

Maximizing Online Videos and Games in Math Class

Summary: With so many different available online tools, it can be difficult for teachers to make sure they are selecting resources that will truly help their students learn. In an article for *Teaching Children Mathematics*, a group of teachers and math experts discuss best practices for utilizing online videos and online games in the classroom.

Practical Applications

The authors explain that videos and games can have a few main purposes:

1. **Sparking Engagement:** Using Youtube videos can be a fantastic way to build students' interest in a lesson. They are especially useful as hooks at the beginning of lessons, ways to review skills, or as transitions during breaks. For younger students, videos that incorporate singing and dancing can be particularly engaging. As a tip, prepare a playlist of videos ahead of time and organize them by topic so that they are easy to use.
2. **Augmenting the Curriculum:** Websites with games and other tools may be OK on their own, but they become truly powerful when they support the learning objectives of the classroom. By setting up systems where teachers 'vet' sites, post them to a master list, keep them organized by topic, etc., they can be brought to bear to help learning. Another suggestion the authors list is to hold an early morning "math club" where students come into the computer lab before school and choose a skill to practice.
3. **Promoting Participation:** Well-designed games will keep students' attention. It's important that teachers use this time actively and ask questions that push students' thinking, such as:
 - a. "How did you solve the problems?"
 - b. What strategies did you use?
 - c. Are there other strategies you could use?
 - d. Did you notice any patterns?"

The authors also note that research shows the features of an effective game are:

- "incorporate a level of choice (to motivate);
- are based on an achievable challenge;
- employ friendly competition (to keep students engaged); and
- promote reflection, which includes good questioning and discussion."

Conclusion and Citation

The more teachers think critically about what online resources they are using in math class, the more effective their use of technology will be.

For a compilation of math videos and games, check out www.kidsknowmath.com.

Bremner, A., et. al. "Singing and Gaming to Math Literacy." *Teaching Children Mathematics* 19.9 (May 2013), pp. 582-584. <http://bit.ly/11dSFLl> (subscription only).