How to Make Kids Like Math

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Bill Gates talked about how the Gates Foundation was approaching math education to better suit the needs of students today in a blog post.

- Bill Gates wrote a blog post suggesting three ways to improve math education.
- He says he believes math skills are a "powerful indicator" of future success.
- Gates, once criticized by a teacher for being "lazy" at math, now says he loves the subject.

When Bill Gates was in eighth grade, a teacher asked him why he was "so lazy" in math class. He responded, rather boldly, that the class was "not doing anything interesting."

It turns out the Microsoft cofounder and philanthropist actually loves math — and is very good at it — but he also acknowledges that it's "America's least favorite subject."

In essence, Gates says math education hasn't kept up with how the world has evolved.

"The way that algebra, geometry, and calculus are taught has barely changed — despite tremendous transformation in the labor market," he wrote, adding that tools such as calculators, computers, and <u>Al chatbots</u> had made it "harder and harder to explain to students why they should learn how to do long division or find the area of a trapezoid by hand."

The billionaire returned to eighth grade for a day to gain insight into the math classes of today. He detailed the experience on <u>his blog</u>, and proposed three ways to fix America's problem with math:

- 1. Math should be tailored to students' interests, capabilities, and goals
- 2. Math shouldn't be a solo expedition but a class that prioritizes communication and problem-solving as a group
- 3. Lessons should be applied to real-world problems, such as coming up with a budget or "estimating population growth"

Gates experienced this three-pronged strategy being implemented at Chula Vista Middle School in Southern California, he wrote. The school is a part of the <u>Networks for School Improvement</u>, a <u>Gates Foundation initiative</u>.

In a lesson about measuring the volume of a pyramid, Amilcar Fernandez — who runs the math department at Chula Vista — gave students popcorn containers. One was shaped like a pyramid, and the other was shaped like a rectangular prism. Fernandez asked the eighth-

grade students to talk through which one they would buy at a movie theater to get the best deal.

"Mr. Fernandez gave his students a real-world application that they've likely already encountered—and an incentive to learn the answer. After all, who *doesn't* want to get the most bang for their buck?" Gates wrote.

The new approach to math seems to be working at Chula Vista: Math proficiency rates have increased 18% during the past three years at the school, Gates wrote.

Nationwide math scores, in comparison, have been falling for several years. The pandemic decelerated many students' learning progress, and recent data on <u>math scores for eighth</u> graders and fourth graders across the country indicated there had been a significant setback since 2019.

Even before the pandemic, though, scores were declining. <u>A study</u> published in June by the Nation's Report Card found that math scores for 13-year-olds in seventh and eighth grade had dropped 14 percentage points during the past decade, to levels not seen since the 1990s.

In his post, Gates said math skills were a "powerful indicator" of future success and shared how the <u>Gates Foundation</u> — the <u>philanthropic organization</u> he founded with his ex-wife <u>Melinda</u> — was approaching math education to better suit students' needs.

College grads who land high-earning jobs often major in fields that require strong math skills. Many of the <u>highest-earning college graduates majored in some form of engineering</u> — which relies on skills ranging from basic arithmetic to calculus — a report from the New York Federal Reserve found.

The Gates Foundation and Chula Vista Middle School did not immediately respond to a request for comment from Insider.