UTAH EDUCATION POLICY CENTER
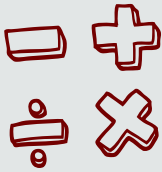## THE UNIVERSITY OF UTAH

STEM Action Center's K-12 Math Personalized Learning Software Grant Program: 2024-2025 Evaluation Summary

Overview

Math learning loss from COVID-19 continues to affect students in Utah and across the U.S.
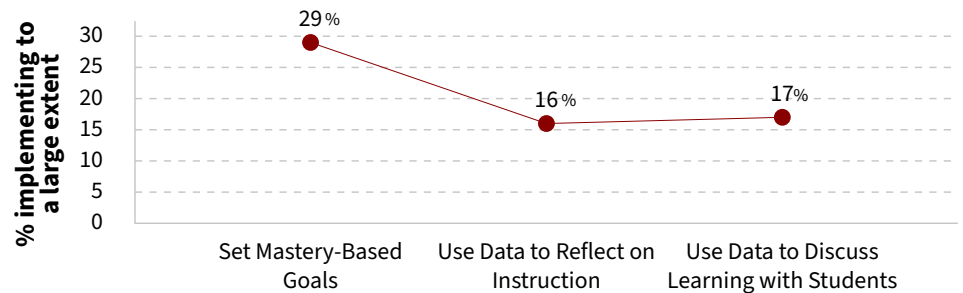
Math learning software (MLS) offers a scalable, personalized approach to help students catch up.

The STEM Action Center's K–12 MLS Grant Program helps Utah schools provide personalized math instruction using technology. The Utah Education Policy Center (UEPC) evaluated how MLS is used, perceived, and whether it improves math learning.

The STEM Action Center awarded 132,536 math software licenses across 739 schools in the 2024–2025 academic year.

Data Sources

Teacher and student surveys
- 2,031 teachers
- 35,306 students

MLS usage metrics
- 8 MLS vendors
- 306,891 students

Statewide math test scores and demographics
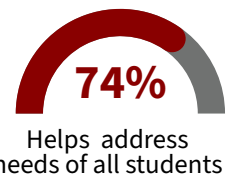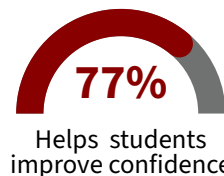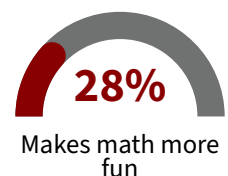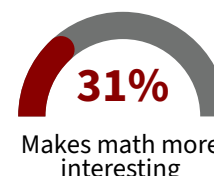
Teacher Use of High-Impact Practices

- Fewer than 30% of teachers consistently used practices for MLS use that have been linked to stronger math gains.
- Teachers were more likely to use these practices when they were attentive to students during MLS use.

Line chart — y-axis: % implementing to a large extent (0–30).
- Set Mastery-Based Goals: 29%
- Use Data to Reflect on Instruction: 16%
- Use Data to Discuss Learning with Students: 17%

Teacher Perceptions of MLS Value

- Over 70% of teachers reported that MLS builds student confidence and skills.
- Perceived value was significantly higher among teachers using high-impact practices.

% agreeing or strongly agreeing that MLS…

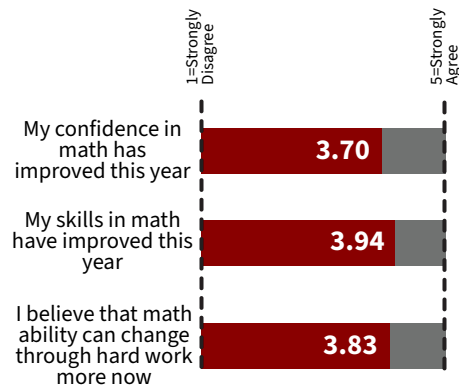| 77%	85%	74%
Helps students improve confidence	Helps students improve skills	Helps address needs of all students

Student Perceptions of MLS Value

- More than half of students indicated that MLS helped them build math skills and confidence, but fewer than half indicated that MLS made math more enjoyable or engaging.
- Perceived value was significantly higher when:
  ◦ students used MLS frequently (especially at school),
  ◦ adult support was available,
  ◦ there was strong alignment with classroom instruction.

% agreeing or strongly agreeing that MLS…

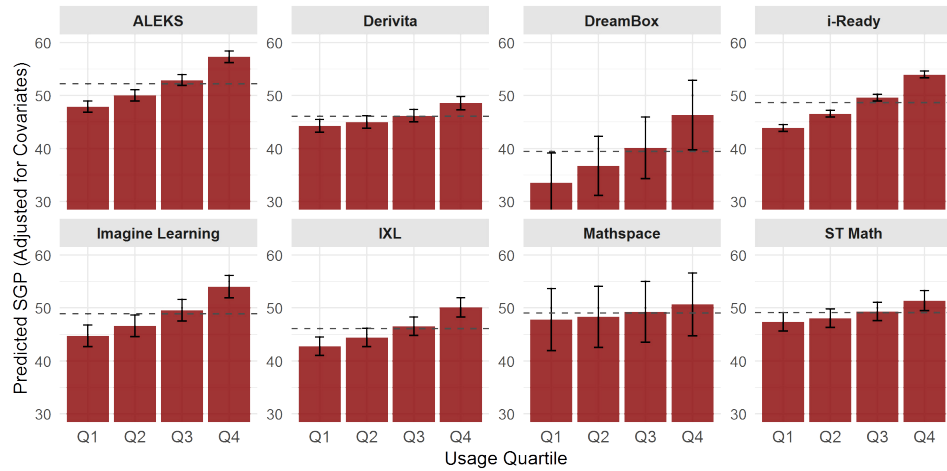| 57%	67%	31%	28%
Helps me improve confidence	Helps me improve skills	Makes math more interesting	Makes math more fun

Changes in Math Attitudes

- Students using MLS were more likely to agree than disagree that their confidence, skills, and ability to get better in math improved.
- Positive changes in math attitudes were higher when:
  - students used MLS frequently at school
  - there was strong alignment with classroom instruction.

1=Strongly Disagree → 5=Strongly Agree

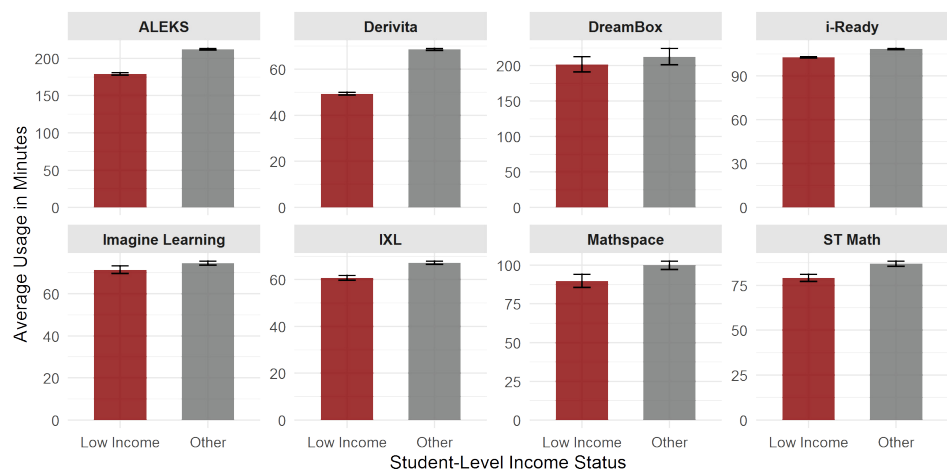| Statement	Score
My confidence in math has improved this year	3.70
My skills in math have improved this year	3.94
I believe that math ability can change through hard work more now	3.83

Impact on Math Achievement

- Across all 8 vendors, students who used MLS for more time showed stronger gains in math achievement as measured by Student Growth Percentiles (SGPs).

Predicted SGP (Adjusted for Covariates) by Usage Quartile (Q1–Q4) for ALEKS, Derivita, DreamBox, i-Ready, Imagine Learning, IXL, Mathspace, ST Math.

Differences in Usage

- Low-income students used MLS less, but benefited more when they did use it.

Average Usage in Minutes by Student-Level Income Status (Low Income vs Other) for ALEKS, Derivita, DreamBox, i-Ready, Imagine Learning, IXL, Mathspace, ST Math.
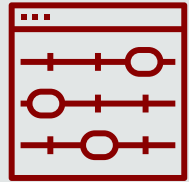
Recommendations

Support Effective Practices

- Offer professional opportunities for mastery-based goal setting and technology enabled instruction.
- Improve MLS dashboards to support use of student data to inform instruction.
- Promote teacher engagement with students throughout their MLS use.

Enhance Alignment with Instruction

- Help teachers sequence and customize MLS to fit their curriculum.
- Provide planning time and collaboration space (e.g., professional learning communities).

Provide Targeted Support

- Ensure device/internet access and in-school support.
- Combine MLS with other academic interventions such as high-dosage tutoring, particularly in underserved schools to help students fully engage with and benefit from MLS.

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