Avonworth Puzzlets Pilot Study Brief

Product Info

Product Name: Puzzlets

Product Description: A hands-on learning game system that includes 22 "Puzzlet" tiles that fit into a play tray, which connects wirelessly via a Bluetooth connection to an iPad game app "Cork the Volcano."

Learning Focus: Elementary School Digital

Literacy

Device Specifications: Web-enabled iPads

provided by school

District Context

District demographics: Suburban; 1,600 students; 15% of students eligible for free or reduced price lunches.

Pilot demographics:

School District	Ed-Tech Tool Piloted	Number of Students in Pilot	Kindergarteners	First Graders	Second Graders
Avonworth	Puzzlets	56	16	2	18

Pilot Goal

To test out Puzzlets learning affordances for communication, collaboration, creativity, and computational thinking in K-2 classrooms and to evaluate whether Puzzlets provided an engaging alternative to other educational technology courseware.

Implementation Plan

Duration: September 2015 - May 2016

Quality of Support: Teacher support provided by the company was timely and helpful.

Implementation Model: The teacher used a station rotation model where students rotated through 3 station setups, Puzzlets, Type Rocket, and Scratch Jr., and were able to spend approximately 15 minutes at each.

Data collected: Product usage data, student post-test, student interviews/focus groups, classroom observations, teacher interviews/ focus groups, and administrator interviews.

Findings

Actual implementation model: After two weeks, the teacher dropped one of the stations, the Scratch Jr. station, resulting in a two station rotation rather than the originally planned three.

Educator satisfaction: Only one teacher, an advisor to the product developer, Digital Dream Labs, was involved in the pilot; however, the teacher reported increases in competitiveness among students when using Puzzlets and noted the need to see the data on student progress.

Student engagement: Evidence from interviews and classroom observations indicated that students across the three grade levels were highly engaged and enjoyed playing Puzzlets.

Student learning: Log data revealed that while all students progressed in the game since they started playing, their progress differed by grade level, with 2nd graders having the greatest level of progress in problem solving. After four in-class sessions using the game, data indicates that students learned problem solving strategies in the game context, though this finding is strongly correlated to grade level.

