

It's no secret that children love to play computer games, and teachers have long known that games play an important role in teaching and learning. Because of this, educational technology companies have worked to develop computer games that try to improve student learning.

And now, the U.S. Department of Education is funding an exciting new study to test the impact of two of these games on student learning. This study offers an opportunity to understand how the games affect student learning and behaviors in second-, third-, and fourth-grade classrooms.

What are the games?

Zoo U:

Students become "zookeepers-in-training," working with other characters to care for animals in an online zoo. Along the way, different scenarios help students develop skills in communication, cooperation, emotion regulation, empathy, impulse control, and initiating social contact.

Both games are visually stunning, fun, and entertaining. And the in-game scenarios provide coaching and adjust with student input, so each game is tailored to maximize individual student learning.

Reflex®:

Students play a variety of exciting, fast-paced games that require answering math questions to advance. Students quickly build math fluency in addition, subtraction, multiplication, and division as they play games delivered at their level of math-fact knowledge.

How does the study work?

- Second-, third-, and fourth-grade classrooms are randomly assigned to play either Zoo U or Reflex, but not both.
- Twice a week for 12 consecutive weeks, students play the game in class for 25 minutes.
- The games include tutorials and are self-contained, so teachers don't need specialized training or instruction.
- Students, teachers, and parents complete assessments before and after the game-playing period to determine if and how well the games worked.

What are the benefits of participation?

- All second- through fourth-grade students in participating classrooms get free access to the games.
- The researchers donate \$500 to the school technology fund at participating schools to help provide students access to tablets and computers.
- Parents and teachers are financially compensated when they complete rating scales at three times during the school year.
- An in-school coordinator, appointed by the principal and compensated for his or her time, works closely with researchers to obtain parental consent and access to school information.

