

# Using games in the classroom

Computer games are beginning to be introduced to schools but do they really work as a tool for education? A study, known as Teaching with Games, is being undertaken by Futurelab and Electronic Arts to find out...

**E**lectronic Arts (EA), the world's leading interactive entertainment software company, and Futurelab, an organisation dedicated to researching, developing and evaluating new technologies for learning, launched the study in September 2005 to explore the practical issues surrounding the use of interactive computer games in schools.

Also part-funded by ISFE (the Interactive Software Federation of Europe), the research aims to, look at what children can learn from computer games, how best to introduce games into the classroom and what changes might be required to make them relevant to the educational environment.

## Three games

Teaching with Games is using three games: The Sims™ 2 (EA), RollerCoaster Tycoon® 3 (Atari) and Knights of Honour (distributed by EA), trialling them in four UK schools. Researchers from Futurelab are working closely with teachers from these schools to extend their understanding of the titles selected, and to identify learning opportunities within the games. The games have been used, in conjunction with supporting materials developed by the teachers, over a term in January 2006.

## Computer games for learning

Annika Small, Managing Director at Futurelab, says: "There has been a lot of interest in using computer games for learning but, to date, no one has really investigated what young people might be able to learn from games and how they might best be introduced in schools. We propose to do this by working closely with teachers and students to design new support materials for use with commercial games. We will evaluate the success of these materials and begin to produce a road map for educators across Europe to provide a framework for how games may be used in the classroom."

An initial MORI Poll was commissioned to investigate teachers' attitudes and the

results, published in January 2006, showed that 59% would consider using them in the classroom for educational purposes. The willingness of respondents to use computer games was reflected in the fact that almost one third have already used them in their classroom.

In addition to higher than expected percentage of teachers interested in the use of games in school, the study also found that 53% of those who would consider using computer games in school would do so because they are an interactive way of motivating and engaging pupils.

The majority of teachers polled believe that playing mainstream games can lead to improved skills and knowledge. For example, 91% felt that players developed their motor-cognitive skills, while over 60% thought that users would develop their higher order thinking skills and could also acquire topic-specific knowledge.

## Barriers to the use of games

The Poll findings also highlight some barriers to the use of games in schools, noting a lack of access to equipment capable of running the games as well as a lack of strong evidence of the educational value of games, an issue of focus for the Teaching with Games project. The appropriate choice and suitability of computer games to be used was also noted by respondents. Despite over one quarter playing computer games themselves, around two-thirds still felt, for example, that computer games may present stereotypical views of others and lead to anti-social behaviour.

## Capacity to engage

A spokesperson from EA, commented in January 2006: "The Poll confirms what we have long believed at EA - that interactive computer games have the capacity to engage both teachers and learners. In a short space of time, Teaching with Games has already highlighted the importance of collaboration between industry and the education sector to show how learning can be enhanced through

gaming."

A second MORI Poll, to explore students' attitudes to commercial computer games has been commissioned and the results will be available in the summer of 2006.

## Futures group

The project has a 'Futures Group' of leading thinkers and practitioners in education, curriculum and games design has been formed to build upon findings arising from the research and to present possible future scenarios that push current boundaries.

Angela McFarlane, Professor of Education at the University of Bristol and Chair of the 'Futures Group', comments: "There is a great deal of interest in the levels of engagement, and the complex learning, that take place when many young people play games. Early research has shown some powerful outcomes in the classroom, but we need to understand how, when and when not to use games to support education. The Teaching with Games project aims to shed some light on these questions in a way that will be of use to teachers and designers."

It is hoped that the findings from Teaching with Games, expected in autumn 2006, will assist the further development of supporting materials for the use of games in classrooms and contribute to the development of educational computer games in the future.

## Excited and intrigued

Marius Frank, Head Teacher at Bedminster Down School in Bristol, who is taking part in the Teaching with Games project comments: "I am excited and intrigued by the prospect of using gaming technology in the classroom. Individualised learning, at rates hitherto thought impossible, may be the norm if we get it right."

For project updates please visit [www.futurelab.org.uk/research/teachingwithgames.htm](http://www.futurelab.org.uk/research/teachingwithgames.htm)