



Different spaces but same places: Possibilities, pitfalls and persistent practices in *Second Life*

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Second Life is one of the social sharing spaces of Web 2.0 that is being employed for educational purposes around the globe. Over the past few years many conference presentations on *Second Life* have highlighted the potentials of its use in the formal education of neomillennials. This paper takes a different perspective. It documents the possibilities and the pitfalls of *Second Life* as a formal educational space, including the persistence of traditional teaching practices in the environment. The paper concludes that it is the quality of the learning design, and the fundamental philosophical underpinnings behind that design, that will lead to deep learning, irrespective of the technological space or place that is utilised.

Keywords: *Second Life*, possibilities, pitfalls, persistent practices

Introduction

Virtual learning environments are beginning to shape the formal educational landscapes of neomillennial learners. One of these virtual environments is *Second Life* (<http://secondlife.com>), which turned 6 years of age in June 2009. Over the past few years especially, *Second Life* (*SL*) has become recognised as an alternative teaching and learning space, and has been swiftly adopted by academia. In 2007, Pathfinder Linden (a.k.a John Lester, Customer Market Developer in Education and Healthcare for Linden Lab, the creators of *SL*) estimated that there were 200 universities or academic institutions involved in *Second Life* (cited in Kelton, 2007, p. 3). Two years on, that number has doubled, with over 400 academic institutions from around the globe now holding a virtual presence within *Second Life* (Smith & Berge, 2009).

Educators may promote *SL* as a suitable learner-centred environment for formal education in the new millennium and there are many fine examples where this is the case. Yet while the motto of *Second Life* is 'Your World, Your Imagination', it can also be far from a learning space that is based on student-centred constructivist philosophies. Thus, formal educational practices in *SL* can remain teacher-centred and/or transmission-focussed. This paper documents the possibilities, pitfalls and persistent practices in *SL* educational environments.

MUVE-ing into *Second Life*

Hypermedia is the result of the union of *hypertexts* with *multimedia* (integrating text, audio and/or sound with graphics, animation, haptics and/or video) (Davies, 1997). Hypermedia learning environments include multi-user virtual environments (MUVEs), or immersive virtual environments (IVEs), of which *Second Life* is an example. MUVEs are defined as those environments which:

enable multiple simultaneous participants to access virtual contexts, to interact with digital artifacts, to represent themselves through 'avatars', to communicate with other participants and with computer-based agents, and to enact collaborative [and individual] learning activities of various types. (Nelson et al., 2005, p. 21)

Hypermedia learning environments potentially provide learners with a high amount of learner control. Dede et al. (2004, p. 160) argue that “MUVES are a promising medium for creating and studying situated learning because they can support immersive, extended experiences, incorporating modelling and mentoring, about problems and contexts similar to the real world”. MUVES can be used to overcome real-world barriers to learning, such as physical challenges, safety or cost(s) (Blaisdell, 2006). However, Peters (2007) reminds us that they can also be used to create alternative or divergent realities. In formal educational uses of MUVES, Blaisdell (2006) argues that the teacher’s role is as a guide in exploration, and not the deliverer of information that it is in traditional teacher-centred approaches to learning. Thus the espoused notion is that *SL* can provide a student-centred teaching and learning space.

Second Life is described as an “innovative online 3D virtual world” (Semrau & Boyer, 2008, p. 179) in which social communities are built (Feenan, 2008). *Second Life* is inhabited by avatars, known as residents. The word avatar has an interesting background. It comes from the Sanskrit word ‘avataro’ which means a descent by a ‘god’ into the mortal world to do some form of activity. More generally, in terms of *Second Life* the word avatar can be defined as “a representation of the user in cyberspace” (Paulemon, 2008, p. 3494). The customised avatar improves the quality of social presence within *Second Life* for the user: “SL provides the ability to communicate with a sense of proximity and tangibility that is accepted in the virtual world” (Paulemon, 2008, p. 3494). Through their avatars in-world, participants are able to “Walk, fly, teleport and talk to each other” (Smith & Berge, 2009, n.p.).

Second Life is comprised of scripting language, audio, and ‘prims’, literally, primitive shapes. The prims can be scaled and/or skewed, and applied with ‘textures’ to give them a realistic appearance (Atkinson, 2008, p. 2080), for example the grass texture in Figure 1. A benefit of *SL* is that objects can be viewed from different perspectives as avatars move around objects. Kelton (2007, p.4) writes that: “Students seem more willing to buy into the learning experience because it feels ‘real’ to them, certainly more engaging than a two-dimensional experience”.

Possibilities of *Second Life* in formal education

There are many possibilities for the application of *Second Life* in formal educational contexts. Wongtangswad (2008b, n.p.) has identified ten major applications. These are the replication of the real world campus in the virtual world, especially for the purposes of recruitment; to strengthen the sense of social community for distance learners; to encourage students to participate; to exhibit their learning through virtual showcases; to practice real-world skills, such as voting or protests; to host a cost-effective site for reunions, such as alumni; for collaboration; for virtual seminars or performances; for organising events; and to obtain experience (experiential learning). In addition, *Second Life* provides opportunities for synchronous learning; observational learning (Smith & Berge, 2009), including the opportunity to go on virtual field trips in-world (Semrau & Boyer, 2008); for imitation and behaviour modelling (Smith & Berge, 2009); and to meet differences in the learning styles of a diverse student population, especially in relation to active-reflective (Willems, 2008a), visual-verbal (Willems, 2008a), and sequential-global (Willems, 2008b) learning styles. Each of these will be discussed in turn.



Figure 1: Example of virtual placement for student recruitment

The first application of *Second Life* is to replicate campuses in the virtual world for recruitment. Erlenkötter et al. (2008, p. 791) note that for most companies, a virtual representation in *Second Life* is

used for “branding, marketing and showing the advantages of their products”. In relation to academia, the product on offer is education, and those institutions which have a presence in *SL* hope that this virtual showcase will translate into real-world student recruitment, and hence funds for their institution. Reiners (2008, p. 1197) writes that the establishment of virtual campuses in *SL* vary between exact reproductions of the actual campus, or are of imaginary designs. Back in 2007, Ashworth University (USA) was one of the 200-odd post-secondary and higher education providers who recognised the financial possibilities of establishing a presence in *SL* for the purposes of student recruitment (Figure 1).

The second main application of *SL* is to strengthen the sense of social community within a learning cohort. In formal education circles, a social community is considered especially important for distance learners (Brungard, 2008; Smith & Berge, 2009). Indeed, Childress and Braswell (2006, p. 189) describe *SL* as being able to provide educators with opportunities to design “highly social cooperative learning activities”. One example of this is where the student cohort designs their avatar clothing at the commencement of an in-world course based on their university colours for the purpose of group identification and cohesion (Semrau & Boyer, 2008, p. 181).

Another application of *Second Life* is to encourage students to participate in their learning in order to gain deep learning (Philips, 2005). Semrau and Boyer (2008, p. 180) suggests that participation can be fostered using group assessment tasks within the student cohort, both ‘in-world’ (that is, within the medium of *Second Life*) and out. This learning can be either formal, such as attaining an understanding of the structure of DNA on Genome Island (<http://slurl.com/secondlife/Genome/118/145/53>), or informal, such as learning to operate one’s virtual presence through their avatar.



Figure 2: Concert, *Second Life*

The fourth main application of *Second Life* in formal education is to exhibit, through virtual showcases, products such as educational programmes and resources. One example of the showcasing opportunities in *SL* can be found at the in-world concerts held on Music Island (<http://slurl.com/secondlife/Sea%20Turtle%20Island/60/23/26>) in which the talents of real world performers and artists are synchronously performed (and displayed) through their avatar (Figure 2).

Fifth, *SL* provides opportunities to practice real-world skills (Wongtangswad, 2008a, n.p.), such as voting or protests, and other forms of social activism (Glogowski, 2008). One way in which real-world skills can be fostered through an in-world immersive experience within the *SL* environment is the acquisition of foreign languages, such as in the Chinese Studies Centre (<http://slurl.com/secondlife/Monash%20University%202/208/198/32>), Monash Island (Figure 3). Beyond such everyday skills, *Second Life* can be used to train individuals with more specialist skills, such as anti-terrorist training. One example of this, quoted by Kelton (2007, p. 6), is the ‘Play2Train’ program by the Idaho Bioterrorism Awareness and Preparedness Program in which “dangerous situations can be simulated and ‘experienced’ without the potential for harm to anyone”.

The sixth area that Wongtangswad (2008a, n.p.) suggests is that *SL* provides a cost-effective site to host reunions, for example, alumni events. To this I would add that *SL* provides an opportunity for globally-distributed members to gather together, for example, to participate in virtual conferences (Figure 4). The Islands of Joykadia is another site where educators can gather to learn and share information and experiences in virtual education (<http://slurl.com/secondlife/jokaydia/113/150/23>).



Figure 3: Chinese Studies Centre, Monash Island, *Second Life*

A seventh application for academia in *Second Life* is for the purposes of collaboration. In academic circles, collaboration in the *SL* environment can take place between educators or institutions. In a study conducted by Nathan McNeese of Penn State University, teams were asked to collaborate face-to-face, by teleconference, or collaborate virtually in *Second Life* (Harris, 2008). The results revealed that groups worked better in the *SL* environment than in either the face-to-face or teleconference scenarios.

Eighth, *SL* is a suitable venue for organising events such as virtual seminars or performances. One example is the Virtual Worlds Best Practices (VWBPE) Conference 2009, held synchronously in-world earlier this year with educators and academic organisations from around the globe (Figure 4).



Figure 4: *SL* is a cost-effective medium to host gatherings from around the globe

A ninth opportunity that *Second Life* enables is synchronous learning opportunities, a benefit which underpins many of the other benefits detailed in this section. Koch (2007, n.p.) writes that:

A website is an isolated, one-way communication channel, but *Second Life* allows visitors to interact in real time using many different media at once. For example, an avatar visiting a virtual meeting hall can view a video while text messaging with another avatar watching the same video.

Tenth, *SL* is a means through which experience (experiential learning) can be obtained. This is especially desirable if the gaining of experience can lead to an ease of performing those skills in real life. Of *SL*'s opportunities for experiential learning situations, Safara (2008, p. 1356) writes that *SL* is:

a place where all imaginable types of human interaction can be experimented with limited repercussions when something goes wrong. This is unlike the real world as any mistake could be our last.

A powerful example of experiential learning is the social community of the residents ('Dooners') of Brigadoon in *SL* (http://braintalk.blogs.com/brigadoon/2005/01/introducing_mys.html). Brigadoon is "a real-world experiment in social skills made virtual, [it is] a private enclave limited to a select mixture of caregivers and individuals with Asperger Syndrome, a higher functioning form of autism" (Loftus, 2005, n.p.). Brigadoon is a medium through which individuals with Asperger's needing to practice and improve their social skills can do so within a safe environment.

Second Life also can provide opportunities for observational learning (Smith & Berge, 2009), including the possibility to go on in-world field trips (Semrau & Boyer, 2008, p. 180). A virtual replica of Cologne Cathedral (Kölner Dom) is one example of a *SL* site that one might visit on an in-world field trip, for example to study mediaeval architecture. In addition to 2D information, the 3D vantage can help explore the construction, layout and grandeur of this beautiful world-listed cathedral ([http://slurl.com/secondlife/Dom zu Koeln/10/199/37](http://slurl.com/secondlife/Dom%20zu%20Koeln/10/199/37)). Another example of an in-world field trip is to visit the Apollo lunar capsule and landing site ([http://slurl.com/secondlife/daden space/127/127/301](http://slurl.com/secondlife/daden%20space/127/127/301)) and to appreciate how disorienting it can be to get lost in the lunar landscape without the obvious visual markers one usually relies on.

Second Life provides opportunities for the imitation and the modelling of behaviour, although this behaviour may be desirable or undesirable behaviour (Smith & Berge, 2009). For example, newcomers ('newbies') can imitate what experienced avatars do in-world. Avatars might ask each other how to 'do' (perform) a particular behaviour, or acquire something such as a prim or texture, such as clothing.

Finally, *Second Life* provides opportunities to meet differences in the learning styles of a diverse student population, especially in relation to active-reflective (Willems, 2008a), visual-verbal (Willems, 2008a), and sequential-global (Willems, 2008b) learning styles. In relation to these, students can have opportunities to reflect on information or be actively involved in a learning task; they can read or hear new information, or see new things from different vantage points; and they can follow a process through from start to finish, or inspect a process as a whole (for example, when using the avatar's 'flying' mode in *SL*).

Pitfalls of *Second Life* in formal education

While there are many documented advantages of incorporating *Second Life* as a formal teaching and learning space there are, however, a number of pitfalls which need to be fully understood. The pitfalls in using *SL* for formal education include issues that may relate to any education environment, such as non-participation or dominating behaviour by some participants. Other pitfalls include technical requirements (Kelton, 2007), such as the need to have up-to-date computers, suitable bandwidth, graphics capabilities, audio capabilities, and stable electricity sources; the challenge of time-zone differences in synchronous learning; and issues relating to intellectual property (Kelton, 2007). Some pitfalls are unique to the *SL* environment, such as the cost of set-up to be considered; the in-world communication modes can be perceived as an obstacle (Bell et al., 2007); the environment does not easily accommodate users with visual disabilities (Wongtangswad, 2008b, n.p.); the time it takes to establish and maintain the learning environment (Bell et al., 2007); there may be unregulated sexual content; and there is always the possibility of intruders (Wongtangswad, 2008b, n.p.) within the learning space which may, or may not, be welcome.

Non-participation can be a challenge in *Second Life*. Non-participation can occur for a variety of reasons, from loss of attention, through to avatar inactivity (manifested by an avatar slumping over as in Figure 5 and Figure 6). One means of loss of attention is through avatars choosing to pay attention to other sensory experiences within the *Second Life* environment. At one in-world presentation to a group of educators, participants had already been present in-world for over an hour on an introductory presentation. A number of participants commenced instant-messaging (IM) on tangential and unrelated topics, while others took to the opportunity flying around the virtual world to explore other aspects of the environment, much to the frustration of the host presenter. Describing the results of a qualitative study on participant experiences in a Masters of Business course conducted partially in *SL*, Mennecke et al. (2008, n.p.) express similar challenges:

Several respondents were disappointed with classmates manipulating objects from their inventories during the classroom discussion. One of them admitted to experimenting with *SL* features on several occasions and not paying much attention to both guest speakers and classroom discussions.

Second Life is a sensory-rich medium which invites exploration and play, and this should be considered in any learning design. Rather than lengthy presentations, the environment is supportive of smaller units of instruction or observation, then opportunities for replication or exploration by participants in order to foster deep learning.

Avatar inactivity can signal several things: signing into a lecture, then ‘wagging’; boredom; or multitasking, for example, typing an essay in another computer screen while listening to the in-world lecture’s audio. However, avatar inactivity cannot always be assumed to be non-participation. Figures 5 and 6 are two cases in point. Figure 5 is the chair of a lecture in *SL* in which there were a number of challenges taking place. The slumping avatar may have been indicative of attending to technical problems. The second is from a live-streamed conference into the *SL* environment in which performer is actively involved in their real-world performance, not their *SL* presence. A way around avatar inactivity for those leading in-world lectures and concerts is to have a real-world assistant driving the in-world avatar. Kate Miranda (a.k.a Linda Rogers) co-ordinates live concerts most Saturday afternoons, American Eastern time, on Music Island (<http://slurl.com/secondlife/Sea%20Turtle%20Island/60/23/26>). She advises that some performers overcome avatar inactivity by the use of a second person to operate the avatar in-world, while the performer sings or plays in the real-world, as it is almost impossible to do both.

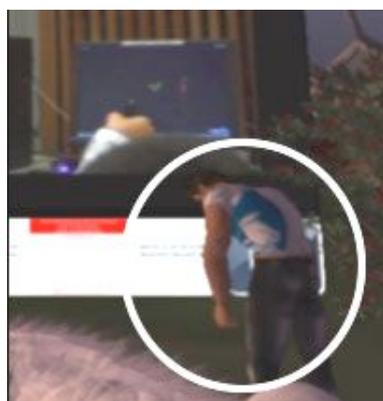


Figure 5: Avatar inactivity during an in-world lecture in *Second Life*

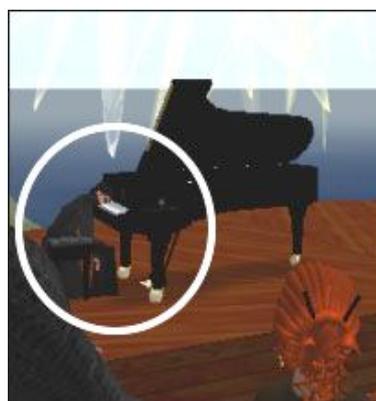


Figure 6: Avatar inactivity during an in-world concert in *Second Life*

Dominating behaviour on the part of some participants is an issue irrespective of the learning environment. Dominating behaviour can be intimidating for other participants, and can also induce non-attention. An example of this recently in *SL* was in a presentation when an audience member continually interrupted the presenter with a stream of questions that were of interest to the participant, but not for the audience as a whole. Such dominating behaviour resulted in the control of the presentation, including its duration. As with any presentation, protocols for the presentation, such as question-asking, need to be clearly identified at the outset.

There are some equity issues related to the incorporation of *Second Life* in formal education that are based on technical matters for students. *SL* requires broadband connections (DSL; cable) and is as such not compatible with connections such as dial-up internet or satellite internet. It also requires a stable power supply: the effects of blackouts and brownouts will obviously affect connectivity in-world. In terms of hardware, *SL* recommends the following technical requirements in order to operate: a modern operating systems in Windows, Mac or Linux; a computer processor of preferably 1 MHz or greater; a computer memory of preferably 1 GB or higher; and an appropriate video/graphics card; in order to be able to run. Tehrani (2008, p. 1300) writes that: “These requirements limit the ability for many...patrons to get involved”. As the *Second Life* website acknowledges: “Your computer *must* meet these REQUIREMENTS, or you may *not* be able to successfully participate in *Second Life*” (*Second Life*, 2009, emphasis in original). Alternatives will need to be considered for students within a given cohort who cannot meet these technical requirements. Further, even with the required technology, “the rendering of the buildings and features of an island still takes minutes to complete and demands the patience of the visitor to wait until the process has finished before being able to explore the grounds” (Wongtanswad, 2008a, p. 1390).

When the bonus of offering formal education through the medium of *SL* is its synchronicity, negotiating time zone differences for learning opportunities or participation at virtual events can be a significant challenge. At a recent in-world conference, for example, participation for those antipodeans amongst us resulted in the necessity of being present online in the very early hours of the morning. Such challenges do need consideration, especially with the global spread of some learning cohorts. Further, the time zone differentials within the *SL* environment cause constant confusion.

The cost of set-up of the *Second Life* learning environment is also a potential pitfall. In order to own *SL* land, and hence build a virtual space for teaching and learning, one requires financial resources. *Second Life* is based on a financial economy of the virtual currency of the Linden dollar (L\$). According *Second Life* (<http://secondlife.com/whatis/currency.php>), 250 Linden dollars is equivalent to the US dollar. Educators can circumvent financial costs by obtaining grants and other forms of funding in order to construct a teaching and learning space in *SL* (O'Connor, 2008). However, this is reliant upon the funding bodies supporting such requests.

Another costly disadvantage relates to the time that it takes to establish the formal learning environment in *Second Life* (Bell et al., 2007). In a reflective article, Mennecke et al. (2008, n.p.) noted that the development of the *SL* island infrastructure “requires a considerable investment in planning, design and development”. Glogowski (2008) concurs, adding that in addition to the time costs, creating *SL* environments requires patience, creativity and innovation.

Issues relating to the infringement of intellectual property in *SL* have also been noted by Kelton (2007, p. 10), who questions: “How are copyrights and academic integrity protected in a world where user-created content can easily be copied and redistributed?” The ramifications of this are still being explored.

Another potentially alienating issue is the in-world communication modes of *Second Life* (Bell et al., 2007). These authors noted in their study that respondents perceived the *SL* communication modes to be a serious obstacle due to the large number of messages appearing in both local chat and instant messaging. They write that:

The chat log often grew very complicated when interjected with numerous responses by student avatars. While the spontaneity of such group discussions was appreciated by some, others felt lost having several chat windows open and thus adding up to information clutter. (Bell et al., 2007, n.p.).

Wang and Hsu (2008, p. 2047) note similar issues from the instructor’s perspective: “If the class is communicating through the text message in *SL*, the text becomes a tangle and it’s difficult for the instructors to follow the conversation”.

A further example of communication issues in *SL* is in situations where instruction is given totally via audio, but due to technical issues cannot be heard by the end-user. A humorous example from a recent in-world conference was when one attending delegate could not get her audio working (there was no audio preamble prior to the presentation for the audience to test audio levels) and typed continually throughout the presentation messages such as “I can’t hear you” and “Can anyone else hear?”. This situation could have been overcome by an initial sound-check if audio was to be used, and also by having someone available to help by typing in practical instructions for participants experiencing such difficulties.

In the same presentation, the .jpeg images of the PowerPoint presentation were not clear – a visual communication challenge that is a common *SL* issue. The same participant attempted to make the .jpeg images clearer for all participants, but accidentally clicked the driving mechanism and turned the presentation into chaos. Unfortunately, the participant was scolded for her efforts, but the issue was two-fold, relating not only to an inexperienced participant, but also relating to a presentation in which both visual and verbal communication were left wanting. Content in .jpeg images needs to be crisp, clear and easily legible. Wongtangswad (2008b, n.p.) has argued that the *SL* environment does not easily accommodate users with visual disabilities: an equity consideration when shifting to formal education in *Second Life*. Kemp & Livingstone (2007, p. 15) observe that:

the user-interface currently does not work with any screen-readers. For students with less severe visual-impairments, the ability to modify the user interface – to change colours and fonts to less stylish but more readable settings – would be a step in the right direction.

There are reports on SLED (Second Life Education Wiki) that suggest that pairing sight-affected students with sighted students in teams can help overcome such problems, but the challenge would remain in distance learning scenarios (Mirliss, 2006).

A further pitfall is the undesirable behaviour of avatars, especially in relation to explicit content. This includes the potential of unregulated sexual content within *SL* (Wongtangswad, 2008b, n.p.). On this aspect, Smith and Berge (2009, n.p.) write that:

Not all behavior is acceptable in *Second Life*...Such problems are usually easily fixed by teachers taking initiative and composing a set of classroom rules (such as: “do not come to class naked”) for their students.

However undesirable behaviour is not solely an issue for the student cohort in *SL*: there is the possibility of intruders moving through the learning space. Intruders may or may not be welcome. For example, at the recent VWBPE Conference, a non-educator appeared out of interest to see why others were gathering in the region. Through a conversation, I discovered that he had met his real-life partner after their initial virtual meeting in *SL*. This chance meeting with an ‘intruder’ provided an opportunity to discuss the possibilities and pitfalls of the *SL* environment with a daily inhabitant. However, intruders can be unwelcome. Wang and Hsu (2008, p. 2047) write that:

Unlike learning in a physical classroom or through a course management system, the *SL* session is open...to anyone on the Internet. People with suspicious intentions might interrupt the class by entering the meeting site, observing the classroom, or distracting the students by using private text message.

As such, intruders can socially misbehave, be vandals, or be sinister (Glogowski, 2008), and for this reason, some considerations are necessary on how these will be dealt with. ‘Griefing’ is the term used to refer to those who harass others in-world. Atkinson (2008, p. 2083) notes that griefing may discourage development within the *SL* educational environment, and that one solution may “result in greater security with residents virtually locked behind doors”.

Persistent practices in *Second Life*

According to Dede (2005), multi-user virtual environments (MUVES) such as *Second Life* contain the key pedagogical elements to enable situated learner-centric environments: they are visually rich, immersive, non-linear, allow for individual and collaborative learning, promote creativity, and encourage learner choice in activities, pathways and assessments. Despite these suggested applications for formal education in *Second Life*, what may result is the perpetuation of the existing practices in other educational. Glogowski (2008, n.p.) notes that a “criticism of teaching in *Second Life* is the misguided pedagogy of using *Second Life* and other newest technologies to teach in old ways; often it’s the traditional, teacher-centred, unidirectional teaching transferred into a new environment”. Reiners (2008, p. 1197) also suggests that the “existing educational methods [are] just mapped into the virtual world instead of using the potential of *Second Life* to create advance[d] learning scenarios and new pedagogical concepts”. Philips (2005) has previously highlighted that the lecture – the dominant mode of teaching in academia – is not always the most appropriate mode of instruction, and Sheely (2006) has argued that despite the possibilities of the new media, we transfer this tradition of lecturing online, even if these not always the most suitable for the environment. Philips (2005, n.p.) writes:

Lectures and lecturing are consistent with a pre-modern view of controlling knowledge. They are also consistent with a modern view of knowledge, with a tacit adoption of an objectivist epistemology, a focus on the transmission of content, and for learners to be passive recipients of knowledge.

This first persistent educational practice in *Second Life* – the primacy of the lecture – translates to the creation of replica lecture halls in *SL* as a multimedia (3D visuals and text and/or audio) alternative to face-to-face, audio, or text-based lectures. An example of the lecture as a key means of educating is reflected in the *Second Life* screen capture in Figure 3 in which tertiary educators in real life had gathered in-world for a virtual symposium.

Healey (2005) distinguishes between educational practices in which students are active participants in their learning, and those which are both teacher-focused and in which students are treated as the audience. In the latter, information is transmitted *en masse* to the student population. The related persistent practice

in *SL* aspect refers to the perception that teaching equates to the transmission of information. Erlenkötter et al. (2008, p. 789) write that one of their main concerns of formal education practices in *Second Life* is that “the student [is] – in most cases – the passive receiver instead of actively involved in actively involved” in their learning. They argue: “Instead of reading and listening to the lecture (cognitive domain), they need to feel and experience the material (affective domain) and, therefore, achieve further educational objectives” (ibid).



Figure 7: Author presenting virtually at the VWBPE Conference 2009 in *Second Life*

To highlight the replication of persistent practices in *SL*, I am using my own presentation at the *Virtual World Best Practices in Education (VWBPE) Conference* for the purposes of critique (Figure 7). Presenters were allocated in-world stands to present in during the conference. I was a late addition to the programme and, given the short window in which to organise the presentation, converted existing conference poster into a .jpeg which in turn was placed at the rear and on the floor of my in-world conference stand. In hindsight, this information was too cluttered for the medium: there were resolution issues for the viewers unless they used the zoom feature of *SL*. Modelling the stands of others, I added chairs, a table, and various other prims such as potted plants to liven up the site. I intended to be frequently present in-world in order to discuss the research embodied in the poster, much in the way that one would be present to discuss a poster display at any conference.

Quite a number of the stands had similar set-ups with 2D text-based information presented on displays plus the addition of a formal sitting area (Figure 6). The presenter of one such stand approached me to discuss my display. She was interested in the technical development behind my prims: “What do they do?”, she typed. This comment made me reflect that my entire stand as while it transmitted visual and verbal information, it did not offer much more. Later I was to find that her stand offered a prim that “did something”: it contained a box of tissues on the table, which dispensed tissues. A further exploration of the conference site yielded stands with rotating balls suspended off the ground or machines where an avatar could get a virtual drink, and while these in effect “did something”, not all were of educational benefit, although it could be argued that they did add to the immersive experience.

As educators, and I am no exception, we need to reflect on the transferral of such traditional approaches into the *Second Life* environment. At times, these age-old traditions may be appropriate, but more often there are different ways in which to engage our audience so that they may learn.

Conclusion

To rephrase the title by Brennan et al. (2001), all that glitters in new technological places is not gold. *Second Life*, like any educational environment, needs to be approached not as the be all and end all, but as a teaching and learning environment that has both possibilities and pitfalls; an environment where existing teaching practices may not be the best means of fostering learning. Lengthy and unengaging lectures will remain frustrating to participants irrespective of the environment, and *SL* is no exception. Rather than viewing *SL* as a place to obtain and maintain a virtual presence, academia seriously needs to consider the applications to which *SL* is being put. As Wang and Hsu (2008, p. 2049) caution, learners should not be thrown into the *SL* environment without meaningful learning tasks or clear and specific instructions.

This paper has attempted to weigh the possibilities, pitfalls, and persistent practices of teaching and learning in *Second Life*. All aspects need to be evaluated and considered in the development of instructional design for this specific mediated learning environment, so that students can be engaged and learn effectively. In the end, it is the quality of the learning design, and the fundamental philosophical underpinnings, that will lead to deep learning, irrespective of the technological space or place that is utilised.

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