

CASE STUDY

ARC WORLDWIDE AND RAYTHEON

MathMovesU – Making Math Fun for Tweens

When you help a student master math, you could be supporting the development of a future engineer or scientist. Getting the student interested in doing the math is sometimes another story. That's the challenge that Raytheon wanted to tackle to help turn around the image of math for America's middle school students.

Arc Worldwide, a global marketing-services company, was the agency that worked with Raytheon to refresh a program that teaches math by showing middle school students that they can easily master the subject on terms familiar to them. The reinvention of the MathMovesU web site was just the solution.

In order to foster a meaningful experience, the program's unique online application was built around the following six strategic pillars:

- Make it fun
- Help them to learn
- Allow them to create their own experience
- Build their confidence
- Listen to them
- Get teachers involved



By reframing math in a tween-friendly light, the goal was to ignite curiosity in students by illustrating that math is fun, relevant to their lives and can be rewarding to practice.

Arkadium Adds Games to the Educational Mix

To ensure that the interactive experience was designed to speak to this tween audience, Arc Worldwide approached Arkadium to develop a series of fun games that would live inside the MathMovesU.com world. The games challenge players with interactive math problems set in environments that students are interested in exploring, and reward them with points for correct answers and speedy play times.

MathMovesU.com includes a series of three interactive environments that take kids through an interesting maze of curious facts about math, all while engaging and challenging them through fun games. Correct answers and good game play earn points that can be used to win prizes.



The music game challenges players to solve math problems to control the pyrotechnics, sound and lights at a concert. Each of the engineer's sliders is controlled by quickly and correctly answering the basic algebraic equations that pop up. By practicing a large amount of math problems, players can build up their arithmetic skills.



In the sports game, as the batter is set to hit a home run, players use the arrows and the mouse to control the power and angle of each swing. Each scored run adds points, and players learn how to calculate percentages and ratios based on their hit and strike points earned during game play.



In the Joles Jewels fashion game, kids practice the basics of addition, subtraction, multiplication and division. By combining a string of numbers and mathematical operations, players must master the basics to move onto the next level.



In another fashion game, Acute Apparel, the player is a store manager in charge of arranging the newest fashions and clearance items. The fewest moves and a faster mastery of puzzle logic helps players think quickly to solve a problem.

Successful Communication Through Games

Since the launch of the new MathMovesU.com program tens of thousands of tweens have engaged with the site with an average interaction time of more than six minutes per visit.

"One of the most compelling things about the MathMovesU program is that we have engaged middle school students with content that is relevant to their everyday lives. These kids are often found playing games everyday, and engaging with each other in social communities to share information about their passions. Arkadium helped us find a way to bridge the gap between fun and learning about math" said Kristin

Hilf, Vice President of Community Relations & Corporate Giving at Raytheon.