Virtual World Meets Real World

As instructional developers and teachers transform education from real world to virtual world environments like Second Life, an understanding of how real life issues transfer to the immersive spaces of virtual life may be critical for effective learning. This presentation describes physical, social, and emotional aspects of virtual life and their relevance to the teaching and learning process.

While many busy people can't fathom the idea of taking on another set of commitments, especially imaginary ones, multiuser virtual environments are quickly moving into the mainstream of education. With some 40 million people now involved worldwide, there is mounting concern that some are squandering, even damaging their real lives by obsessing over their second ones. That's always been a concern with videogames, but a field of study suggests that the boundary between virtual worlds and reality may be more porous than experts previously imagined.

Nearly 40% of men and 53% of women who play online games said their virtual friends were equal to or better than their real-life friends (Yee 2007). More than a quarter of gamers said the emotional highlight of the past week occurred in a virtual world. The study implied a lack of clarity that's emerging between the virtual world and the real world.

Researchers have only recently begun to study the social dynamics of virtual worlds. Some say they are astonished by how closely virtual relationships mirror real life (Reeves 2007). People respond to interactive technology on social and emotional levels much more than we ever thought," says Byron Reeves, a professor of communication at Stanford University, “People feel bad when something bad happens to their avatar, and they feel quite good when something good happens.” Just as teachers try to create positive learning experiences in real life classrooms, they must also consider how to apply these techniques in virtual environments.
Because rules, morality, laws, cultural imperatives may have no connection in virtual space to the person’s real world constraints, incentives and risks in virtual spaces may be quite different than they are in real life. Mapping virtual world incentives to those in real world environments may be required for establishing real and virtual behavioral research connections.

Recent neurological studies suggest participants may not distinguish between virtual and real-life relationships. In an experiment conducted at the University of Washington’s Institute for Learning and Brain Sciences, test subjects received fMRI scans as they played a simple computer game that moved colored discs to form a pattern. When told that they were playing with a person rather than a computer, participants showed increased activity in areas of the brain that govern social interaction. Because this substantiates the premise that “perception is reality,” teachers must be aware of how they create academic realities and the perceptions they plan to invoke.

Other experiments show that people socializing in virtual worlds remain sensitive to subtle cues like eye contact. In one study, participants moved their avatars back if another character stood too close, even though the space violation was merely virtual, says Jeremy Bailenson, director of Stanford’s Virtual Human Interaction Lab. "Our brains are not specialized for 21st-century media," says Reeves, "There's no switch that says, process this differently because it's on a screen." Thus, the way a teacher arranges a virtual classroom to maximize interactions and avoid virtual improprieties may parallel real life classrooms.

Like the real world, virtual world issues are increasingly becoming global. For example, Korea is facing significant social and economic problems due to a large percentage of its population who spend considerable time in virtual worlds. The Korean experience may foretell the future of other countries. Although many educators view multiuser virtual environments as an opportunity, the Korean problems suggest that the opportunity phase is over and that we must integrate immersive experiences into real world education or risk losing learners’ attention to far more compelling spaces in the virtual world.