



135 Berkshire Street, Cambridge, Massachusetts 02141

June 6, 2023

TO THE HONORABLE MEMBERS OF THE SCHOOL COMMITTEE:

CONTRACT: Computer Software (FY24 Contract)

RECOMMENDATION:

That the School Committee approve a contract with the following vendor, funds to be provided in accordance with the budget reference listed below. Procurement procedures for this purchase have complied with Chapter 30B of the laws of the Commonwealth of Massachusetts.

<u>Contractor</u>	<u>Period of Contract</u>	<u>Amount</u>
Mind Research Institute 5281 California Ave, Suite 300 Irvine, CA 92617	7/1/23-6/30/24	\$94,000.00

DESCRIPTION: This contract will enable the district to continue use of ST Math Software at all elementary schools as part of a comprehensive math system to support students in heterogeneously grouped classrooms. See attached supplemental information for additional details.

SUPPORTING DATA, RULES OF THE SCHOOL COMMITTEE: Chapter II, Section 12..." motions calling for the appropriation or expenditure of money require the affirmative vote of four members."

BUDGET REFERENCE:

Fund		Account		Dept.	
15000	General Fund	55804	Computer Software	851635	Educational Technology/Mathematics

Respectfully Submitted,

Victoria L. Greer, PhD
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CS Superintendent of Schools

SUPPLEMENTAL INFORMATION: MIND Research Institute (ST Math)

Purpose: Math Supplemental Application

Amount of Contract: \$94,000

Description/Scope of Services:

This contract will enable the district to continue use of ST Math Software at all elementary schools as part of a comprehensive system to support students in heterogeneously grouped math classrooms. ST Math will be used as a supplemental tool (in addition to our Tier 1 curriculum, Illustrative Math) in a systematic approach to equitably serving students with unique learning needs.

ST Math is used in a few different ways. It can be used in-class as a Center during Center times, when students are making choices among different games or activities for practice with skills and fluency. It can be used during WIN Blocks, when educators can assign students specific objectives to work on that are aligned with their learning goals. Outside of school, students can use ST Math at home as well, either by following the grade-level "Journey" or by working on objectives assigned to them by their teacher. Classes may engage in "puzzle talks" when they discuss an ST Math problem or provocation; however, ST Math is mostly used individually or in pairs.

ST Math is unique in building skills and fluency because it provides math practice that is grounded in meaningful visuals so that students are making sense as they practice. They also receive animated feedback that shows them the consequences of each answer in a meaningful context, helping to form and shape their understanding. Students don't just guess at multiple choices, or worse, get a question wrong and wonder why.

In addition, every grade level in ST Math offers Challenge puzzles which are very challenging, even for adults! This makes ST Math a platform that can be used by advanced students as well.

ST Math's approach requires students to manipulate objects in space and time. The program starts by teaching the foundational concepts visually, then connects the ideas to the symbols, language, and robust discourse. With visual learning, students are better equipped to tackle unfamiliar math problems, recognize patterns, and build conceptual understanding. The program is entirely non-verbal and puzzle-based. Without language barriers, the problem is accessible to all students, regardless of skill level or language background.

ST Math is mastery based, which means students must pass each level with a score of 100% (all puzzles correctly solved) before the next level in a sequence becomes available to them. Each student has their own personalized journey and takes as long as they need to achieve mastery. This ensures that students are building and demonstrating a strong conceptual foundation. [Research shows](#) that over time, students who are 2 or 3 grade-levels below have success with grade-level objectives in ST Math.

This contract supplements the Tier 1 math curriculum now being used or rolled out in all grades from Kindergarten to high school in Cambridge Public Schools: Illustrative Mathematics. It is well-aligned with Illustrative Mathematics because it is a problem-based application that builds both conceptual understanding and procedural fluency. ST Math will be used in grades K-5, with a possible focus on JK-2 (still in discussion).