VISION for SUCCESS

Louisiana's Math Refresh
Accelerating Math Learning for Every Student

October 6, 2022
I. Announcing Louisiana’s Math Refresh
II. The Case for Learning Acceleration
   i. Data and findings from new national study
   ii. Learning acceleration in practice
   iii. Supporting learning acceleration
III. Next Steps for Systems
Each child's educational journey is focused on **SIX CRITICAL GOALS.**

**BIRTH through GRADUATION**

1. Students enter kindergarten ready.
2. Students will achieve mastery on third-grade assessments and enter fourth grade prepared for grade-level content.
3. Students will achieve mastery on eighth-grade assessments and enter ninth grade prepared for grade-level content.
4. Students will graduate on time.
5. Students will graduate with a college and/or career credential.
6. Students will graduate eligible for a TOPS award.

**VISION for SUCCESS**
We know **several key things that must** be true to position students for success along the educational journey.

- **Access to a high-quality early childhood experience**
- Foundational **literacy instruction**
- A **teacher** prepared to lead a classroom every single day
- Daily instruction that **accelerates learning**
- **A meaningful high school experience**
Louisiana’s Math Refresh
To support all schools in accelerating math learning, the Louisiana Math Refresh will provide strategically focused support to teachers and school and system leaders in two key areas:

• funding to support a refresh of math materials to ensure resources used during any instructional time are of the same high level of quality as core instruction

• explicit guidance, resources, and professional learning to support a refresh of existing instructional practices to align with evidence-based approaches for maximum impact in accelerating students’ math progress
Accelerating Math Learning

Teachers have access to high-impact structures and systems to support their growth.

Teachers have access to high-quality, aligned resources.

Teachers are prepared to lead highly-effective instruction in positive, inclusive environments every day.
## Accelerating Math Learning

<table>
<thead>
<tr>
<th>more of this…</th>
<th>less of this…</th>
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<tbody>
<tr>
<td>● emphasis on <em>forward movement</em>; unfinished math learning is systematically addressed just in time for new concepts</td>
<td>● emphasis on <em>backward movement</em>, reteaching every “missing” skill or concept in isolation from grade level work</td>
</tr>
<tr>
<td>● ensuring all students, including students with disabilities and English Learners, have daily access to high-quality, grade level learning alongside peers</td>
<td>● structuring extended learning time and interventions so that students miss sacred core ELA, math, science, or social studies instruction</td>
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<tr>
<td>● math instruction across settings (e.g. tutoring, extended learning time) is connected to core instruction and of the same standard of quality, prioritizing individualized supports that ensure readiness to engage in grade level work</td>
<td>● instructional and intervention time is passive and isolated from core (e.g. focused on worksheets or computer-based fluency drills), and/or students are engaging with work that is better suited for earlier grades</td>
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</table>
school structures prioritize all students’ successful engagement in high-quality, grade-level core math instruction alongside peers.

 timely, proactive interventions connecting prerequisite learning to upcoming and current grade-level work.

 ongoing professional learning and proactive planning are essential for effective teaching and accelerating.

 families, caregivers and communities play an essential role at all ages and stages.
# Louisiana Math Refresh: Support Overview

<table>
<thead>
<tr>
<th>Key Event</th>
<th>Timeline</th>
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<tbody>
<tr>
<td><strong>Math Refresh Library</strong></td>
<td>resources added on a rolling basis</td>
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<tr>
<td>Math Refresh funding opportunity guidance and resources released with <strong>2023-24 School System Planning</strong></td>
<td>October 2022-February 2023</td>
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<tr>
<td>statewide <strong>Zearn access for grades K-8</strong> with aligned professional learning (PL) support</td>
<td>fall 2022: PL offerings begin January 2023: school account access</td>
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<tr>
<td><strong>Eureka Math² Algebra I Pilot Opportunity</strong> with aligned professional learning (PL) support</td>
<td>fall 2022: PL offerings begin January 2023: pilot window begins and funding available for selected systems</td>
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<td>LDOE professional learning and individualized assistance</td>
<td>ongoing</td>
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The Case for Learning Acceleration
Data and findings from new national study

Learning acceleration in practice

Supporting learning acceleration
About Zearn:

501(c)3 nonprofit organization

Materials for students to explore grade-level math concepts with built-in differentiated support

Largest dataset on student learning
What strategies help all students catch up and move forward in math?
Promising evidence that learning acceleration works—at scale

- Two years of math learning data
- 600,000 elementary and middle school students (1st - 7th grade) across 50 states
- 5 million instructional choices
New research **compares the same group of students** looking at what happened when they were accelerated and remediated.

A student **repeatedly struggles** in math

A teacher makes an **instructional decision**

**Learning Acceleration**

**Remediation**

A student **returns to grade-level learning**
FINDING 1

A student **struggled 17% less in math** and **completed 2X as many grade level lessons** when they experienced learning acceleration.

When students were consistently accelerated, they completed:

**2X more grade-level lessons**
FINDING 2

A student enrolled in a majority Black, Latino or low-income school was more likely to be remediated when compared with their white and high-income peers—even when they already demonstrated the same level of success with grade-level work.

<table>
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<tr>
<th>Percent of students demonstrating success with grade-level content who are assigned remediation content in response to struggle, by student subgroup</th>
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<tbody>
<tr>
<td>Students enrolled in schools serving primarily:</td>
</tr>
<tr>
<td>White students</td>
</tr>
<tr>
<td>Black and Latino students</td>
</tr>
<tr>
<td>Students from high-income backgrounds</td>
</tr>
<tr>
<td>Students from low-income backgrounds</td>
</tr>
</tbody>
</table>
FINDING 3

A student enrolled in a majority Black, Latino or low-income schools **struggled 19% less in math** when they experienced learning acceleration.
Scaffolds to grade-level learning

Just-in-time support on connected foundational concepts
$2 \div 1/2 = ?$
How does acceleration impact student outcomes?
Students at the lowest levels of proficiency exceeded growth benchmarks, growing more than 2 grade levels in 2 years.
Almost **40% of students** at the lowest level of proficiency who used Zearn moved up a **full level or more** on state assessments.
Next Steps for School Systems
Math Refresh Library

All resources to support Louisiana’s Math Refresh will be available through the Math Refresh Library. The library will host planning resources, guidance on best practices, and professional learning information.
Statewide Zearn Access for Louisiana Schools K-8

The Department has partnered with Zearn to provide school accounts to all public schools serving grades K-8. This opportunity will support systems’ efforts to accelerate math learning and will include the following:

- **high-quality, evidence-based resources**, which can be used as core materials or alongside other high-quality materials for use within class as well as extended learning time (e.g. tutoring, as part of a summer learning program)
- virtual and in-person options for **aligned professional learning** for teachers and leaders to ensure successful implementation
Special Eureka Math\textsuperscript{2} Pilot Opportunity for Algebra I

The Department is inviting systems to apply to pilot of Eureka Math\textsuperscript{2} Algebra I in high school classrooms. Acceptance to the pilot includes funding for the purchase of resources and professional learning.

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<tr>
<td>Algebra I pilot applications open</td>
<td>October 6</td>
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<tr>
<td>Algebra I pilot applications due</td>
<td>October 18</td>
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<tr>
<td>participating systems are notified</td>
<td>Early November</td>
</tr>
<tr>
<td>allocations sent to BESE for approval</td>
<td>December 13 &amp; 14</td>
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<tr>
<td>funding available to awardees in EGMS</td>
<td>January 2023</td>
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Consult the [Eureka Math\textsuperscript{2} Algebra I Pilot Overview](#) for details and eligibility requirements.
## Math Refresh Launch Webinars for Educators

<table>
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<tr>
<th>Webinar</th>
<th>Registration link</th>
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<tr>
<td>Learning Acceleration for Math Grades K-2</td>
<td>November 1 at 4 p.m.</td>
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<tr>
<td>Learning Acceleration for Math Grades 3-5</td>
<td>November 2 at 4 p.m.</td>
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<tr>
<td>Learning Acceleration for Math Grades 6-8</td>
<td>November 3 at 4 p.m.</td>
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Contact Information

Please contact STEM@la.gov with any questions or to request an individualized call to support your implementation planning efforts.