

Let the Games Begin

Serious games, also known as games-based learning, is rapidly becoming a hot topic in the training and education sectors. **Dan Licari** at Interactive Digital Media explains why we should begin to seriously embrace the power of games in the learning process

Games have the potential to significantly improve training and education activities and initiatives. You only have to observe an 'average gamer' at play to see that the computer and videogame industry has more or less mastered the art of using computer technology to not only captivate its audience but also to persuade it to spend approximately £10 billion a year on using it.

If we compare a typical entertainment games technology-based experience with a typical learning technology-based experience, the contrast is glaringly obvious. When was the last time you had to drag a learner from their computer at 11pm while they pleaded; 'Please, just another hour, I really want to finish this level'?

Rapid-fire growth

The serious games sector, while still at an early stage of development, is rapidly growing and is being adopted by many organisations of different types and sizes here in the UK and around the world.

Recent market figures have shown that:

- The market for delivery of training and educational content via computer is estimated to be \$300-\$450 billion per year (current market worth)
- Both Gartner and Merrill Lynch estimate that corporate learning and development is one of the fastest-growing sectors of the overall market

- The demand for e-learning simulations is growing even more rapidly than the overall e-learning market and by 2006 was worth an annual \$6 billion according to US e-learning consultants Brandon-Hall.

Serious games mean serious business. The West Midlands region, which has long been a hotbed of entertainment games development, is leading the way in terms of both industry applications of serious games as well as academic research into the field. To continue to bolster its position as a key driver for the serious games industry, the region has invested in a number of initiatives including the Interactive Digital Media Project, Warwick University's Digital Laboratory and the Serious Games Institute.

The Serious Games Institute (SGI), the first of its kind in the UK, is based in Coventry University's Technology Park. The Institute is an international centre of excellence for serious games and a model of best practice for regional development through technology innovation. The Institute provides a close interface between high-level applied academic research and leading edge technology companies in the field of games-based learning.

The SGI is strategically linked with leading computer games companies in the West Midlands. Firms such as Blitz Games and



Code Masters are already publishing global titles within the entertainment sector and PIXELearning has established an international reputation for its development of serious games within both financial and professional services sectors.

PIXELearning specialises in corporate training and business education. It has developed business games and interactive learning simulations that cover, for example, an introduction to finance, audit fundamentals and diversity awareness training. As an example of how fast the industry is growing, PIXELearning has seen a near nine-fold increase in sales turnover in 24 months. Kevin Corti, PIXEL's Managing Director, says, "It is clear that customers believe that this new medium has the potential to significantly enhance both traditional and other forms of technology-based learning solutions. The Serious Games Institute will help us to meet the current and projected demand."

Effective developments

One key role of the SGI is to ensure that the solutions being developed are pedagogically sound, as well as to independently verify the efficacy of serious games as a method of enhancing training and education. This is seen by many in the industry as the key to its success. SGI's Research Director, Sara



The Business - a serious game teaching the basics of running a business

DeFrias, says, "To achieve the ambitions that games-based learning implies, in short, requires collaboration, inter-working and constructive change (policy, organisational and pedagogic), but with a full awareness of what clear benefits and outcomes for learners may be attained. While we have some 'early adopter' models of practice in evidence, more examples and experience would benefit the wider community of practitioners who are seeking to use these new approaches to innovate their organisation."

Digital 2.0, another SGI tenant, have chosen to be based in Coventry to allow sourcing developers and research resources available through the Institute. Jude Ower, Managing Director of Digital 2.0, says the move has already paid dividends: "Our aim is to provide organisations with useful, cost-effective serious games solutions. Using West Midland-based developers as the first point of contact, we are able to capitalise on the innovation coming out of the region." ■

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A flash application to promote the TV series, 'Heroes.'

Dan Licari is Project Manager at Interactive Digital Media.

For more information on how games can be harnessed to improve the performance of your organisation, log on to www.seriousaboutgames.com or visit the Serious Games Village at the World of Learning exhibition, 14-15 November 2007.



Artwork used for BBC Jam - an online learning resource