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## Second Life in the Open University: how the virtual world can facilitate learning for staff and students

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#### How to cite:

Broadribb, Stephanie; Peachey, Anna; Carter, Christopher and Westrapp, Francine (2009). Second Life in the Open University: how the virtual world can facilitate learning for staff and students. In: Wankel, Charles and Kingsley, Jan eds. Higher Education: Teaching and Learning in Virtual Worlds. International Perspectives on Education and Society (12). Bingley: Emerald Group Publishing, pp. 203–220.

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Version: Accepted Manuscript

Link(s) to article on publisher's website:

<http://books.emeraldinsight.com/display.asp?K=9781849506090>

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## Second Life in The Open University: How the Virtual World Can Facilitate Learning for Staff and Students



In November 2008, the inaugural Research and Learning in Virtual Environments conference (see [www.open.ac.uk/relive08](http://www.open.ac.uk/relive08)) was considered a success by many measures, but perhaps most strikingly in that it served to illustrate the groundswell of Higher Education institutes that are turning their attentions to the vast learning potential of virtual world environments. Whether academic or predominantly practitioner-based, delegates including this chapter's authors (who, incidentally, embrace aspects of both roles) were left inspired by numerous success stories where the use of virtual worlds had created a meaningful, positive learning experience for both students and staff within Higher Education institutions.

Whilst ReLIVE is by no means the only conference addressing learning in virtual environment (e.g. see [www.vs-games.org.uk](http://www.vs-games.org.uk), [www.vwbpe.org](http://www.vwbpe.org), [www.rezed.org](http://www.rezed.org)) its reference within the opening of this chapter is fitting as the event was based entirely at the Open University's Walton Hall campus in Milton Keynes, United Kingdom.. As an established provider of distance education, the Open University brand is recognised on a worldwide scale, signifying openness "to people, places, methods and ideas" (The Open University Mission online, 2008). Embracing the learning potential of emerging technologies such as virtual environments therefore seems a logical strategy for such an institution, not least given the current global economic climate, combined with an increasing focus on the environmental impact of travel meaning that alternative methods of course delivery are a priority.

The Open University seeks to be a world leader in distance education and to maintain this position it is crucial that staff stay current with developing technology. With growth in the public profile of virtual environments it seems appropriate that we explore the technology not only with our customers, the students, but also within our staff development activity. This chapter opens with a description of the Open University's presence within the open virtual world of Second Life, followed by an account of how this virtual space has been used with particular cohorts of Open University students, and how a thriving in-world learning community has developed as a result.

The authors will then summarise the theoretical and practical implications of an exploratory project using Second Life as a vehicle for skills practice-based staff development, where through rigorously controlled experimental design, they sought to answer the following question: can an in-world virtual role-play provide us with a viable option for providing our staff valuable skills practice within a safe environment? The positive results from the research to date, against a background of institutional support, have motivated a drive to extend the research further and ultimately provide a case for Second Life to become a natural component of the learning toolkit for both

staff and students at The Open University. The chapter closes with a discussion of some of the waypoints for achieving this ambition, including practical implications for the University.

### *Using Second Life with Students*

The 2008 Virtual World Snapshot report, commissioned by Eduserv, found that most educators in the UK who are already working in virtual worlds now believe that virtual worlds are moving towards becoming mainstream (Kirriemuir 2008). The Open University (OU) has taken a lead in virtual world presence and can demonstrate a history of being an early adopter, in fact one of the very first UK educators to work inworld. In June 2006 the University purchased its first island – essentially a plot of virtual land - in Second Life. Cetlment Island was a pilot project for a fellowship through COLMSCT – The Centre for Open Learning in Math's, Science, Computing and Technology. COLMSCT is one of the Centres for Excellence in Teaching and Learning (CETLs) created in 2005 by the Higher Education Funding Council for England. On its website COLMSCT states:

'The home student must be provided with rich and motivating experiences in subjects that are about the wonders of the natural world and technology. They must be helped to work together in spite of geographical separation. They must be supported in learning how to use complex tools and techniques. The Centre will harness academic creativity and new learning technologies in generating new responses to these long-standing challenges.'  
(COLMSCT 2009).

A second OU island, SchomeBase, was established in December 06, and was managed as a main grid presence for the Schome project (see [www.schome.ac.uk](http://www.schome.ac.uk)). Both islands were experimental spaces where any user could create or rez<sup>1</sup> objects and contribute to the evolution of the island. Students were welcome to visit, and two formal tutorial groups for a 30 credit level one technology course were run on Cetlment. However, the Second Life presence was deliberately not promoted at a general level within the university and subsequently there was little regular activity or casual social interaction on either island.

Evidence of participation and retention rates from the pilot studies in 2006/7 was encouraging (see Bennett and Peachey, 2006), and the CETL was keen for research to build on this work with the next cohort of students. For the previous few months the Schome project had been focusing much of its attention in the Schome wiki, forums, and on their Schome Park Project in the teen grid. SchomeBase, in the main grid, was not being used and no longer generated any traffic. The decision was made to buy a new CETL island and site it next to SchomeBase, with a development plan to landscape the two islands as complementary spaces. As a result, Open Life was delivered in March 2008, and Cetlment was closed down.

One of the key lessons that came from the extended exploratory learning on Cetlment was the importance of providing an attractive and engaging environment in which students could interact. It was apparent that real world buildings, which can obscure camera angles, were generally unnecessary and that most social connection goes on in open spaces.

In early 2008, very little published research was available about successful learning spaces in virtual worlds. Large scale studies in this area continue to be slow to appear, although the DELVE project (forthcoming 2009, see

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<sup>1</sup> a Second Life word for taking an item out of inventory and making it appear as 'real'

<http://www.jisc.ac.uk/whatwedo/programmes/elearningtig/delve.aspx>) should provide steps forward. With minimal indication of future take up for the islands, it was decided to create spaces that were simply as attractive, engaging and flexible as possible within the context of the environment, enabling the potential for specific developments to follow. The COLMSCT and Schome projects would continue, and staff and students would be invited to visit the islands and, through their use patterns and feedback, contribute to both form and function for future development. An outline design for Open Life and Schomebase then evolved from discussion with other stakeholders in education in virtual worlds - an informal, unstructured survey of approximately 50 Second Life users, including academics, students and others in student support services, who talked about what they liked about the spaces they frequented most in Second Life, and what put them off returning or exploring further.

The resulting double island, informed by the survey responses, had a varied topography and made good use of height and depth so that its layout was not immediately apparent to the casual visitor. It displayed an abundance of greenery and seating areas using real world metaphors that enabled people to feel grounded and 'safe', but decorated areas with unexpected treats and surprises, drawing people back to explore further. Content on Open Life included a large sandbox (designed as a sandy desert island), the Centre for The Open Degree, formal meeting rooms (the only building with a roof, designed to meet the needs of users who were looking to augment reality through the virtual world rather than immerse in it, and hence were more comfortable in a formal, familiar setting for a professional business meeting), a crystal cave that can be used for meetings, large events arena, presentation and discussion area and several small group discussion areas.

An incidental observation from the Cetlment research period indicated a number of first time visitors whose first instinct after completing orientation was to create a virtual residence. Unless one wishes to exhibit, for example, art, information or items for sale, there is no need to own property in Second Life as all belongings can be held in an inventory folder until needed. However, in recognition of this observed behaviour, and in order to explore it further, it was decided to provide a small number of residences on the new island. The initial instruction was that these buildings would be available rent free to any member of staff or students for a period of 6 weeks, after which time they would be required to vacate if there was a waiting list. An assumption was made that after this time, a resident would either wish to settle down in a higher quality, paid-for apartment elsewhere in-world, would be happy to exist without walls, or would have left Second Life altogether. The resulting twenty-four 'Sholokhov Halls' apartments were located on Open Life and built to face into a central quad, with communal seating and a virtual coffee machine.

Whilst the growth of a more permanent in-world community on Open Life island was an exciting development, there was a downside to the significantly increased level of social activity that the Halls quickly generated. Tutors were beginning to use the public spaces for formal tutorial and teaching sessions with their students, and sometimes found themselves with an inquisitive audience: bystanders who were on the island in order to socialise at the Halls. The tutors involved were generous enough to include and welcome the visitors, but this was clearly not a scalable solution for the long term. After discussion with the Schome project, the Halls were relocated to SchomeBase Island and the natural division between spaces for formal and informal learning was ratified.

Whilst we would recommend and welcome readers to visit The Open University in Second Life, it should be noted that SchomeBase, a loaned space, has since been replaced by Open Life Ocean and Open Life Village, as a new, dedicated social community island. This aspect of the OU presence in Second Life, initiated by the

residencies at the original Sholokhov Halls, is a thriving development, driven in large part by an egalitarian mix of staff and students who are inworld not for any formal teaching or learning commitments but because they derive value from being active members of a regular community. Recognising that for many this virtual community provides a Third Place (Oldenburg 1991) – a regular social opportunity that is not home or work - facilitation has sought to provide support for activity that is community driven, rather than to impose activity (Peachey, 2008). To date, events on the islands have included an art exhibition, visiting speakers, collaborative builds, discussion groups, themed parties and even an inworld Christmas pantomime.

Students from T175 have continued to benefit from tutorial support in Second Life. In 2008, this support extended from regular tutor groups to events open to the national cohort (an audience of approximately 1,000 students). Furthermore, in 2009 the course will provide dedicated inworld resources to illustrate key concepts from the two dimensional web-based material, with the learning points developed further through student participation in inworld discussion groups. In 2007/8 tutorial groups from another 30 credit level one technology course began to use the island formally along with a number of smaller, individual tutor groups from various other courses, and an exploration into the potential of the environment for a virtual residential school was initiated. The University is supporting two externally funded projects into aspects of virtual world use for education and in 2008/2009 is significantly increasing its investment into virtual world research, with long-term prospects for substantial mainstreaming of virtual world support into faculty-based courses.

It is the experience of the OU in Second Life to date that approaches of both social and cognitive constructivism are found in the emerging pedagogies. In social constructivism, the focus emphasises interaction with people and co-construction of knowledge (Vygotsky, 1978), whereas in cognitive constructivism the focus is on interaction with content and individual construction of knowledge (Felix, 2005). The OU social community demonstrates social constructivism through the assumption that knowledge construction is achieved by the interaction taking place within oneself through reflective thinking, and by the interaction that occurs in communications and collaboration with other people. Individuals in the community are working together and it is this collaboration, both within and without the environment (eg in FirstClass forums, Facebook, instant messaging etc) that enables their individual reflections and learning. For other groups, such as the users of the OU nOUBie Building, which was developed by the community to provide a welcome centre for newcomers to the environment, collaboration is not inherent to their learning experience as they are interacting with content rather than people in order to construct their understanding. It was with a growing appreciation of the value of these different theoretical approaches to the construction of knowledge that the authors turned their attention to the challenge of how Second Life could be used in staff development.

#### *Using Second Life in Staff Development*

Prior to addressing the issue of 'how' Second Life could be used within staff development, it is perhaps important to firstly address 'why?' With the University already using Second Life as an environment for learning with some student cohorts, it became apparent that there was potential for a widening gap between staff and student developmental experiences. This indicated a disconnection between learning media, with virtual worlds becoming increasingly utilised within student interactions, but not yet considered as a tool for staff development. Given the strategic goals of the University, and the success that student usage of Second Life had brought, the promise of utilising virtual environments within staff development seemed to present a significant opportunity.

To remedy this, it seemed appropriate to incorporate a trial of a Second Life-based activity within a staff development intervention, to support University staff gaining exposure, knowledge and confidence in using this emerging technology. In addition to providing this enhanced awareness of virtual world environments and the potential they could offer for student learning, it was important that the Second Life-based activity would add real, tangible value as part of the staff development intervention in which it was embedded. Furthermore, it was felt to be crucial that this could be evaluated as making a direct contribution to the learning outcomes. The challenge was to select a development intervention that could provide a suitable vehicle to deliver on both these objectives.

Evaluative feedback from the participants of previous staff development sessions indicated that when using traditional role play activities as a form of skills practice, relatively high levels of discomfort and disengagement with the task were reported. Over time, this had led to staff development activities primarily focused on the embedding of new skills, often being provided through group discussion. This issue, however, is not unique to the OU's learning and development practitioners. Swink (1993) presents a compelling anecdote illustrating the dislike that many employees have for role play activity, mainly, he argues, "because they are afraid of making mistakes in front of their peers" (p. 91). Potential antecedents for the reported negative affect towards role play may run deeper than impression management or self-confidence, however. Jackson and Lawty-Jones (1996) found strong positive statistical relationships between scores of extraversion in individuals and their preference for 'active learning'; a finding replicated by Bakx, Van der Sanden and Vermetten (2002), who reported that the extraverted students in their study preferred role play activities as a form of learning significantly more so than the introverts. It is perhaps unsurprising then that individuals of a more introverted personality type, perhaps with a greater preference for a more reflective rather than activist learning style (e.g. Furnham, 1992), may be less comfortable with the social form of learning that role play embodies.

From an organizational perspective of 'Best Practice', we had been seeking an alternative to real life role-play that could still offer our staff the opportunity of a 'learning through doing' experience. From our initial scoping exercise, it appeared that Second Life could offer the University such an alternative, or as Broadribb and Carter (In Press) described it, Second Life provided "virtual affordances [to address] real needs". In particular, we employed a critical theory framework to hypothesize that the virtual environment presented the participant with the opportunity to role play a situation through the medium of an alternative identity, which in this context would be the individual's three dimensional virtual character, or 'avatar'. Unlike in traditional real-world role play activity, we proposed that role playing in Second Life would provide a 'safer' environment in which the participant could operate, as there would be a clearer delineation in the attribution of actions to the individual enacting them. Furthermore, by designing an activity that involved group control of a single avatar, or 'virtual character', discomfort could be further reduced as actions would be attributed to a small collective rather than one individual. This also mitigates for many of the potential issues of identity management associated with virtual world use.

In selecting a developmental workshop to act as a vehicle for the study, it was decided that a session focusing on feedback skills would be most appropriate due to its focus on interpersonal development. In 1983, Bailey and Butcher emphasised that effective interpersonal skills training should focus on developing perceptual, cognitive, and behavioural skills components together. We felt that Second Life provided a platform for just that. Learners would be able to make reasonable

judgements at the perceptual level and be able to respond in a timely manner; at the cognitive level, the learners could understand the purpose of an interaction and have clear ideas of what appropriate behaviours they should display in specific situations; and finally, the learners would be able demonstrate actual behaviours at the performance level to execute their individual interpersonal skills.

Although the proposed workshop effectively replaced the traditional real-world role play activity with the virtual alternative using Second Life, it was decided not to make the full transition into an exclusively virtual session. Based upon an intention to investigate the learning outcomes of a blended workshop design, in addition to the technological and practical demands that an entirely virtual session would place on staff, this decision would be crucial in contributing to one of the most salient findings of the research to date (to be discussed later in this chapter). From this starting point the authors set out to explore whether a virtual role-play could be a viable alternative for real-life role-play and specifically, whether Second Life could provide a similar and more comfortable 'learning through doing' experience.

### *From theory to practice*

Our first pilot intervention was based primarily on the format of the original half-day Feedback Skills workshop offered by the OU's Human Resources Development team. The workshop was re-designed from a traditional, exclusively real-world based delivery structure into an interactive, blended learning approach focused on developing skills in providing and receiving feedback effectively. The primary purpose of this pilot was to assess the impact of using a Second Life virtual role play and compare the learning outcomes of participants against those reported by participants who engaged in more traditional forms of skills practice. The twenty-two self-selected participants formed a single cohort for the initial part of the workshop which introduced a theoretical grounding of effective feedback. This was led by a learning and development professional who focused on introducing concepts and models relevant to the giving and receiving of feedback. Following this predominantly didactic format, participants split into three groups to experience one of three forms of skills practice: script writing, traditional 'real life' role play, or virtual role play using Second Life. Each of the groups worked with the same case study, featuring a bespoke scenario carefully constructed to be relevant to the institution and its staff.

A group of eight participants were assigned to the Second Life virtual role play condition, and the group was then split further into two groups of four. Each group had the support of a facilitator experienced in the use of Second Life and a laptop connected to the virtual world. The virtual role play activity took the form of a discussion between two 'avatars', based on the case-study. Each group used their avatar to provide feedback to a corresponding avatar controlled by a learning and development professional seated in a separate room.

The aforementioned inworld relocation of the Sholokhov Halls to ShomeBase left a blank area on Open Life Island, creating an opportunity for role play offices to be created and situated on OU virtual land specifically for the purpose of the planned HR workshop. This was identified as a well-structured opportunity to investigate the immersive aspects of the environment, and was felt to be appropriate content with which to fill the empty space. The construction of buildings that contained relatively high fidelity representations of real-world office environments was easily justified despite being surrounded by more fantastical virtual structures, as in this instance the driving motivator was to replicate a real world scenario. Specifically, the virtual office environments (see Figure 1) provided multiple areas for participants to conduct their

feedback practice, from open-plan and meeting room spaces to a staff room with coffee facilities. Whilst any Second Life user may explore these environments when not in active use, an invitation-only group was created for restricted access to the virtual offices for the duration of the workshop. This ensured a secure and private space for the participants.



Figure 1: The Virtual Office

At the outset of the skills practice session, participants were assigned a pre-constructed avatar, then provided with a tour of the virtual office environment and an overview of basic avatar movement and text-speech. They were then given 30 minutes in which to agree their group approach to the case study, before a 20 minute virtual role play in which learners took turns in 'driving' the avatar. Interaction took place within Second Life through movement around the virtual office and text-speech conversation with the corresponding avatar controlled by the learning and development professional. In the real world, the group discussed what the text-based responses on behalf of the group would be, with the 'driver' of the group's avatar typing them in. At the end of the virtual role play activity, the two groups re-united for a discussion with the facilitators on their experience of the skills practice, before regrouping into the larger cohort for a final review of their learning.

Evaluation of the pilot intervention pointed to a number of specific learning points that we could utilize to further improve the design of the activities, thus maximizing the benefits realized from the use of Second Life as a learning tool. We amended our intervention design to extend the length of virtual role play time to 40 minutes, and extend the group debriefing session to 25 minutes. In addition, we included the use of a printed text-speech transcription as a self-analysis prompt for the groups in reflecting on their performance during the virtual role play activity. The resulting workshop, incorporating the revised intervention design, was then piloted with 14 participants in total.

### *Evaluation and Development*

In evaluating the two workshops the authors were keen to progress from the traditional 'happy sheet' approach and move towards a more rigorous design that would enable us to measure the numerous variables of interest. However, firstly key

learning objectives at both the organisational and individual level were outlined. At an organisational level the learning objectives were to:

- a) increase staff confidence in handling difficult interpersonal situations at work, and
- b) increase staff awareness and interest in using emerging technologies (specifically Second Life).

At the learner level this was translated into measurable outcomes of:

- a) increased confidence in providing and receiving feedback in interactions with colleagues, and
- b) a positive experience of using new technology in a developmental setting.

To achieve this, data was gathered using online surveys shortly before the workshop as part of the participants' pre-work, followed by a fortnight after the event. This would enable us to determine statistically significant increases in any of the survey items.

Using a combination of self-rating Likert scales and comment boxes, the online survey administered in the first workshop contained 11 items. Items were included in both pre- and post-workshop surveys that addressed self-perceived ability to meet three broad, pre-defined course objectives, level of confidence in providing and receiving feedback effectively and level of comfort in participating in role play activities. Control items addressing levels of computer keyboard skills, typing confidence and previous experience using Second Life were included within the pre-workshop survey to ensure that data was not skewed by extraneous variables. Finally, levels of satisfaction and engagement with the skills practice activity were measured in the post-workshop survey.

Analysis of the data from both workshops revealed some interesting findings. In the first workshop, there were statistically significant increases between pre- and post-workshop surveys in the participants' self-ratings of ability to meet the pre-defined course objectives, in level of confidence in providing and receiving feedback effectively and in the level of comfort participating in role play activities. Furthermore, all participants were satisfied and felt engaged by the skills practice activities. Combined with the content analysis of the qualitative data, which indicated that Second Life was felt to have enabled "putting theory into practice", to have "reflected real life" through its synchronous form of communication and was "a refreshing change from a variety of other courses", it would seem reasonable to conclude that the use of Second Life as an alternative medium for role play activity was a success. As one attendee commented:

"[My key learning points were from] the excellent Second Life role play exercise, which was my first experience of this concept. I most definitely feel more confident in giving and receiving feedback in both my personal and professional life. I found the Second Life training very motivational".

However, there was a key limitation to the research data. In total twenty-two OU employees of various ages, roles, salary grades and of both genders attended the first workshop, with only eight participants assigned to the two groups using Second Life. Clearly, this was a very restricted sample size that limits making any definitive conclusions based on the data, particularly given that the statistically significant

increases in ratings applied to the data spanning all three experimental conditions within the workshop, making it unclear with regards to the exact contribution of the Second Life group's data. Despite this, the qualitative data and anecdotal feedback following the workshop illustrated an overwhelmingly positive reaction to the introduction of the virtual environment as a development activity. As long as we intended to design blended workshops that essentially used pre-existing developmental sessions as a vehicle, sample size would always be restricted by the limited resources available.

With the above in mind, the second workshop moved away from attempting to find the comparative worth of using Second Life for skills practice and focused instead on exploring how a slightly larger group of participants found this approach, measured by the same pre- and post-session surveys used in the original workshop. Although the final data set was reduced to 11 individuals following the attrition of a number of participants between pre- and post-session data collection points, the results were again extremely positive, indicating that participants felt that the use of Second Life had been a success. Specifically, there were statistically significant increases in the attendees' self-perceived ratings of ability to satisfy the pre-defined course objectives, in the level of comfort in using role play and in the level of confidence to provide positive and constructive feedback to others. Interestingly, however, there were no significant increases to be found in the ratings of confidence in receiving positive and constructive feedback. This is likely to be because participants were asked only to provide feedback within the role-play but not receive it, thus receiving few direct opportunities to develop their skills and confidence in this area.

Presented with data that suggested highly positive outcomes of using Second Life for staff development, albeit despite some methodological limitations, we set about reflecting on what it was about the workshop design that had potentially encouraged these findings. A number of observations made by facilitators involved directly in the Second Life role play activities were felt to be important here. Discussions within the facilitator debriefing sessions following both workshops indicated that participants appeared to not only practice the techniques for giving feedback within the confines of the in-world virtual role play activity, but that this stretched further to the group's interaction with each other in the real-world. This was observed in the form of peer debate and feedback on ideas for taking the in-world conversation forward. As one particular respondent noted in her feedback: "working in a group collectively on the preparation was useful as it gave different perspectives and time to discuss them".

Subsequently, the first of two key learning points emerged: collaboratively controlling the Second Life avatar within the virtual role play offers more developmental benefits for the participant than were initially anticipated. Initial concerns about whether participants within the small role play groups would be able to engage with the activity when for periods of time they may not even be in direct control of the avatar were rapidly allayed through observation and the feedback data received. Not only did participants typically report high levels of engagement with the activity in the post-session survey, but were frequently observed to be discussing best ways to proceed whilst searching for consensus with fellow group members as the role play progressed. This appeared to allow the groups to move in and out of the role play with relative ease, whilst discussing in the real world how their next response related back to the theoretical grounding in effective feedback at the outset of the workshop. Furthermore, having the support of fellow group members may not have just ensured that the role play activity was a more comfortable experience for participants but also may have provided the appropriate scaffolding required for individuals to move effectively through their own proximal zones of development (Vygotsky, 1978).

Subsequently, in using a virtual role-play scenario within a real-world setting, there appears to be potential for what could be termed as 'direct' learning through the virtual role-play scenario to practice feedback technique and skills, and 'indirect' learning through more informal debate and constructive challenge with peers in the real-world groups. This leads onto our second key learning point which was that the decision to opt for a blended design in the workshop was not only necessary given the traditionally on-site nature of developmental activities within the organization, but also crucial in enabling the participants to experience how technologies such as Second Life can facilitate the development of skills that don't simply have to be left behind in the virtual world once one has logged off. The opportunity to instantaneously print out transcripts of the in-world role play dialogues and be able to analyse them within a facilitated discussion following the activity is just one small but salient illustration of how such a technology can enable learning from within the real world, to the virtual world and then back. Whilst it is not inconceivable that the same effect could be achieved with exclusively virtual content, this is perhaps an area of investigation for the future rather than a solution for the present. The University has good links with the Sloodle project ([www.sloodle.org](http://www.sloodle.org)) and it is anticipated that developments within the University virtual world provision will incorporate this sort of mashup learning management solution. Thus, we argue that learning through this blended design adds a greater richness than a wholly real-world or wholly virtual-world experience.

## *DISCUSSION*

As detailed previously in this chapter, Second Life appears to have contributed significantly towards the positive experiences of Open University staff as part of their in-house developmental activity. Specifically, evaluation of participant feedback has indicated that both increased confidence and high levels of engagement have been reported in response to the blended workshop design, combining more traditional, real-world techniques to facilitating the development of effective feedback skills with the opportunity to practice through role play activity within a virtual environment. Participants had the opportunity to construct meaning through purposeful collaborative activity, drawing on the socio-constructivist approach already seen to work well in virtual worlds. Participants each applied their own perspective as well as the collective view of their small cohort, demonstrating aspects of a pragmatic or emergent constructivist approach (Cobb, 1995; Gredler, 1997).

Recalling the introduction to this chapter, the authors' original rationale for utilizing a virtual environment as an alternative form of skills practice was the theory that participants might feel more comfortable and confident role playing via the medium of a collaboratively controlled virtual identity in Second Life rather than via their own physicality in the real world. Though the evaluation studies conducted to date have been necessarily small in scale – a criticism that is somewhat counteracted through using a well-established developmental workshop as a vehicle for the research design – the overwhelmingly positive feedback from those having attended the workshops suggests to us that Second Life has every chance of becoming a natural component in the OU developmental practitioner's toolkit.

However, with every statement proclaiming the omnipotence of a novel technology come the inevitable caveats. Indeed, there will be those who argue that equivalent success, in terms of positive developmental outcomes and increased levels of confidence, can be achieved through blended workshop designs utilizing any number of alternative forms of technology, for example high definition video capture, PDAs or

web-based social networking sites. In developing interview skills, for instance, it is perhaps the case that video is a more appropriate medium for practicing, recording and reviewing such skills than Second Life, which has yet to fully develop the capability to realistically mimic the subtlety and complexity of human body language or spoken intonation. Virtual worlds such as Second Life appear to have a great deal to offer a wide range of individuals in terms of some forms of skill development, but they should not be seen as the one-size-fits-all solution to every developmental need. Moving forward within the Open University we seek to capitalize on the positive affordances of working in virtual worlds through a cycle of rigorous academic planning, execution and evaluation. To extend the toolkit analogy, simply because an interesting and shiny new tool appears to have been effective in a particular task doesn't mean that it should become the workperson's tool of choice for all subsequent tasks, regardless of context. This is the question that practitioners looking towards new technologies need to ask themselves when designing their methodologies.

We continue to ask the same question of our own work as we plan the next phase of our research using Second Life in staff development. Despite the numerous, diverse courses that the OU's Human Resources Development team run throughout the year, the focus on feedback skills still remains the most relevant when incorporating the use of Second Life – primarily due to the interpersonal basis of providing effective feedback and the opportunities that Second Life offers for peer-to-peer interaction. However, with the next iteration of our workshop design, many of the key criticisms have been addressed in order to provide greater validity to our argument that Second Life does add value to current development practices within the organization. With regards to the two previous pilot workshops, it was a justifiable criticism of both that they relied exclusively on self-report data, thus incurring the methodological issues associated with single-source data sets, such as common method variance interpretations of findings (e.g. Holmbeck, Li, Schurman, Friedman and Coakley, 2002). Furthermore, although the findings from the pilot sessions indicate a positive impact of using Second Life in terms of increased confidence in providing feedback effectively and having successfully met the pre-defined course objectives, to date it has not been possible to adequately conclude any behavioural outcomes as a result of the workshop intervention.

In order to address the above limitations, the next workshop shall embrace a 360 degree feedback to the evaluation. Specifically, participants are asked to nominate three colleagues – typically a manager, a peer and a subordinate – who complete a version of the online survey based on that used in the pilot studies. This survey is administered one week prior to the workshop, and then six weeks following, in order to provide a sufficient time frame for the participant and his or her colleagues to assess any behavioural indications of ability. Though arguably more resource intensive as a form of evaluation, it is hoped that the multi-source approach will present a more robust indication of each participant's feedback skills development, thus leading to a workshop that fully embraces the organisation's commitment to 'Best Practice'. It is anticipated that further contributing to this desired outcome will be the extension of the workshop from a half-day to a whole-day, the opportunity for participant groups to role-play in Second Life directly with other groups rather than with practitioners – thus enabling individuals to practice receiving feedback as well as providing it – and finally, referring more explicitly to the importance of body language and vocal intonation in giving and receiving feedback. This was felt to be an important addition to the workshop as a number of participants from the pilot studies had indicated the limitations of Second Life in effectively communicating this aspect of feedback skill when mediating discussion through text alone. This shall be

addressed through encouraging participants to describe their conscious choices of body language through the use of the /me function in Second Life as they create their role-play dialogues.

As with any developmental tool, the effective use of virtual worlds within a blended workshop to support participant learning is explicitly linked with a clearly defined purpose, or goal, for that virtual activity. However, we have realized that it is not simply a case of taking a traditional activity and adjusting it to a virtual world environment. We believe it is important that we do not merely recreate identical activities in a virtual world from those we have previously conducted in the real world. Whilst the evaluation data of both workshops demonstrated similar levels of achievement of the pre-defined learning objectives, the first workshop appeared to motivate and maintain a high level of engagement and energy within the session. The second workshop, on the other hand, was felt by the session's facilitators to lack the energy and excitement of the first workshop.

From a period of reflection and discussion about the two trial workshops, it is the authors' belief that that this difference was largely due to the more flexible, experimental nature of the first workshop, which engendered a high energy and fun atmosphere. Conversely, the second workshop was far more tightly structured in terms of time and activities, resulting in what the authors believe to have been less flexibility to 'enjoy' the virtual world environment. This observation appears to correspond with the views of Castronova (2005, 2006), who urges educators and business people to consider the design of learning activities from the perspective of game theory. Castronova maintains that a virtual environment alone will not effectively harness the energy of virtuality, but that it is the environment, combined with the design of the activity that will engage or detract from the learning experience.

As Addison & O'Hare (2008) suggest, technology can offer an opportunity for enhanced social interaction as a pathway to constructing meaning and knowledge. It is this opportunity for shared thinking and sense making that we wish to capitalize on within our blended learning design. Hollins and Robbins (2008) draw parallels between virtual world environments, such as Second Life, and massive multiplayer online role-playing games such as World of Warcraft. Whilst they conclude that they are not identical categories, they suggest that both provide a 'playful' immersive experience. The author of the current chapter concurs that this element of 'playfulness' is an important ingredient in successfully engaging participants in the blended learning experience. This led us to consider how we might redress the balance of structure and playfulness in order to create a more consistent high energy learning intervention.

In considering gaming theory, a key element of online games is the use of quests to initiate users into the environment of the game, and to support them in developing basic user skills. As observed by Jeffery (2008), this serves to entertain as well as teach users. Consequently, we revised our workshop design to incorporate a series of stepped quests, or goals, for participants to engage in along the learning pathway. This included providing goals within the real world, such as identifying strengths or weaknesses of various approaches to giving feedback, as well as group activities in the virtual world, which begin with an orientation quest and ultimately progress to the role play activity. Through successful achievement of each quest or activity, the participants progress to a more challenging one. We anticipate that this will enable us to build upon our fledgling notion of 'direct' and 'indirect' strands of learning: that which occurs through the direct interaction with the workshop activities both in the real world and in Second Life, and that which occurs via the discussions generated

between individuals that supplement the workshop activities. Ultimately, however, we hope that by providing a structured but fun approach to using Second Life, it will invigorate and utilize the sense of energy in users that a virtual world environment can readily inspire.

Future consideration for HR staff involved in training and development (and indeed faculty teaching and development throughout the institution) includes the question of whether to purchase a dedicated island space or continue to use the publicly accessible areas on Open Life Island. As noted previously, it is possible to close an area for the duration of an exercise, but this can result in interested individuals standing at the boundaries, sometimes within virtual earshot of activity. The island will shortly be controlled by an in-world booking system that enables verified users to automatically book and close an area (instead of the manual changes currently necessary), hence making this a more formal and recognized aspect of life on the island. Spaces are likely to be booked with increasing frequency as general use of the virtual world presence for tutorials and meetings rises. Whether this is sufficient for enabling the increasing use of Second Life to support HR blended learning within our existing provision will thus depend largely on the volume of throughput and the need to extend beyond the two role play offices that are currently in use. These questions of access and scalability will continue to face all users of our virtual world provision as uptake increases in the relatively short term future.

Unfortunately, the irony of embracing the many positive learning-based elements of engaging in games is that for some, virtual environments will always represent a frivolous waste of time: a pursuit unfit to grace the arena of traditional, 'serious' training and development activity. Whilst we readily encourage you to consider the ways in which virtual environments might add value to developmental activity within your own institution, we would also warn you to expect an element of resistance. For every new adopter eager to sample innovative alternatives to the established format, there will most likely be the traditionalist: wary and highly skeptical of the change. There are likely to be further challenges found in the technical support of your institution in permitting software such as Second Life onto its network. Indeed, one of the biggest technological obstacles we faced was enabling the computers used in our workshops to bypass the University's highly secured firewall. Fortunately, our two pilot sessions required only six terminals so issues relating to bandwidth were not an especially salient issue. A relatively significant investment was required to ensure the workshop participants could receive the full benefit of Second Life and to do so was a crucial decision. By allowing participants to use graphically incapable sub-standard machines, our experimentation in using Second Life would have effectively been over before it even started. What is interesting, however, is that the positive change in institutional attitude to supporting Second Life has been dramatic in the time period following our initial workshop, although we have been fortunate to have received support from a high level within the organisation: a luxury that may not be so apparent in fellow institutions.

Practitioners looking to utilize Second Life, or other virtual world environments, as part of their development toolkit need to be mindful of how they introduce this into their institution or organization. With virtual worlds still relatively within their infancy compared to more traditional methods of learning and development, engaging key stakeholders and enhancing their understanding of the technology will be essential. Confused perceptions of the purpose of virtual worlds and their ability to provide an appropriate learning environment will need to be acknowledged and addressed. We have found that providing an immersive session within which these key stakeholders

can experience the learning activity for themselves is especially beneficial, and would advise other practitioners to consider the same.

The community of virtual world users is growing daily and provides a global resource from which to draw and exchange knowledge. Virtual worlds are a fascinating and evolving tool and their future depends very much on the use to which we put them. We look forward to our continuing participation in that evolution.

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