways. MATHia uses AI to determine the strategy the student is using, the mistake they made, and adjusts to provide just the right hints and other supports.

# Support student agency

MATHia creates an environment where asking for help is a regular practice. Students are empowered to own their learning by using self-help tools and embracing their mistakes.



### Let's see how Emma gets the support she needs to succeed!



#### **Just-in-Time Hints**

When Emma answers a question incorrectly, she gets nuanced, helpful feedback that addresses the specific actions she took while solving the problem.

#### Skillometer

After answering a few questions, Emma sees her progress celebrated! It's clear how much she knows and the skills she should continue to work on.

# Empower teachers to be efficient and effective

Get in-depth assessment-level insight without having to administer an assessment. MATHia provides real-time data and predictive analytics so you can run your classroom as efficiently as possible.

With **LiveLab**, you can see a real-time report of how active and productive every student is during MATHia time. Notifications let you know when it's time to jump in and give personalized support.







"I used to stand in the back of the room to look for when they were getting stuck. Now I know when they're getting stuck."

Nikki Baker, Teacher, Hopewell High School, Aliquippa, PA

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The **Adaptive Personalized Learning Score (APLSE)** report can predict a student's proficiency level on end-ofyear assessments.

# It's like having a crystal ball

MATHia provides mission-critical data in streamlined reports, so you know where your students are, where they're heading, and what you can do to help.

- The APLSE Report leverages predictive analytics.
- Leadership Reports provide a constant stream of performance and usage data to monitor district-wide, school-wide, and classroom progress toward learning goals.
- Other reports cover standards, skills, and individual student progress.

## An evidence-based math program

Founded at Carnegie Mellon University, MATHia is based on rigorous research on how students learn best and decades of experience putting it into practice in real classrooms. Studies conducted by independent 3rd party research groups prove that MATHia's approach leads to better student outcomes.





### More MATHia, better outcomes

The EMERALDS Study by Student Achievement Partners found that completion of more MATHia workspaces in middle school led to better performance in Algebra 1. The effect was even stronger in students who had low test scores.



http://www.carnegielearning.com/EMERALDS >

We're here to support you Help every student discover their inner math person! https://www.carnegielearning.com/mathia >



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