

Faculty Work Comprehensive List

5-1-2014

Game Time: Choosing Apps and Games that Align to the Common Core

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Recommended Citation

Zonnefeld, R. G., & Zonnefeld, V. L. (2014). Game Time: Choosing Apps and Games that Align to the Common Core. Retrieved from https://digitalcollections.dordt.edu/faculty_work/215

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Game Time: Choosing Apps and Games that Align to the Common Core

Keywords

mathematics, education, educational apps, iPad apps, Common Core

Disciplines

Science and Mathematics Education

Comments

Presented at the 46th Annual Conference of the Wisconsin Mathematics Council held in Green Lake, Wisconsin, April 30-May 2, 2014.

Also presented at the Heartland Christian Educator's Convention held on the campus of Dordt College in Sioux Center, Iowa, October 2, 2014.



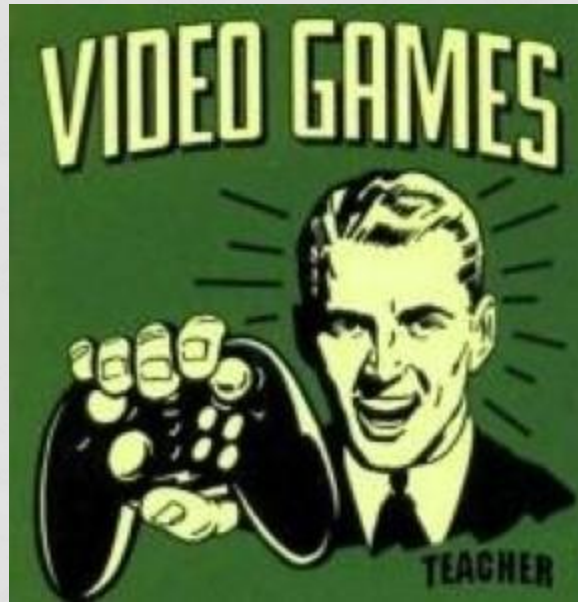
GAME TIME

VALORIE AND RYAN ZONNEFELD
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Credit to Maria Andersen for many concepts

WHO'S PLAYING GAMES?

- 91% of 2-17 year olds play online games according to [cnet](#)



WHO'S PLAYING GAMES?



LAME GAMES (MARIA ANDERSON)

- It's just homework, with pretty graphics
- There is no strategy involved. Playing faster, slower, or making different decisions have no effect on the overall outcome or scoring.
- The game play stops when it's time to do math
- The game can be won by trial and error, with no mathematical abilities.
- The "game" is a fixed puzzle, not a game.
- There is no "check" in the game for correct math (or there is no "check" for all players, only the winners).
- In multiplayer games, only the current player is involved, everyone else is an observer.
- It has bad design.

EXAMPLES OF A BAD MATH GAME

- Balance between boredom and frustration
- Example 1 – [Absolutely](#)
- Example 2 – [Area & Perimeter](#)
- Example 3 – [Math Baseball](#)

GOOD GAME

- Teaches **how** to play with an easy concept
- Continually progresses / gets harder gradually
- Leveled
- Engaging
- Time to play – feel free to explore while we talk

NUMBER SENSE (COUNTING & CARDINALITY, NUMBER SYSTEM)

- Wings – iPad app
- [Ice ice maybe](#)
- [Flower power](#)
- [Factor-Tris](#)

FRACTIONS

- Motion math – iPad app
- Equivalent Fractions – iPad app from NCTM

GEOMETRY

- Penominos – iPad app
- Zentominos – iPad app
- Tangram – iPad app
- Grid Drawing – iPad app

OPERATIONS & ALGEBRAIC THINKING

- Dragonbox – iPad app
- [Algebra meltdown](#)
- Algeburst – iPad app
- [Line gem](#)
- Algeboats – iPad app

TOOLS ADDRESSING STANDARDS FOR MATHEMATICAL PRACTICE

- My Script Calculator – iPad app
- Flow – iPad app
- Kenken – iPad app
- Math Quiz Up – iPad app
- Bedtime Math – iPad app

HOW TO USE



HOW TO USE

- 1 to 1 environment
- Have available during free time
- Put on website
- Assign homework and ask students to send a screen shot after 15 minutes or once they reach a certain level or score
- Difference b/t iPads and computers

WHAT ARE YOUR FAVORITES?

- Apps
- Websites
- Other

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