



Implementation & Results Profile

Overview

After being trained on the DimensionU program, Waipahu High School teacher Amelia Cook realized that the games would be a great way to get her Algebra I students more engaged with math.

The implementation was supported by nCASE (National Center for the Advancement of STEM Education) and funded through the Department of Defense's National Defense Education Program (NDEP) initiative.

Implementation

Cook initially incorporated the games into her classes as a supplemental tool, allowing the students to play the single-player games for additional practice on content that proved difficult to master. After seeing how much the students loved it as well as increased achievement, Cook took the game playing to a higher level: she organized a live DimensionU tournament in the school's library. Here, students from her class were given a chance to show off both their algebra and gaming skills to the delight of their classmates as they went head-to-head using the DimensionU multiplayer educational gaming software for math.

Results

For Cook, the fact that the multiplayer game can be set to focus on state math standards from third-grade level through Algebra II, is a real benefit. Taking the law of exponents content, for example, Cook had her students "train" for the benchmark quizzes and tests just as an athlete would train for a sporting event. The result: **97 percent of her students showed proficiency on the benchmark exam.**

"These results are directly correlated to the use of DimensionU games," said Cook. "In previous years I would have had to reteach these concepts over and over and it still wouldn't have registered with the students, because eventually they tune the teacher out. Not this year and it's because students love the games. They collaborate with one another and it helps them master the content – the games made all the difference."

What Teachers are Saying

"We live in an age where technology is part of our kids' everyday lives. I love the fact that DimensionU successfully incorporates the use of immersive games into a subject like math, which many students find difficult, and frankly not much fun to learn. With DimensionU, my students are not only enthusiastic about math but also motivated to learn the content so they win the games. It's so rewarding to see kids having fun while learning math - that's a win in my book."

– Amelia Cook

School Year: 2010-2011

District: Waipahu School District

School: Waipahu High School

Location: Waipahu, Hawaii

Grades: 9-12

Enrollment: 2,532

Asian/Pacific Islander: 90%

White: 7%

Hispanic: 2%

Free & Reduced Lunch: 47%

DimensionU Curriculum: Math

Frequency of Use: Weekly

Portion of Curriculum: 10%

Scenario of Use: Computer lab;

Classroom; At home

Summary

Key Outcomes

- 97% of Cook's students scored proficient on the benchmark exam
- Combined in-class work plus a live school tournament to engage students
- Competition and collaboration were great motivators for students