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Gamification: what makes a "serious game" involving and educational?

The study and conclusions of four MIT researchers.

Since Tetris has been recognized as a powerful educational tool in the 1980s, researchers and designers have studied "serious games". The challenge faced by four MIT (Massachusetts Institute of Technology) designers in the book "*Resonant Games: Design Principles for Learning Games that Connect Hearts, Minds, and the Everyday*" is to really understand what makes a game educational and engaging.

Summary

The authors Eric Klopfer, Jason Haas, Scot Osterweil and Louisa Rosenheck start from the observation that serious games or educational videogames are often too focused on specific learning outcomes. They argue that in order to develop truly effective games, it is necessary to integrate useful content and game, and create learning experiences that have an impact on students' lives.
The authors identify and describe **20 fundamental principles for designing games** that provide a deep learning experience with reference to five games developed in the MIT educational games research lab.

Four key elements in the design of serious games

One of the key principles promoted in Resonant Games is the need that learners really like the game. Scot Osterweil, one of the authors explains: "Our goal is not only to create pleasant games, but games that are deeply appreciated because they are connected to the learning process objectives of the learners".

Why is it essential to connect with the learner? "Students are human beings with a range of passions, likes and dislikes, they have homes, social lives and interests outside of a given learning opportunity." "We believe that we, as producers of video games, have to hook the students using all the weapons we have: telling them a good story, trying to present the contents with puzzles, challenges or other provocations that arouse interest."

Osterweil and his coauthors emphasize the need to pay attention to three other elements: the social dimension of learning (and play), the connection between the content and the game and the learning context.

The surprise effect and the resolution of problems are also important

The team notes that "Good design is usually surprising, the more it will surprise the player, the greater the depth of commitment the player will pour into the game."
Finally, Osterweil invites designers to respond to the strong desire of players to solve problems: "People tend to get tired when the problem seems too big or too dark, but if you can make a problem understandable, people tend to be willing to solve it. And this is the mechanism we are trying to exploit. "

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