National Workshop on Learning in Immersive Worlds

Coventry University 11th November 2009

Online Simulation of Real Life Experiences; the educational potential

Liz Falconer, Manuel Frutos-Perez

University of the West of England, Bristol, UK

The technology enhanced learning (TEL) strategy being developed by the University is focussing upon the use of online technologies to support learning through simulated experiences in a range of subject areas, using both "Web 1.0" and "Web 2.0" technologies. As we develop these techniques alongside the more traditional uses of online technologies, e.g. delivering teaching materials and enabling social educational activities such as collaborative learning, we are beginning to see the enormous potential that online technologies offer for enabling students to experience the essence of practice in a "safe" educational environment. The university has many students who study professional courses in, for example, law, environmental health practice, architecture, planning, tourism, health care and social work. Education in these professions is greatly enhanced where students can apply the theory they learn to examples of situations they are likely to encounter in practise. But, in many cases it is either impractical or dangerous to create these types of situations in real life.

 This presentation will outline demonstrate examples of simulations that use a mixture of web technologies, social networking and virtual worlds. In particular we will demonstrate a simulation that enables groups of law students to work as partners in simulated law practices, communicating through text, email and voice in a virtual town that supports a range of case types. We will also demonstrate an accident investigation simulation in Second Life. Groups of "witnesses" can experience the whole accident in real time and then groups of investigators can see the accident aftermath, interview the witnesses and retrieve simulated documentation. They then use theoretical accident modelling techniques to reconstruct their rendition of the accident, and make recommendations for preventive action. The students can then take their findings back inworld and we can rerun the accident so they can compare their findings with the actual event. We will also discuss how visualisation of mathematics topics can be simulated using virtual worlds. Further information on our activities can be found on our website at http://www.uwe.ac.uk/elearning and on our blog at http://researchobs2.edublogs.org , including the location of our island in Second Life.