Virtual Worlds and Education

Chapter Outline

Introduction
The nature of virtual schools
Overview of virtual worlds
Formats of virtual worlds
Key issues in the educational use of virtual worlds
Conclusions
Activity

Melnick (2002: 87) suggests technology infrastructures ‘can be both supportive and preventative. When networks go down, or applications crash, backlogs are created as the learning process stops. Students lose work, and teachers lose their ability to communicate with their students until the problem is fixed’. This potential frustration is one of the reasons proffered by Roblyer (2008) for the high drop-out rate in virtual schools. Can you think of others?

Activity

De Freitas (2008) suggests that immersive virtual worlds can be grouped into five categories, although her categorization is not definitive. These are Role Play Worlds such as World of Warcraft and Guild Wars, which are role-playing games driven by quests with different levels and rewards; Social Worlds such as Second Life and Active Worlds, which tend to be immersive without specific quests and focus community-building activities and communication between individuals; Working Worlds such as Project Wonderland and Metaverse which focus on corporate communications and facilities to support business activity; Training Worlds such as the Online Interactive Virtual Environment (OLIVE) for the American Army, which has a singular focus on developing specific professional skills and knowledge; and Mirror Worlds such as Google Earth and Planet Earth that offer a 3D representation of the real world that can embed onto other unrelated applications. Using the Internet, find and explore different examples of as many of the principle types of virtual worlds mentioned above. Decide which might be used in education and state at what level and why.
Activity

Dalgarno et al. (2010) suggest that there are five affordances that virtual worlds possess. They can be used to facilitate learning that enhances the spatial knowledge of the domain being explored. They can allow learning to take place that would be impractical or impossible to carry out in the real world. They increase levels of motivation and engagement. They offer opportunities to transfer knowledge and skills to the real situations. Activities can be richer and more collaborative in nature. Using either the River City example provide in the text or one you have found yourself, identify practical examples of each of these affordances.

Activity

Discuss if it possible to create a virtual world dealing honestly and fully with issues such as the genocide that took place in Cambodia from 1975 to 1979 and avoid the macabre and mawkish? What would you do to maximize the educational value of such a resource?

Activity

It appears that younger rather than older users of virtual worlds have fewer problems with adopting an avatar identity. What implications dose this have for teachers and teacher training?
Big question

The technology to make virtual worlds more immersive will be available shortly. The clamour from the young in particular will be to embrace them fully in all aspects of life. Is it necessary or desirable to resist their use, particularly in education?