

Second Life as a Learning Application - Deb Wise

What is Second Life?

Second Life is a Massive Multiplayer Online Role Play Game (MMORPG). Members open resident accounts that enable them to create and customize an avatar as their personal digital representation. This three-dimensional avatar is able to walk, fly, build, manipulate objects and otherwise conduct a fantasy life within the virtual environment.

The Second Life environment itself is created by residents. Residents can become land owners, entrepreneurs, performers, researchers, or anything else they desire. There are no game “rules” as there are for other fantasy games. There are no levels of hierarchy to attain; residents are able to use the environment in any way they please.

Why am I interested in Second Life?

Once I created my own account, I was immediately immersed due to the ability to function with very little specialized training. Higher-level activities (such as building and scripting) require some learning curve but basic functions can be accomplished quickly. I find the environment fascinating because unlike other fantasy games where there are established roles and rewards, Second Life is more like real-life, enabling residents to cultivate whatever virtual life they choose.

What is Second Life used for?

Second life can be used for anything from social networking and marketing to education. My own uses of Second Life are in the areas of events promotion, enabling musicians to use my venue to stream their music live from their home studios into the

virtual environment. This enables musicians to consider Second Life as a global marketing channel. Many corporations have also used the environment as part of their marketing strategy. Toyota, for example, has created model vehicles that are scripted (programmed) to be customized and “driven” by avatars who can then order vehicles through a link to the manufacturer’s web site.

How is Second Life used?

In order to use Second Life, an account needs to be opened at <http://www.secondlife.com>. The Second Life client also needs to be downloaded to the user’s computer. There are three main barriers to entry for users:

- Hardware – Second Life is a graphic-rich environment that needs an upgraded video card and enhanced RAM (random access memory) in order to be used optimally.
- Bandwidth – in order to be able to view and maneuver activities in Second Life, the environment needs to have at least a DSL connection. Anything less may result in “locking” which will disable an avatar and result in forced log-out.
- Technology learning curve – there is a minimal understanding of text messaging, voice over IP protocol (headset enabled) and maneuvering an avatar’s actions through the use of the keyboard. Most digital natives should have no trouble using the environment but others may find the learning curve to be a barrier to entry.

Educational Applications in Second Life

A colleague introduced me to Second Life. She is a software engineering professor who gave her graduate students the opportunity to either write and test programs conventionally, or to create an avatar account and build amusement park rides

within the environment. For those who chose the latter, they were able to test their programming proficiency by verifying the rides did what they were supposed to. This professor and I were able to convince our board of trustees to actually build a campus in Second Life, enabling instructors at any of our campuses to bring students into the environments for part of their class work.

Many colleges and universities have established their presence in Second Life (a partial list can be seen at <http://secondliferesearch.blogspot.com/2007/07/current-list-of-universities-in-second.html>). The attraction for educational institutions is the ability to have a “virtual campus,” where students that are geographically disbursed can meet synchronously. These campuses have not only been effectively used as marketing and teaching tools, they have hosted speakers who have presented via audio or video feed to global audiences.

What specific learning processes are involved?

Virtual-world learning assumes a constructivist perspective, where the member/avatar must take responsibility for their learning. The level of engagement a person experiences depends on how they interact with the tools available and subject matter being taught (Freebody & Freiberg, 2006). As a dynamic, abstract environment where everything might change from one log-in to the next, it is important to be able to consistently build upon prior learning in order to move forward. Thankfully, the space is so immersive that it is easy to lose track of time engaging in learning activities (Andersen, 2004). There may be constraints to learning; where objects are involved, one must learn how to manipulate the objects first (Dickey, 2003) such as sitting down in a chair, getting up from a seated position, etc. Once the basics are accomplished, the

environment increasingly accepts new media, enabling the on-demand delivery of learning materials and self-directed learning to take place (Beldarrain, 2006).

As an environment, virtual worlds enable a student avatar to experience the entire cycle as Zull (2002) defined it: (a) Reflection by means of attaching virtual activities to real-life experiences, (b) Abstraction by visualizing ourselves completing a task that incorporates new, virtual world experiences, (c) Action by completing new activities that are applicable to the virtual environment, and (d) Concrete Experience by now having a tool kit of new information and actions to build on. The pixelated nature of virtual worlds allows for countless iterations of learning to take place; everything can be deleted and recreated at will, with no additional cost incurred. In the example of my colleague, amusement park rides can be created and deleted any number of times, saved to inventory, and even recorded as a screen capture to prove proficiency.

References

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