Chapter 9

Exploiting the Power of Persistence for Learning in Virtual Worlds

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ABSTRACT

While the age old adage: “Build it and they will come” may ring true to some extent in many cases, it also begs the question: “…But will they come back?” Persistence can describe the continuously existing state of a virtual world, whether anyone is in it and using it or not; it remains as the last person left it. Persistence is a major affordance of virtual worlds—a central characteristic that sets it apart from any other learning medium available in the current instructional design toolkit. This chapter addresses the criticality of exploiting this attribute in order to design the optimal user interface for a meaningful, lasting learning experience in a virtual world.

INTRODUCTION

Developed “through the convergence of social networking, simulation and online gaming” (Gartner, Inc., 2007), a virtual world is an online simulation of either a real or fantasy world environment populated by “avatars”, which are pictorial or graphical representations of the human participants. A virtual world can be described as “a synchronous, persistent network of people, represented as avatars, facilitated by networked computers” (Bell, 2008, p. 2). EDUCAUSE, a non-profit association concerned with leveraging technology to improve higher education, defines a virtual world simply as an “online environment whose “residents” are avatars representing individuals participating online.” (The EDUCAUSE Learning Initiative, 2006, p. 1) Still, other definitions which address the specific affordances of 3-D virtual worlds help us understand the potential of the technology as well. Examining popular virtual world applications such as Forterra, Nexus, OpenSim, Second Life, Teleplace, or VastPark can help frame an understanding of virtual worlds as “online 3-D virtual worlds …within which residents are able to establish identities (avatars), explore, create and...
communicate. [Further, a virtual world may] lend itself well to social networking, collaboration and learning” (IEEE, para. 2).

Crafting meaningful learning experiences has, historically, been a great challenge in situations where context is as important as content. Role playing scenarios, case studies, and discussions are a few of the instructional strategies used to provide a rich, experiential aspect to traditional classroom and e-learning courses. These same strategies can still be used in a virtual world; however, these approaches now have the added benefit of a group dynamic in a persistent, graphically rich space that has a reality outside of the users’ imagination; that is co-created rather than dictated; that is simultaneously shared by many users for the purpose of collaboration, rather than accessible to a selected few. Leveraging the significant advances in technology that have yielded faster, cheaper, and more ubiquitous access than even ten years ago, virtual worlds provide for new instructional strategies not possible in traditional learning environments. We can anticipate that virtual worlds are here to stay and to continue to grow as the technology continues to improve. Gartner, Inc. (2009), a leading research firm, identified IT for Green, Social Computing, and Advanced Analytics to be among the Top 10 Strategic Technologies for 2010, and virtual worlds enable these technologies to reach new dimensions through its unique affordances as a collaborative tool. There is no shortage of hype and expectation regarding the Knowledge Revolution, but, in the near future, we can expect faster, cheaper, more stable and more engaging versions of knowledge-sharing technologies, infrastructures, and protocols to emerge. Even more importantly, the technology will become convenient, easy, and reliable (Norris, et al. 2004). Indeed in the years to come, we expect that virtual worlds will be among the top tools used to conduct business, to participate in meetings and training events, and to socialize.

With more than 300 virtual world products on the market today (Association of Virtual Worlds, 2008) targeting a number of different audiences, and with projections that this number will increase exponentially in the next several years, it is becoming imperative for implementers to be aware of their own functional and technical requirements. Thus, instead of jumping on the virtual world bandwagon “for the cool factor” or “to keep up with the (no possessive, just a simple plural – more than one Jones) Joneses”, a clear understanding of the features that most virtual worlds share helps decision-makers identify the unique attributes that may address specific training, education, or performance improvement needs, which will also aid in developing sound instructional design approaches. Understanding why one needs a virtual world, with specific goals, objectives, and functional requirements, will enable organizations to directly benefit from the unprecedented advances in today’s virtual worlds, worlds that also provide a comprehensive forum for collaboration.

Virtual Worlds and Distance Learning Challenges

Historically, distance learning theory has been characterized by its focus on the individual learner (Garrison, 2000). The most obvious learning transaction for learners has typically been between the learner and the user interface (Berge, 1995), and thus, historically, giving way to a common complaint by learners of feeling isolated and detached from the institution and their learning peers in traditional distance learning courses (Dickey, 2004; Sheets, 1992; Sweet, 1986). According to a 2009 meta study from the Department of Education: “Students who took all or part of their class online performed better, on average, than those taking the same course through traditional face-to-face instruction (p. 20).” That same study asserts that students who mix online learning with traditional coursework (often referred to as blended learning) do even better. While blended learning has typically been considered as the combination of online and traditional face-to-face instruction, the