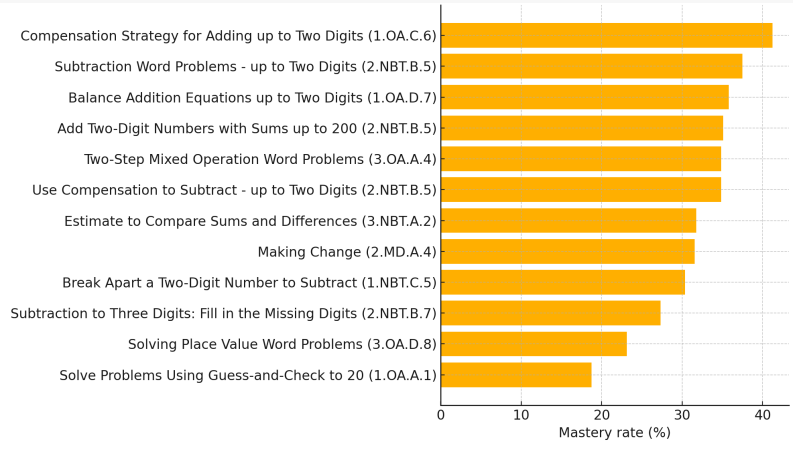
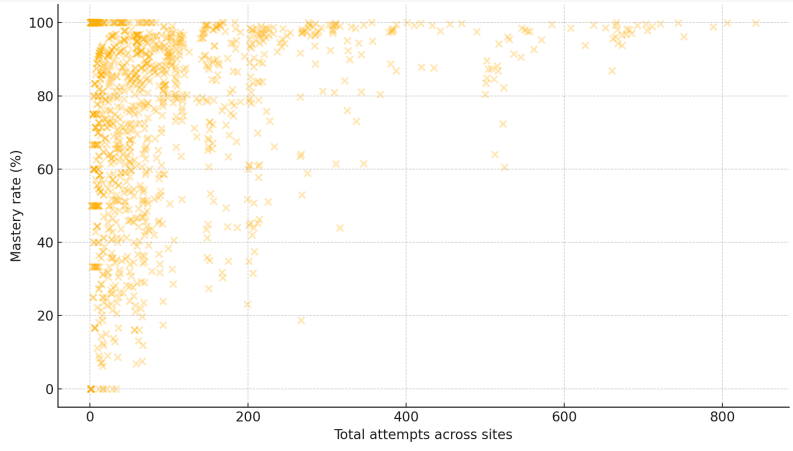
ClassGaga Multi-School Study Reveals Math Strengths in Early Grades and Key Challenges in Grades 4 and 5

ClassGaga study finds strong early math mastery but a significant drop in Grades 4–5, with fractions, division, and strategy choice posing the biggest hurdles.



Across-School Challenges (High Practice, Low Mastery)



Practice volume vs. mastery for each concept (each dot is a concept)

PRINCETON, NJ, UNITED STATES, September 24, 2025 / EINPresswire.com/ -- ClassGaga today released its multi-school analysis of math learning, drawing on more than 120,000 student practice attempts across a group of partner school sites during the 2024-25 school year. The findings demonstrate strong mastery in Grades 1-3 and core arithmetic, but also a significant decline in Grades 4 and 5, particularly when students encounter fractions, division, and more complex problem types.

Across all sites, students achieved an overall mastery rate of 82.4%. Performance was strongest in Operations & Algebraic Thinking (86.9%) and Number & Base Ten (85.7%), reflecting the strength of early arithmetic foundations. By contrast, Fractions (56.3%) and Statistics & Probability (53.2%) proved to be the most difficult domains.

Key Findings

- Strong early progress. Students in Grades 1-3 mastered more than 90% of attempted concepts, particularly in addition and place value.

- Turning point in Grades 4-5. Mastery dropped sharply as students began connecting whole numbers to fractions and division, with Grade 5 recording the lowest average mastery (59.6%).
- Stubborn challenges across schools. Subtraction strategies and multi-step word problems consistently tripped up students, even with extensive practice.
- Specific standards stand out. The study identified the most challenging concepts, including division with remainders, area of triangles, fraction division, and percent change problems, where fewer than one in five attempts were answered correctly across multiple schools.

Why This Matters

“These results are both encouraging and urgent,” said Dr. Jeff Wang, Chief Learning Officer at ClassGaga. “Early math is strong and consistent across sites, but too many students hit a wall in Grades 4 and 5. By identifying the exact concepts where mastery breaks down, schools can target support and make the transition to fractions and division much sturdier.”

Implications for schools

The report urges schools to:
1. Fortify the Grade 4-5 bridge. Treat the transition as essential infrastructure and strengthen instruction in core topics such as fraction as division, multi-digit division, and whole number rounding.
2. Prioritize strategy choice. Help students learn how to choose the appropriate method, not just how to execute steps, especially in subtraction and complex word problems.
3. Ensure consistent support. Utilize a small, shared library of example problems to minimize classroom-to-classroom variability, offering aligned examples and scaffolds for the most challenging concepts.

To download the complete multi-school analysis report, please visit us at www.classgaga.com

About ClassGaga

ClassGaga empowers educators with a cutting-edge AI platform for personalized math instruction. By utilizing sophisticated data-driven insights, ClassGaga ensures curriculum alignment with state and national standards while precisely addressing each student's learning gaps. The platform delivers real-time analytics directly to teachers and administrators, streamlining instructional adjustments. Ultimately, ClassGaga drives measurable improvement in math proficiency, engagement, and student confidence, making it an essential tool for data-informed school improvement.

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