To Kahoot! or not to Kahoot!?
Kahoot an effective formative assessment or a distraction?
Alison Charbonneau, Saint Helens Middle School, Saint Helens, Oregon

Abstract
More than 50% of all US k-12 teachers use Kahoot! (Kahoot!.com). This study measured the impact of Kahoot! as a formative assessment by comparing 120 middle-school students’ engagement and performance with three different modes of Kahoot! — team, competitive, and no-score — to traditional classroom discussion.

Research Questions
1. What is the impact using Kahoot! as a formative assessment?
2. What is the impact of Kahoot! on students’ engagement and motivation?
3. What is the impact of Kahoot! on performance and perception of learning?
4. What is the impact of competition on students of different genders and academic abilities?

Methodology
Four formative assessments were compared: paper quizzes, No-Score Kahoot!, Competitive Kahoot!, and Team Kahoot! Four classes of middle-school science students rotated to a different formative assessment after each unit until every class had experienced each of the formative assessments twice.

Student Performance

Student Engagement and Preference

Interview Quotes
• I like Kahoot! because... it’s a game that helps you learn
• it helps keep me focused
• it helps me figure out what I don’t know
• I like rankings because it’s like bragging without bragging
• I prefer no ranking because it makes me feel not as smart as most people

Conclusion and Value
This study found a statistically significant difference between academic groups’ preference for Competitive Kahoot! High achieving students preferred Competitive Kahoot! while struggling students preferred Team Kahoot!, and performed worse after the Competitive Kahoot! treatment. Also, online cruising increased by 10% after 14 weeks of playing Kahoot! When using Kahoot! as a formative assessment be aware that quiet and shy students of all academic abilities will not be comfortable with public scoring and ranking. Low-performing students are more comfortable with Team Kahoot!, and seem to become acclimated to Competitive Kahoot! over time. Socially astute special education students are embarrassed by their scores and never prefer Competitive Kahoot!

Acknowledgments