

Teaching computer games

January 21 2010

Computer games have a broad appeal that transcends gender, culture, age and socio-economic status. Now, computer scientists in the US think that creating computer games, rather than just playing them could boost students' critical and creative thinking skills as well as broaden their participation in computing. They discuss details in the current issue of the *International Journal of Social and Humanistic Computing*.

Nikunj Dalal, Parth Dalal, Subhash Kak, Pavlo Antonenko, and Susan Stansberry of Oklahoma State University, Stillwater, outline a case for using rapid [computer](#) game creation as an innovative [teaching method](#) that could ultimately help bridge the digital divide between those people lacking computer skills and access and those with them. "Worldwide, there is increasing recognition of a digital divide, a troubling gap between groups that use information and communication technologies widely and those that do not," the team explains. "The digital divide refers not only to unequal access to [computing resources](#) between groups of people but also to inequalities in their ability to use information technology fully."

There are many causes and proposed solutions to bridging this divide, but applying them at the educational and computer literacy level in an entertaining and productive way might be one of the more successful. The team adds that teaching people how to use off-the-shelf tools to quickly build a [computer game](#) might allow anyone to learn new thinking and computing skills. After all, they explain, the process involves storytelling, developing characters, evaluating plots, and working with digital images and music. Indeed, their preliminary survey of this

approach shows largely positive effects. Rapid computer game creation (RCGC) sidesteps the need for the students, whether schoolchildren or adult learners, to have any prior knowledge of computer programming.

Traditionally, various groups have stereotypically been excluded from computing to some degree, including women, seniors and people who don't consider themselves as mathematically minded. Dalal and colleagues suggest that their approach circumvents most of the issues and provides a lead into computing that would otherwise not be apparent.

With RCGC becoming increasingly popular in schools and universities, the team suggests that the next step will be to develop yet more effective teaching models using RCGC and to investigate the conditions under which it works best in improving critical and creative thinking and developing positive attitudes to computing among different groups by gender, age, nationality, culture, ethnic group, and academic background.

More information: "Rapid digital game creation for broadening participation in computing and fostering crucial thinking skills" in Int. J. Social and Humanistic Computing, 2009, 1, 123-137

Provided by Inderscience Publishers

Citation: Teaching computer games (2010, January 21) retrieved 19 April 2024 from <https://phys.org/news/2010-01-games.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.
