

ALMOST FUN PROGRAM PROFILE

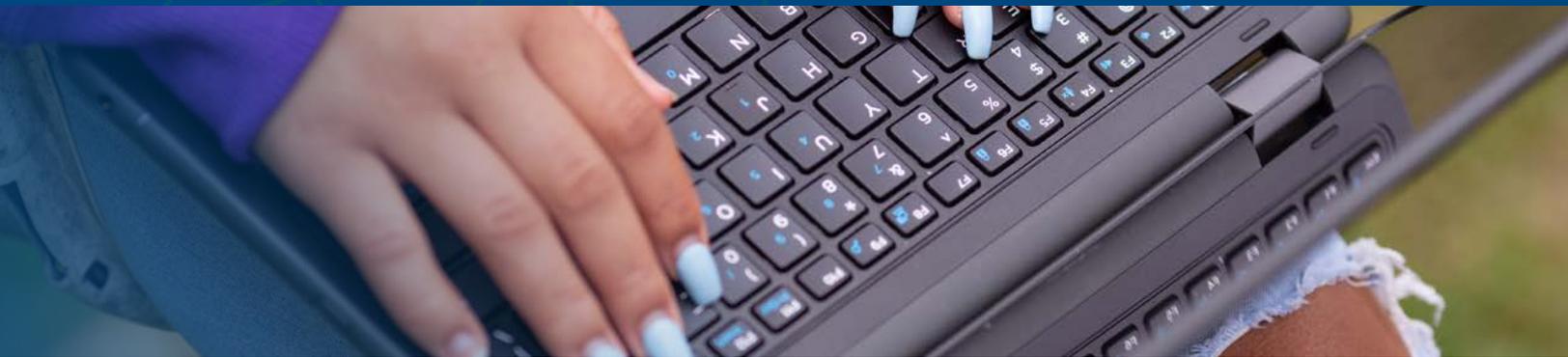


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The web-based Almost Fun math program provides key skill and problem-solving tools when students need support or practice with a skill or concept. The program began as a way to provide SAT preparation, especially for marginalized students, and help reduce student math anxiety with the use of familiar and culturally responsive contexts and analogies. Beyond SAT preparation, Almost Fun also has a searchable library of self-paced math lessons focused on middle grades and high school content.

Each lesson begins with a short introduction with a real-world problem, followed by an overview of the steps needed to solve a particular type of problem, practice problems, and a task-specific “calculator” that will show the key steps for solving similar problems. The calculator is interactive so that students have opportunities to respond to the steps and engage as they are demonstrated. The material is presented in small chunks to avoid overwhelming students, and clickable buttons provide opportunities for students to access additional problems. Lessons incorporate images and GIFs to draw students into the topic.

Additional support is available for students who choose to join the Discord group, an online forum in which students can participate in real time with other students.

Teachers can subscribe to access Common Core State Standards–aligned instructional guides to accompany the lessons. These guides utilize popular lesson structures (e.g., 3 Act Task and 5E models) to support student inquiry, active learning, and additional practice.

This is a product of the Overdeck Family Foundation funded Math ReEngagement Project that profiled innovative math programs that can be used outside the school day. WestEd conducted high-level studies of each program by administering student and teacher surveys and organizing observations and/or teacher interviews. Learn more about this work and view other profiles at: WestEd.org/MathReEngage.

In what ways does participating in Almost Fun influence student math learning and attitudes?

We surveyed students between October 2022 and February 2023 via the Almost Fun website to ask about their confidence, mathematical identity, and nervousness about mathematics before and after using the online support; we also asked three background questions about their race, family wealth (self-perception), and frequency of Almost Fun use. Only students agreeing to complete the online consent documentation and providing ratings for before and after their Almost Fun use were included (a total of only 24–26 students). (Before and after ratings were provided by students within each unique log-in period.) Analysis of student feedback demonstrated two important aspects of the program supporting positive student outcomes.

The lessons are accessible and provide just-in-time support.

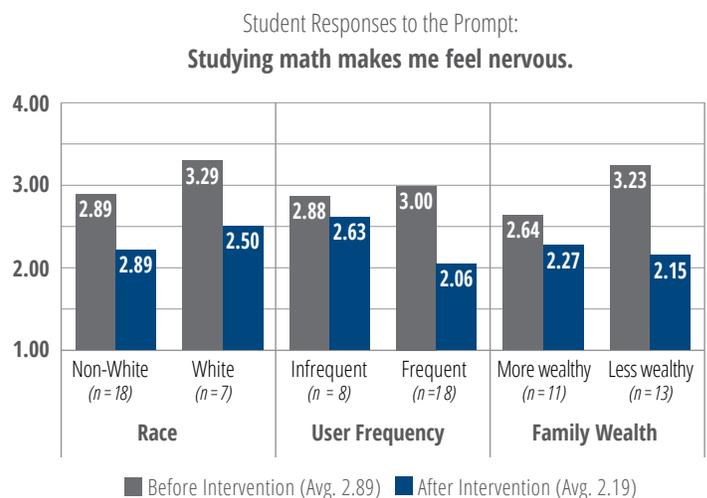
Heatmap data shared by Almost Fun from the period January 1, 2021, through December 31, 2021, showed that students from all over the world use the program (211 countries, with approximately 89% of log-ins from the United States). The data also showed that the biggest usage periods were weeknights from 10 p.m. to 2 a.m., suggesting that students were likely accessing the program for homework help when other sources of support were not available to them. Data from our survey indicated that the majority of students who access the site are frequent users, using Almost Fun about once a week (43%) or almost every lesson (25%). Knowing the power of the right search criteria, founders paid particular attention to helping students find what they needed when they needed it without getting discouraged. Founder Lisa Wang remarked on this point:

We started with hearing from students that they would search for function composition help on Google and the first 20 results would all look the same—repetitions of the same formula. It would be so easy to get discouraged because that’s already on the homework assignment.

LISA WANG, FOUNDER

Students’ attitudes about mathematics were more positive after accessing Almost Fun resources.

We asked Almost Fun users to rate the extent to which “studying math makes me feel nervous” before and after using Almost Fun materials (1 = strongly disagree to 4 = strongly agree). Our data suggest that regardless of when they access the program, **students feel less nervous about the mathematics** afterward: Students were less likely to agree that “studying math makes me feel nervous” after using Almost Fun materials (2.19) than before (2.89). An examination of these data for students with different background characteristics shows that Almost Fun access for less wealthy students may be particularly important: The greatest differences regarding nervousness about math between the before and after average ratings were for less wealthy students (3.23 before and 2.15 after).



When asked about their math self-confidence, students disagreed (2.04) that they had a lot of self-confidence before, while their “after” ratings shifted toward agreement on the Likert scale. The greatest changes in before-to-after ratings about math self-confidence were for White students and frequent users of the program. Students’ ratings on the same strongly disagree to strongly agree scale also indicated that **students feel greater confidence about being able to solve a difficult math question** after using Almost Fun (2.74) than before (2.04).

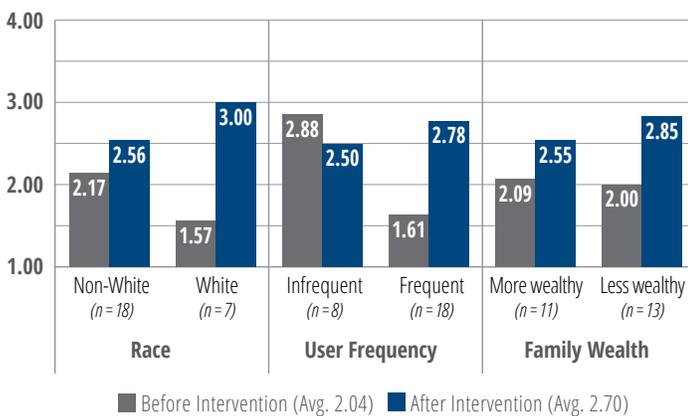
On average, students also agreed (3.04 on the 4.0 scale) that they felt confident after using Almost Fun about being able to successfully solve new classroom math tasks that require knowledge of that same math topic. There was little variation in these ratings among the different student groups, although the less wealthy students seemed to be the most confident that they could apply their knowledge to novel math tasks (3.15 on the 4.0 scale).

Students also rated their agreement with the statement “I see myself as a math person” higher after (2.52) using Almost Fun than before (2.30). These before and after ratings were most different for more wealthy and more frequent users.

Implications and Next Steps

Direct-to-student programs like Almost Fun provide free mathematics support for any and all students. Lessons across topics are in a consistent format to support users to easily access the mathematical ideas. Programs like this can support students to develop positive mathematics attitudes and contribute to mathematical equity, and they can be used by teachers and out-of-school programs working with students both in and outside of school.

Student Responses to the Prompt:
I feel confident solving a difficult math question.



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