Digital Promise
Accelerating Innovation in Education

Woot Math Polls Pilot Study Brief

Product Info

Product Name: Woot Math Polls

Product Description: Woot Math Polls is a free, digital formative assessment tool designed to support middle school mathematics teachers. The tool was developed to support teachers in their use of formative assessment and their facilitation of rich mathematical discussions in their classrooms.

Learning Focus: Algebra I

Teacher Training: The teachers received 6 full hours of professional development over four sessions, focused on the practice of formative assessment for Algebra.

Usage Minimum: After professional development, teachers administered 5 online formative assessments every three weeks.

Cost: After professional development, teachers administered 5 online formative assessments every three weeks.

Pilot Context

Pilot demographics: 9 mathematics teachers who were teaching Algebra I classes in 8th or 9th grade.

Pilot Goal

The pilot goal was for Woot Math Polls to support mathematics teachers in more frequently administering and more effectively using formative assessment in their classrooms.

Implementation Plan

Duration: September 2017 – November 2017

Implementation Model: Teachers develop formative assessments, or pull them from the online repository, and present them to the class. Students log in and complete the tasks on a connected device. The software helps teachers analyze and anonymously present student responses and assign student groups for discussion. Successful implementations were expected to result in improved student motivational and cognitive outcomes in mathematics and teachers would be supported in guiding students to more richly explore conceptual understanding and mathematical practices, which, in turn, would lead to improved student outcomes relative to the CCSS-M Standards for Mathematical Practice.

Data collected: Teachers completed a pre-survey about their use of formative assessment and technology in the classroom. Students completed a self-assessment on areas including algebraic reasoning and attitudes toward their mathematics class. At the end of the study period, students completed a final self-assessment and teachers took a post-survey on their use of polling and their views of formative assessment and technology. from national and international mathematics

assessments, were administered to students.

Findings

Actual implementation model: The actual implementation model aligned with the study design and intended data collection timeline.

Educator engagement: Results demonstrate that teachers found Woot Math Polls to be particularly effective for formative assessment and for facilitating classroom discussion about mathematics.

Educator satisfaction: All teachers involved demonstrated an increased interest in and demand for Woot Math Polls and 8 of the 9 teachers had a strong disposition toward continued use of Woot Math Polls, clearly indicating that they perceived it as a useful classroom tool.

Student satisfaction: Student results demonstrated moderate to strong gains for interest, enthusiasm, confidence, and willingness-to-seek-help with respect to mathematics.

Student learning: Although the study was not designed to measure student learning, in open-ended survey questions, students reported learning gains as well as increased engagement using Woot Math Polls.

Outcome

Study Discussion: This study found evidence that the use of this platform was associated with important changes in teacher classroom practice, specifically with respect to having more frequent and more productive conversations about mathematics, and with teachers being able to better adapt their instruction through improved real-time visibility into student understandings.