

Future Directions

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New Avenues for Games

- While games have mostly been aimed at a mass entertainment market, there are other emerging uses for games
 - Serious games/ games for training
 - Games in education
 - Games for marketing

Core Idea

- Raph Koster says it well
 - Fun is all about our brains feeling good—the release of endorphins into our system.
 - One of the subtlest releases of chemicals is at that moment of triumph when we learn something or master a task.
 - Fun from games arises out of mastery. It arises out of comprehension. It is the act of solving puzzles that makes games fun.
 - In other words, with games, learning is the drug.
 - “A Theory of Fun for Game Design,” Raph Koster, Paraglyph, 2005.
- If you can make the learning in the game something that has real-world utility, playing the game will teach the player a useful idea or skill.

Serious Games

- Create games for training purposes
 - The learning here is a job skill
 - Basic problem: organizations realize they need to keep the skills of their employees up to date. This skills training is expensive.
 - If games can be developed for low cost that are (more) effective in teaching concepts, they can save money.
 - Games can be played at any time, in distant places
 - Allows flexibility in training, and can be easily shipped to hard-to-reach places

Serious Games (cont'd)

- The military is a key party pushing the exploration of serious games
 - MOVES Institute at Naval Postgraduate School
 - Naval Research Lab as well
 - Military spends huge amounts of money on training. Much of this training is hard to do when units are deployed in the field.
 - Video game playing is common among soldiers.
- Large corporations are also starting to explore this area

Games for Education

- If you can make the learning focus of a game be a subject you would otherwise teach in a traditional setting, a video game can potentially teach the subject.
- Could allow teaching resources to focus on subjects that are hard to automate
- Can allow students to take as long as needed to learn material (just keep replaying the game until mastered)

Games for Education

- Problems
 - Hard to make games where the thing being taught is integrated into the gameplay of the game
 - Easy to focus on things that are kinds of rote memorization
 - Lots of kids games focus on the alphabet, matching shapes, and sometimes simple phonics
 - Gameplay is fairly shallow
 - Synthesis of information, or deep problem solving is much harder
 - Educational games, as a category, are not big money makers
 - Web has led to many Flash games being placed online
 - Drives the price of simple games to zero

Games for Education

- Other challenges
 - It might be more time-efficient to learn material using an web-based learning environment.
 - What is best to teach by traditional reading, understanding, practice approach?
 - What concepts are best taught with games?
 - How to teach time consuming, complex subjects using games?
 - How to teach writing, or algebra, or calculus using a game?

Games for Education

- Examples of games that integrate learning well
 - Zoombinis games are good example of integrating boolean logic into the game's core gameplay experience
 - Tycoon series games (such as Roller Coaster Tycoon)
 - Sim games that are done well, such as Sim City

Games for Marketing

- Since games are engrossing, it might make sense to give out a game that focuses on a given product, or organization
 - Imagine: a series of Wario-ware like games that focus on Coke or Pepsi
- Can make abstract issues more concrete
 - Example: Food Force game

