



The Autumn 2008 Snapshot of
UK Higher and Further Education
Developments in Second Life

Virtual World Watch

www.virtualworldwatch.net

October 2008

Funded and supported by the Eduserv Foundation

www.eduserv.org.uk/foundation



Summary

'Second Life is not the only fruit'

This is the first snapshot survey where a significant number of respondents were supported by external, often research-based funding. The spread of funding sources is diverse, including national sources (JISC are mentioned by several respondents), European funding and non-academic sources. Of the other respondents, the majority had institutional support, e.g. from central funds, the department, or a Pro-Vice Chancellor's fund; such funding is sometimes multi-departmental in nature.

Many respondents had either carried out some kind of teaching and learning activity, or were planning such events for the new academic year. These included collaborative learning and design, seminars, workshops, tutorials and induction courses. Several lecturers and supervisors were using Second Life to hold tutorials, or communicate with remote undergraduate or PhD students. A significant number of universities are carrying out research as to the effectiveness of using Second Life especially in teaching and learning.

Some, but not all, teaching and learning activities were assessed, with no particular method of assessment being predominant. Positive benefits were mentioned by the majority, such as student skill acquisition, ease of communication and the ability to meet peers one would otherwise not meet. Problems such as the amount of work required to run in-world sessions were also reported.

As with previous snapshots, the two issues of obtaining funding for virtual world development, teaching and learning, and technical problems, predominated. Several respondents indicated a need for guides and tutorials, as well as a ready-to-use 'kit' of high quality, education-specific resources.

The general reaction of peers and academics to virtual worlds seems to have improved over time. More respondents reported largely positive, or a mixed, attitude locally and in the wider university sector. Some academics who were previously cautious or negative about the use of virtual worlds in education become more positive after using the technology, or seeing the benefits. Funding for research and virtual world projects has also had a positive effect on academic attitudes.

Looking ahead, most respondents who chose to answer thought that virtual worlds were more likely to be a 'mainstream' feature of UK education, rather than a 'niche' or 'novelty'. However, several of these respondents felt this would be a gradual long-term development over several years.

Many respondents had used, or were considering examining, virtual worlds and online environments other than Second Life. A dozen such applications were cited. Of these three were mentioned by far the most: Google Lively, Wonderland and OpenSim. Lively was found to be disappointing in terms of education-relevant functionality, Wonderland had considerable communication potential, and OpenSim had attractive options for creating a closed virtual environment.

This theme, that Second Life is not the only option for teaching, learning and other educational activities in virtual environments, will be explored in future snapshots and activities of Virtual World Watch.

1. Quotes of note

Some quotes 'caught the eye' while compiling this survey report.

"Hard to sum up 18 months of experience in a sentence! Overall my experiences have been exciting, perhaps especially when I have been the one learning from teenagers who have developed not only technical and other skills in the environment, but a really effective sense of how to teach!" (Julia Gillen)

"Educationalists need to embrace the idea that environment and interaction are inseparable." (Simon Bignell)

"There may be a whole range of virtual worlds emerging which might be used for different purposes and subjects. I think that there will still be value in a 'messy', more heterogeneous world like SL, as life is messy and heterogeneous and I don't think students would be done any favours if they were only allowed in sanitised 'education only' silos." (Sheila Webber)

"It has taken around 15 years from the birth of the web for web-based e-learning to become thoroughly institutionalised (with ongoing pockets of resistance throughout academia). The 3D internet could easily take as long." (Daniel Livingstone)

(On how virtual worlds are perceived in UK universities) "One-third mixture of excitement about the potential, one-third trepidation about the user requirements and the lack of support forthcoming from IT 'service' departments and one-third bewilderment about what the value of this for education could be." (Mark Childs)

(Same question) "Some real enthusiasm, some disgust at moving away from the real-world, some apathy." (Lorna McKnight)

"In general, adapting our learning approach to virtual worlds has forced us to re-examine our beliefs about education, and we have developed a deeper understanding of what we do well. Abstracting and testing different learning approaches in virtual worlds has enabled us to apply them more effectively on the real life courses that we manage." (Ian Truelove)

"I think the idea of virtual worlds will not be a dead-end novelty as long as the software gets better with less bugs and continued development, and enough people in UK education see the potential and create examples of virtual world experiences which can be shown to positively benefit the users." (Lindsay Da Silva)

"Although Second Life is virtual it was clear that a number of experiences can have an unexpected emotional impact: in a positive light when students were complemented on their work by casual passersby and in a negative light with students being harassed, and once imprisoned." (Simon Walker)

"It reminds me of the early days of the web when HE web pages were put together by some very unlikely people purely because they had the skills and interest. And there were all the pitfalls of having people working on 'official' sites who were basically hobbyists who didn't necessarily have a great understanding of communication and marketing but who liked playing with HTML." (Kriss Fearon)

"Generally very successful in meeting the needs of distance learners - I have better retention than I do with face to face groups." (Anna Peachey)

2. Introduction

2.1 The snapshot series

This is the fourth snapshot report, the first being in May 2007. During the 18 months of the series, the experimentation and use of virtual worlds in UK universities, and to a much lesser extent colleges, has steadily increased. Our main problem, close to submission of the first snapshot, was finding adequate data to make it worthwhile; the main problem for the snapshot you are now reading was dealing with the quantity of information.

As with previous snapshots, the research and report attempts to provide a representative picture of Second Life activities in HE/FE. It does not provide a comprehensive overview; there are many Second Life (and virtual world) activities not detailed here. Some are temporary; some have been completed and their staff have moved on; some are not public, or not 'official'.

For the next year, snapshots will be undertaken as part of the Eduserv Foundation-funded Virtual World Watch¹ project. Other reports, and blog postings, on trends and virtual world activity in UK HE and FE will appear on the website during that year.

2.2 The questions

For clarity, the questions are reported here in a different order from how they appeared in the survey form. We started by asking people about themselves and their institution. Questions one and three in this report cover what they had done, were doing, and (in a few cases) were going to do in Second Life. Question two covered the issue of who was funding the effort (staff time) and resources (PCs, land fees).

This was followed by several questions about teaching and learning activities in Second Life, including one about formal or informal assessment of the activities. This has been flagged up by many people curious about virtual worlds as an important factor in determining whether they invest (or, as a few put it, 'risk') their own time and resource in such activities.

Two related questions were asked regarding what would help academics in their further Second Life or virtual world activities. As well as the usual answers of 'more money' and 'easier technology', a few new requirements, such as a 'kit' of educational resources, were mentioned by respondents of this snapshot.

Anecdotal evidence over the last few months, as well as blog postings and 'tweets' from the UK digital information research community, indicated an increased interest in virtual worlds other than Second Life. Therefore in this survey we asked a question about non-SL virtual world use to see if there was significant interest or activity (answers: yes, and yes).

The last three questions presented in section two of this report concern three aspects of the perception of virtual worlds: peers, UK academia in general, and the survey respondents themselves. The last question was deliberately done in a 'tabloid' style to see if more forthright reactions could be gained from reticent respondents. The three questions concerning virtual world perception were dispersed through the survey form so as not to take the focus

¹ Virtual World Watch: www.virtualworldwatch.net

away from core discussions (namely what academics are doing, and how successful are they at it).

2.3 Responses

Responses were received from staff and research students in 36 UK universities and 2 colleges. We have kept their text as close to the original submission as possible, making only minor editorial changes where necessary for clarity.

Two companies who develop applications and buildings in Second Life for the UK education sector contacted us and were also included, as was a submission from the JISC Regional Support Centres.

A few universities (Coventry, Glasgow Caledonian, Lancaster and the Open University) submitted replies from several people. Nine academics declined to respond to this survey but would consider future surveys; in most cases, this was because they didn't feel they had anything significant to report, or their work was currently in development. One response (from a research student) was discarded due to inappropriate language and comments.

Three people who promised responses didn't submit. Three others sent their publication list or CV; as this snapshot isn't a literature review, and such material didn't fit with the survey questions, it wasn't incorporated into this report.

Though it would be satisfying to obtain a comprehensive account of all virtual world activities, this isn't possible. As previously mentioned, some academics don't want to respond for a number of reasons. While some are able to respond freely and/or blog or 'tweet' about their work, others have to go through more official channels and decision-making in order to release news.

2.4 The next snapshot

The next snapshot will be available in the second half of January, 2009. Data will be collected from the start of December 2008. Please add Virtual World Watch to your RSS feeds, and follow us on Twitter, for further news and snapshot updates.

2.5 Acknowledgements

Thanks to Andy Powell, Pete Johnston and Ed Barker at the Eduserv Foundation² for support, contacts, tweets and for funding Virtual World Watch.

Thanks also to Ruth Wilson³ of Scotproof for proofreading this report.

Above all, thanks to the many academics who filled in survey questionnaires, often in great detail, openness and refreshing frankness, or who answered questions about their Second Life activities. And a special thank you to those who have now done this, without complaint, for several snapshots. Like blood donations, we are thinking of some kind of reward for those who reach a certain number of submissions over the years.

² Eduserv Foundation: <http://www.eduserv.org.uk/foundation>

³ Ruth Wilson, proofreader: <http://www.scotproof.com/>

3. Survey Responses

3.1 What are you doing, using which virtual world, why and where?

“Using Second Life because it was available to me as the university had an island. Because it is open access and because it was fun. I wished to identify if interprofessional learning could take place in this environment. I’m on the Coventry University Island, the Centre for Interprofessional Learning Building.”⁴

“Second Life (mostly), OpenSim, Twinity, Lively by Google and a range of others for testing. My own interests are for collaboration, task support, emergency response research, training.”⁵

“We’ve built a photo realistic replica of the award winning Saltire Centre as a hub in our virtual presence on Second Life, and have built several other (Glaswegian) landmark buildings located around George Square as an invitation to the local community. We want to inform (potential) international students about the university, allow them to use the environment during induction so they can join their fellow students without physically having arrived yet. There’s a lot more in the pipeline, most notably several collaborations with local governmental/educational/business entities.

Also immediately set up a weekly recurring evening class (aka workshop), informal, open for students, staff and the general Glaswegian community to find and support interested individuals.”⁶

“Second Life. Ran a university wide competition to find pilot 3D world teaching and learning projects for the SL sim. Had a number of entries and are attempting to support all of these. Three winning entries getting a small pot of funding (£ and L\$), supported by departmental (CA) strategy budget for emerging technologies strand of activity.

A further two of the runner-up entries are being given some in-world funding to cover 'living costs' (clothing, hair, gadgets, texture upload for building) etc.

Have been working with a range of schools/departments across the university to get individuals registered and 'inducted' into SL. This has included demos, taster sessions, discussions, invited talks, and 2 hour 'workshops' (commonly referred to as 'avatar training' amongst staff, even though we did not use that phrase), where we take up to four members of staff at a time. This model works well to give staff time to get in-world, a thing they find difficult during usual working hours, especially when new to SL.”⁷

“Second Life. Teaching first year Computer Science students how to build and design object and scripting.”⁸

“We bought an island in SL back in July and are now in the process of designing its layout and considering its uses.”⁹

⁴ Elinor Clarke, Centre for Inter-Professional e-Learning, Coventry University.

⁵ Professor Austin Tate, Artificial Intelligence Applications Institute, University of Edinburgh.

⁶ Ferdinand Francino, Project Manager Web 3.D (Second Life), Glasgow Caledonian University.

⁷ Kathryn Trinder, Research Fellow (e-Learning), Glasgow Caledonian University.

⁸ Dr Judy Robertson, Computer Science, Heriot-Watt University.

⁹ Will Stewart, E-learning Adviser, University of Bradford.

“I created a virtual library building to help me learn about building and creating content in Second Life, and then was offered a temporary piece of land on which to place it after I showed it to a colleague from another organisation. This was to hopefully generate interest and participation in Second Life and virtual worlds in general to explore their potential, but in all honesty the interest shown seems to have been minimal, though the stats counter seems to show quite a number of visits to the virtual library.

I personally think virtual worlds have lots of potential for learning and teaching, and we should be exploring this potential, but there seem to be a number of barriers at present, both technological (need for reasonably powerful computers, loading the client onto ‘locked down’ institute computers, broadband internet access, etc.) and psychological - I have come across quite a few negative views about Second Life!

My virtual library, which is based on our physical library (and I know that’s a whole debate in itself (!), but my view is that recognition can provide some almost emotional ‘hook’ to get visitors to explore a site), is located in Second Life at: <http://slurl.com/secondlife/Hauwai/215/152/72>, though this is only temporary, since it is built on private land owned by a colleague from another organisation.”¹⁰

The PREVIEW project is a collaboration between Coventry University and St George’s University, London. We are developing problem-based learning scenarios for healthcare courses using Second Life. We chose Second Life as a platform as it was ideal for the level of collaboration required.”¹¹

“In Second Life, at <http://slurl.com/secondlife/Games%20at%20DerbyUni/207/29/23>, we are teaching undergraduates psychology skills and actively researching psychology. We are also conducting funded research looking at how Problem-Based Learning can be conducted in the virtual world.”¹²

“Second Life - the university has an island on Second Life which we are currently exploring to see how useful this environment could be in enhancing our students’ learning process. It is not public at the moment.”¹³

“Over the last 18 months we have established and explored novel applications for virtual worlds in healthcare, with a focus on innovative and efficient means for communicating complex health messages, the visualisation of future health care delivery models, medical device development, professional networking and educational tools for patients and staff.

To focus our efforts Imperial College has created a new research group headed by Professor Ara Darzi within the Department of Biosurgery and Surgical Technology - called the Medical Media and Design Laboratory (MMDL). This group will study and redefine the way that new digital media is used in healthcare. It will develop and innovate within the technological fields of web science, the online metaverse, serious games and human interface technologies. Its focus is on the development of novel online technologies and how they may be best utilised for professional and public health education, medical innovation and service delivery.

¹⁰ Lindsay Da Silva, Technical Services Librarian, University of Chichester.

¹¹ Maggi Savin-Baden, Director, Learning Innovation, Coventry University.

¹² Simon Bignell, Lecturer in Psychology, University of Derby.

¹³ Remy Olosoji, School of Distance and E-Learning, University of East London.

We are interested in all virtual worlds but to date have piloted many applications and initiated most of our research in Second Life (as a good prototyping environment for rapid deployment of research builds).

Most of our research work on medical education takes place on a private island 'Medical School'. MMDL operates several islands in the SciLands (www.scilands.org) where we collaborate with scientists in other disciplines and with medical colleagues at the Memorial Sloan Kettering Cancer Center and the NIH's National Library of Medicine in the USA."¹⁴

"Evaluating the role of Second Life/virtual 3D roles in supporting learning and teaching, particularly in terms of communication and collaboration, within and beyond the institution. One module was taught within the system during 2007/8 with further modules being planned/implemented in 2008/9. Staff are provided with virtual space with which to experiment and students are given access on request. Some limited central support is provided for staff with both a Second Life Interest group and Developers group meeting at intervals during the year."¹⁵

"I am a core staff member of Schome Park - a project with teenagers based at the Open University (www.schome.ac.uk/wiki/Main_Page) participating, researching, disseminating and seeking research funding to develop further.

Also co-founder of Lancaster University Second Life users' group, and a member of the conference committee of ReLIVE08 (www.open.ac.uk/relive08/)"¹⁶

"Nothing at the moment; my previous interest was related to its use for distance learning. I have previously created a learning space with resources and invited MBA students in."¹⁷

"Our LiVE project went well. It was (as much as anything) a starting point for Virtual Birmingham, an initiative we are undertaking with Service Birmingham (on behalf of Birmingham City Council).

One of the issues we had was the Millennium Point management are very concerned about how public the virtual model becomes. In fact at present, we don't have permission to make it public due to security issues (for the building), and the duty of care to the other tenants in the building (IMAX cinema are one). Also, the use of registered logos etc.

We are hoping to get this reviewed and take the building public, especially as Millennium Point have much to gain from marketing the building and the businesses inside it. I presume it's an issue that will occur in many virtual models, especially simulations/mirrors of cities."¹⁸

"I used SL as a research tool for a project on my Masters course last year. Now I am about to begin a PhD with the possibilities of maybe using SL within my research, although it will be only a secondary consideration."¹⁹

¹⁴ Dave Taylor, Programme Lead, Virtual Worlds and Medical Media, Imperial College, London.

¹⁵ Dr Tim Linsey, Head of E-Learning, Kingston University.

¹⁶ Dr Julia Gillen, Literacy Research Centre, Lancaster University.

¹⁷ John Mackness, Lancaster University.

¹⁸ Jerry Foss, Technology Innovation Centre, Birmingham City University.

¹⁹ Jennefer Hart (MRes Student finished), Lancaster University.

“I am getting my PhD in the use of virtual worlds (SL) for education. I teach a class using SL. I use them because I think that they are [a] gateway to improving higher education because they can help overcome pedagogical barriers that have stifled educational reform for years. They provide a ‘safe environment’ for teachers, not just students. SL allows teachers to experiment with more constructivist pedagogies; many of whom are not comfortable enough to try these in their real world classrooms. But in SL it is much easier.

<http://slurl.com/secondlife/Lancaster%20University/70/126/80> will be opened to the public in Oct 2008; it is currently closed pending a clean-up from research that was being done over the summer.”²⁰

“Second Life, as part of PhD research. My work was at Lancaster University island, but will soon be cleared to make way for new users.”²¹

“We are working with Leeds Met Art and Design student in OpenSim and Second Life as part of the JISC funded Open Habitat project. We are interested in the potential for virtual worlds to accelerate the development of creative skills through building, collaboration and dialogue. We are also interested in personal development through identity construction and role play, supported by coaching.

We have two islands at the moment in Second Life:
<http://slurl.com/secondlife/LeedsMet/128/128/128>
<http://slurl.com/secondlife/LeedsMet%20FAS/128/128/128>

We have been trying to purchase a third island for about 5 months, but Linden Lab's insane system for ordering islands does not seem to be compatible with our institution's finance department. I'm just on the brink of canceling the order altogether.”²²

“We have two projects at the University of Leicester:

MOOSE: The MOOSE project investigates the scaffolding and processes needed to enable groups of students from formal HE environments to establish their socialisation and engagement for more productive information and knowledge exchange and learning through the medium of online 3D Multi User Virtual Environments (3D MUVES). It assesses the institutional opportunities and barriers to the successful deployment of and enhancement of student learning through 3D MUVES.

CALF: exploring plausible ‘alternative futures’ for learning and teaching methods in HE through in-world creative events. Events in Second Life to surface scenarios for the future - grounded and context specific.

They can be found at The Media Zoo in Second Life.”²³

“Basically we are assessing Second Life’s usefulness for library advisory support of in-world students. We will also be using it for a small number of classes and project work in biological sciences and (probably) archaeology. This can be found at Second Life, Liverpool University Port (may be closed or part-closed during classes/project work).”²⁴

²⁰ Michele Ryan, Lancaster University.

²¹ Lorna McKnight, Lancaster University.

²² Ian Truelove, Principal Lecturer, Leeds School of Contemporary Art & Graphic Design.

²³ Gilly Salmon, Professor of E-learning & Learning Technologies, University of Leicester.

²⁴ Dr Peter GG Miller, School of Biological Sciences, University of Liverpool.

“Yes, I have a personal plot of land I use for educational purposes. There is an underwater ‘Deep Learning Institute’ with presentation/display materials, seating and meeting area and the possibility to hold public discussion. There is also a Skypod conference area titled the ‘High Learning Institute’ that I only use if/when I need to hold conference-type session or media presentation sessions. I am developing a ‘Second Life researcher toolkit’.

There are problems in relation to the need for constant updating of the client. We need an Admin account to do this and this presents some added complications to the process. We have SL installed only in some multimedia labs. However, our IT staff are very helpful and strongly interested in looking at viable options.”²⁵

“I am leading a project to explore using SL at the university. This is an institutional wide project led by a steering group. At the moment we are in early stages of development and we are discussing requirements and objectives for the island (for teaching, marketing and research).”²⁶

“Three things using Second Life:

- Looking at the affordances of teaching in a virtual world.
- Production of a teaching toolkit for Second Life on behalf of the HEA ICS Subject Group, see: <http://userweb.port.ac.uk/~chandler/HEA-ICS/>
- Running workshops introducing people to SL.

Second Life, UoP Island - in particular the in-world part of the toolkit produced for the HEA ICS is available at: <http://slurl.com/secondlife/UoP%20Island/240/19/53>”²⁷

“We use Second Life for music network performances, for teaching students in and about virtual worlds/dislocated projects and for re-appropriation of the SL platform.

SARC has a small plot of land on the European University Island. We have concerts and will be using the space for a teaching project in 2009 with students from Drama and Music plus two international artists (from the UK and US) that will be meeting the students virtually and will direct a project on improvisation through SL.”²⁸

“Various research projects, including MUVEnation: developing a European peer learning program for teacher training for the use of ‘Active learning with Multi-Users Virtual Environments’ to increase pupils’ motivation and participation in education; LLL3D looking at the use of MUVes in lifelong learning; CoP3D: a Reading based Community of Practice.”²⁹

“a) Intervention with first year BSc Information Management students, culminating in them undertaking research interviews in Second Life and analysing the transcripts for a credit-bearing assignment. This achieved the desired academic outcomes last year, so I am just about to start this exercise again. This year I am anticipating ethics approval to use the results for publication (not just the assignments).

b) A follow-up activity about the steps in the research process, in a module in the following semester.

²⁵ Elena Moschini, MA Digital Media course leader, London Metropolitan University.

²⁶ Andy Beggan, IS Learning Team Leader, University of Nottingham.

²⁷ Jane Chandler, Principal Lecturer, School of Computing, University of Portsmouth.

²⁸ Dr Franziska Schroeder, School of Music and Sonic Arts, Queen's University Belfast.

²⁹ Dr Shirley Williams, School of Systems Engineering, University of Reading.

c) Students on a Masters option, Educational Informatics, were inducted into SL and had to include proposals for use of SL as one of the tools addressed in the problem-based coursework.

d) A series of discussions: 25 events plus a parallel track to the Learning Through Enquiry Alliance conference, June 2007. The latter is documented on another wiki at <http://networked-inquiry.pbwiki.com/About+LTEA2008+in+Second+Life> and the events are listed on the Infolit iSchool wiki.

Second Life has richer affordances than some of the other, less technically demanding, worlds. It is the publicly-open world which is most used by educators and business people, therefore it has a wide range of content, and people to network with in-world.”³⁰

“We are developing problem-based learning scenarios for Healthcare students in Second Life. This is a 15 month project, from January 2008. The problem-based learning scenarios are for Paramedic and Clinical Management students. At SGUL our focus is on the Paramedic scenarios, which are developed using a ‘virtual patient’ model. Virtual patients are web-based resources that test students’ clinical decision making.

We have created five different Paramedic scenarios for the students work through, collaborating together in small groups. All scenarios start with call to scene, with some basic dispatch information. The students are then able to interact with the scenarios in a variety of ways: they can ask the patient basic questions, they can assess different parts of the body, and they can use any object from their Paramedic ‘kit’ (replica of a Paramedic kit in real life) to assess, diagnose and treat the patient. The scenario ends with decision on if/how to transport the patient to hospital, and a handover at hospital.

The Paramedic scenarios are based on the St George’s Second Life Island, SLURL: <http://slurl.com/secondlife/St%20Georges%20University/66/181/25/>

The island is open, and you can see the scenarios. To be able to interact with them fully you will need to register. You can either register on the island through a registration board or through our web form: http://www.elu.sgul.ac.uk/preview/blog/?page_id=65.

The Clinical Manager scenarios can be found on Coventry University Island (<http://slurl.com/secondlife/Coventry%20University/140/147/137/>).”³¹

“Investigating the benefits and limitations of using SL to complement teaching and learning - and assessment - in the area of environment and sustainability.

The Staffordshire University office is temporarily based on Education UK’s island: <http://slurl.com/secondlife/Education%20UK/195/165/30>”³²

“We recruited two student ‘island builders’ who are developing Surrey Island at the moment; we hope to have this completed in early autumn. We have not been able to progress as quickly as hoped partly due to student availability and funding. Surrey Island features an initial demonstrator for Anna Vartapetian’s MSc dissertation,

³⁰ Sheila Webber, Senior Lecturer, Department of Information Studies, University of Sheffield.

³¹ Emily Conradi, e-Projects Manager, St George’s University of London.

³² Dr Glynn Skerratt, Faculty of Sciences, Staffordshire University.

concerning machine ethics and risk taking, and a number of presentations have been given about this in Second Life. Another student has presented his dissertation topic on tourism and authenticity, in-world from Eduserv Island Congress Centre.

Dr Lee Gillam has completed an initial analysis of exploring Second Life as an environment for learning and teaching with a group of three Masters students in the Department of Computing. He is including and inviting contributions from Masters and PhD students in the forthcoming cohorts.

Dr Tereza Capelos plans to examine how Second Life can be integrated in teaching this autumn, with an undergraduate class in political science research methods by testing a) whether students in a class seminar format perform better than in a seminar held in Second Life environment, b) whether students are comfortable interacting with other students in Second Life while collaborating for a short data collection project, and c) whether office hours available in Second Life give additional access to students for teacher/student interaction.

We are exploring options for using Second Life as a virtual resource for nursing students completing early diagnosis of dementia, with Dr Trevor Adams.

A student on work experience in the Surrey Centre for Excellence in Professional Training and Education undertook a survey of the uses of SL for health education and medicine. The wiki he built to host the resources he found was cited on the SimTeach wiki top 20 educational sites in SL.

We have formed an internal cross faculty (including Marketing and IT Services) Second Life Community of Interest and hope to meet both in-world and real life, every few months to discuss opportunities and ideas.

Our island at: <http://slurl.com/secondlife/Surrey%20Island/144/149/25> is under development.”³³

“Established the university campus on SL to give online visitors a sense of the university and explore possibilities for its further use for e-learning and marketing and communication. <http://slurl.com/secondlife/University%20of%20Sussex/75/16/38>”³⁴

“The Theatron project is building 20 theatres from throughout history on Theatron Island in Second Life. These will be used as venues for a range of activities involving performance, theatre studies and creative writing. The in-world location is Theatron Island.”³⁵

“Teaching

- Honours year class: Collaborative Virtual Environments. Also includes content on Active Worlds, OpenSim and other VWs.
- Undergraduate 2nd year class: Introduction to Virtual Worlds, due to start Feb 2009, distance learning.

Research and Development

- Co-investigator on the SLOODLE project, and international collaboration developing software to integrate 3D and web based virtual learning environments.
- Advisory panel member on the JISC Habitat project.

³³ Nicola Avery, e-Learning Unit, University of Surrey.

³⁴ Tony Hudson, Web Team Manager, University of Sussex.

³⁵ Mark Childs, Teaching Development Fellow Elearning, Coventry University.

Consultancy

- Virtual worlds and game-based learning consultancy work.

Our developments in Second Life are the virtuALBA sim (principally for teaching activity; also supports consultancy) and the SLOODLE sim (principally to support the SLOODLE project). In Lively we have the UWS chatroom.”³⁶

“We are exploring the learning experiences of students using SL as a virtual space. More specifically within the art and design and performing arts subjects where we are using SL to explore the potential of using virtual space for digital practice in digital media. We have developed a range of functionality including a teleporter, disco pad, cinema screen and interactive whiteboard.

Colleagues in the School of Art and Design and the School for Sport, Performing Arts and Leisure at the University of Wolverhampton are working and sharing good practice.”³⁷

“Our Pro-Vice Chancellor of Teaching wanted to investigate the potential of Second Life, mainly for teaching and learning. So we have an island and an informal project group of interested parties around the institution.

York’s island is called University of York. The SLURL to reach it is <http://slurl.com/secondlife/University%20of%20York/128/128/27>”³⁸

“There are two strands to the Scheme Initiative’s use of virtual worlds, one of which uses Second Life™ virtual world and the other uses Teen Second Life virtual world. In both cases the primary objective is to enhance our thinking about what scheme (the education system for the learning age) could/should be like.

Over the last couple of years we have found that people have great difficulty in coming up with creative (yet grounded) visions of education - they tend to focus on the physical spaces rather than deeper structures (such as assessment) and seem to be constrained by the predominance of existing models of education (school/college). Virtual worlds appear to be ‘unclaimed spaces’ (at least as far as education is concerned) - or what Castronova (2007) calls ‘the frontier’ - they seem to offer an opportunity to provide people with ‘lived experiences’ of radically different forms of education, which will help to extend our thinking about scheme (the education system for the learning age).

Teen Second Life™ virtual world activity - the Scheme Park Programme - started in late 2006, with students joining the community in March 2007. We are currently writing up data from the first three phases of this project. For more information see <http://www.scheme.ac.uk/>.

Second Life™ virtual world - using SchemeBase, which is located next to OpenLife (the OU’s main island). OpenLife currently focuses on supporting activity directly linked to OU courses whilst SchemeBase supports informal (and generally student led) activities which are open to anyone to participate in (and help organise). At the present time there is an active community on SchemeBase which consists predominantly of OU

³⁶ Dr Daniel Livingstone, Lecturer, School of Computing, University of the West of Scotland.

³⁷ Crispin Dale, Principal Lecturer, Technology Supported Learning, University of Wolverhampton.

³⁸ Kriss Fearon, Web Coordinator, University of York.

students. They are using the schomunity wiki and forum to organise events, collaboratively author material, and discuss how to develop the SchomeBase community in the future.

SchomeBase is open to the public. You have to join the Schome Educators group in order to be able to build. The slurl is <http://slurl.com/secondlife/SchomeBase/48/219/23>³⁹

“Currently only Second Life, because we started there with a small pilot project two years ago and that project has expanded. We have a range of presence for teaching and learning activities, and a very active learning community in-world, who use a range of media (blogs, wikis, social networking etc.) to communicate and to organise events such as discussion groups, visiting speakers, collaborative builds, building classes, field trips in-world and management of the welcome building on the social learning island, SchomeBase.

Formal tutorials on a range of subjects take place on Second Life, which is also used by our HR department for training, and hosts corporate training sessions for the Centre for Professional Learning and Development at Open.

Shailey Minocha, a Teaching Fellow at the COLMSCT CETL, is directing two JISC funded projects looking at socialisation in virtual worlds and at learning spaces in virtual worlds, and Lucia Rapanotti of the Computing Department is managing a Virtual Graduate School project on two closed islands in Second Life. The FIT Project, based at the OU, has recently bought a closed island to support their global e-conference in November.

“Personally, I’m the estate manager for ‘Minerva Island’, our region in Second Life. I’m also exploring possible hosting of an OpenSim grid for the UK academic community. I also regularly attend the Architecture Working Group’s meetings, and am a ‘Gridnaut’ (grid to grid teleport beta tester).”⁴⁰

“Using Second Life as a blended learning platform specifically for students undertaking Gas, H&V NVQs. The College of North West London region is at <http://slurl.com/secondlife/CNWL/77/180/26/>”⁴¹

“Our teaching and learning space in Second Life has been under development during the summer, to support a number of funded projects across campus. ‘TeesLife’ is currently open to builders and those setting up, and is open to the public from 5th November.”⁴²

“Second Life. Not really ‘using’ it. We have a closed (not public) island for academics to experiment with but that is about it. Interest is minimal.”⁴³

“We are using Second Life to experiment with a range of uses for virtual worlds in education, but really concentrating now on the potential for the simulation aspects of SL rather than the social aspects. There is a wide range of situations and events that are very valuable learning opportunities but that cannot be experienced for ethical,

³⁹ Dr Peter Twining, Senior Lecturer, Department of Education, Open University.

⁴⁰ J Ross Nicoll, Research Fellow, University of St Andrews.

⁴¹ Martin Biron, Senior Lecturer, Faculty of Technology, College of North West London.

⁴² Kate Boardman, Head of E-learning, Centre for Learning & Quality Enhancement, University of Teesside.

⁴³ Dr Stuart Lee, Director of Computing Services, University of Oxford.

safety or simply practical reasons. Also, some activities are best learned by role play and SL offers a more convincing environment for some forms of role play than classroom or breakout sessions.

Second Life, Elearning at UWE, can be explored at:

<http://slurl.com/secondlife/Elearning%20at%20UWE/110/128/35>⁴⁴

“We are looking at Second Life as a medium for creating films - using Machinima techniques. We worked with a small number of academic staff and developed a range of scenarios. We are hoping that some of the scenarios will be developed as student projects in this academic year. An article about this work is about to be published in a special edition of ALT-J.

We don't have an in-world location. We did all of our work in areas where you can build temporary objects for free. We built prototypes of objects and environments, and 'film sets'.”⁴⁵

“Supporting collaborative and community developments across the university and its partner colleges. The island will be used to support:

Further student design and build collaboration undergraduate projects.

- An Equality and Diversity Project: learning about representations and realities using SL, which is supported by internal university funds.
- Community developments such as the Linden Script exhibition built by Bromley College.
- A student collaborative project on one course of Certificate of Professional Development in e-Learning, Teaching and Training investigating collaborative learning environments.

Future plans may involve:

- Working with the Natural Resources Institute and Swedish Global School to design Global Sustainability assets and environments.
- SL presence for Universities Centre for Sustainability.
- Using SL to support paramedic training in School of Health and Social Care.

Our developments in Second Life are at:

<http://slurl.com/secondlife/Maritime+Greenwich/216/166/22>⁴⁶

“Ashridge Business School - creating the main part of their campus in Second Life as stage one. This will be followed up with a more detailed look at ways to use Second Life for their students who mostly work at a distance from the business school. Also considering the use of the sim as a marketing tool. It's not public yet but will be eventually; the sim name is Ashridge Island.”⁴⁷

“We are a virtual worlds and virtual characters consultancy based in the Midlands. Our clients include:

- Birmingham City University.
- Coventry University.

⁴⁴ Dr Liz Falconer, Manager, E-learning Development Unit, University of the West of England.

⁴⁵ Richard Mather & Andrew Middleton, Learning and Teaching Institute, Sheffield Hallam University.

⁴⁶ Simon Walker, Head of Educational Development, University of Greenwich.

⁴⁷ Pauline Randall, Developer, virtual-e.

- Wolverhampton University.
- Southampton Solent University.
- University of Southampton.
- St George's University of London.”⁴⁸

“I have moved the Linden Script exhibition over to the new Greenwich Maritime sim, where space has kindly been provided for the exhibition by the School of Computing and Mathematical Sciences of the University of Greenwich:
<http://slurl.com/secondlife/Maritime+Greenwich/216/166/22>

Now that I am no longer paying land costs, all the Linden Script THiNC books in the bookstore associated with the exhibition are now free of charge ☺

I have continued to use the exhibition with applicants to the FdEng in Software Development to give them a pre-course appreciation of programming concepts.

I also intend to repeat the use Second Life later this year with second year HND in Computer Systems Engineering students on the Database Programming course. This will involve an assessed exercise including research into web services including XML-RPC.”⁴⁹

“The RSCs have initiated a national group made up of representatives from across the UK with an overall remit to ensure that RSC staff are suitably informed and equipped to advise and support learning providers with enquiries regarding the use of MUVES within their organisations.

This group is investigating the current state of play regarding the use of Multi User Virtual Environments for teaching and learning by collating the considerable information which is already available from a variety of sources into a form which is easily accessible to RSC staff and supported providers. It will also investigate whether or not there is a need to support a UK-wide community of educators using MUVES.

Some RSCs have islands in Second Life to support their work. This is an individual RSC’s decision taken at regional level.”⁵⁰

“We are working on a project to create a new part-time MPhil for distance students to be delivered online. The programme will be offered by the Computing Department of the Open University starting from October 2009. We are constructing a virtual campus consisting of a Moodle site coupled with a Second Life island, called DeepThink, plus a number of synchronous Web 2.0 tools.

Only the welcome area of DeepThink is public. We are in the process of signing off the SL development, with an official launch of DeepThink expected in the autumn, at which point we’ll be able to provide co-ordinates.”⁵¹

3.2 Who’s paying for it (staff time, computing, other resources)?

⁴⁸ Soulla Stylianou, RL Client Director, Daden Limited.

⁴⁹ Clive Gould, HE PAL ICT, Bromley College of Further & Higher Education.

⁵⁰ Jane Edwards and Shri Footring, JISC Regional Support Centres.

⁵¹ Dr Lucia Rapanotti, Computing Department, Open University.

“Small research grant from the CETL (Centre for Excellence in Teaching and Learning) that I am employed in. Payment for my time only. Hourly rate of payment for a student to create the CIPeL IPE Centre (building).”⁵²

“A mixture of schools, central units at university level and projects. Many resources are being provided by projects and schools.”⁵³

“The executive has allocated a substantial budget.”⁵⁴

“The department bought our land, but my time is paid for as part of my normal teaching duties.”⁵⁵

“We were awarded some money through a TQEF project which has enabled us to buy an island and employ 3 PG students to help us build it. This has been a cross-school project, bringing together Archaeology, Dementia Studies, Informatics, Engineering, Finance, and the Library.”⁵⁶

“The virtual library is on a piece of land kindly temporarily loaned from a colleague from another organisation. So thus it has cost me nothing, apart from my own free time spent on building the library and adding to it. Practically all of my activity in Second Life, apart from demonstrations to colleagues, has been in my own time, on my own computer at home.”⁵⁷

“It’s a JISC funded project.”⁵⁸

“Mainly university funded but I also hold external grant funding for Second Life research.”⁵⁹

“Currently funded by UEL’s LEO (Learning Enhancement Opportunities) project funding and overseen by UELconnect (formerly School of Distance and E-Learning).”⁶⁰

“Funding comes from research grants.”⁶¹

“The university’s Academic Development Centre is funding the basic cost of the University Island. No external resource has been used to develop the space. No additional hardware has been purchased to support this development. Faculties have access to a central resource for developing e-learning resources which can include Second Life developments. The ADC provides the basic administration for the island.”⁶²

“Schome Park has had various funders, including Becta and the Innovations Unit.”⁶³

⁵² Elinor Clarke, Centre for Inter-Professional e-Learning, Coventry University.

⁵³ Professor Austin Tate, Artificial Intelligence Applications Institute, University of Edinburgh.

⁵⁴ Ferdinand Francino, Project Manager Web 3.D (Second Life), Glasgow Caledonian University.

⁵⁵ Dr Judy Robertson, Computer Science, Heriot-Watt University.

⁵⁶ Will Stewart, E-learning Adviser, University of Bradford.

⁵⁷ Lindsay Da Silva, Technical Services Librarian, University of Chichester.

⁵⁸ Maggi Savin-Baden, Director, Learning Innovation, Coventry University.

⁵⁹ Simon Bignell, Lecturer in Psychology, University of Derby.

⁶⁰ Remy Olosoji, School of Distance and E-Learning, University of East London.

⁶¹ Dave Taylor, Programme Lead, Virtual Worlds and Medical Media, Imperial College, London.

⁶² Dr Tim Linsey, Head of E-Learning, Kingston University.

⁶³ Dr Julia Gillen, Literacy Research Centre, Lancaster University.

“The island is paid for by the computing department (Linden fees only). The work is done by a group of volunteers from all areas of the school. We call ourselves, LUSLUG (Lancaster University Second Life Users Group).”⁶⁴

“Land was paid for by my department as part of the research support budget. My PhD was funded in part by an EPSRC training grant and partly by departmental funding.”⁶⁵

“The Office or the Pro-Vice Chancellor for Assessment, Learning and Teaching (LeedsMet island). The Faculty of Arts and Society (LeedsMet FAS island). The School of Contemporary Art and Graphic Design (Staff time and workshop provision). JISC (Staff time on the Open Habitat project plus Open Habitat island). The Technology Enhanced Learning team (The third island, if we don't give up on it).”⁶⁶

“Staff time and computing facilities: university plus funded external projects. Partner: TwoFour Learning for development”⁶⁷

“Primarily the University Library with short-term special funds, the Faculty of Arts and the School of Biological Sciences. It is a pilot, sub-institutional project though with no guaranteed longevity.”⁶⁸

“Most of the preliminary work so far have been self-funded (I own the land and pay the maintenance fee) but I have recently received some support for future developments.”⁶⁹

“This is a strategic project with funding provided through IS. Development staff involved are members of the central IS e-learning team, portal team as well as dedicated staff from SL research projects. Steering group membership includes academics, IS, and in the future student reps.”⁷⁰

“HEA ICS gave us a grant for the toolkit work. ExPERT CETL is funding our working looking at the affordances of SL for teaching in a virtual world.”⁷¹

“AHRC (Research Fellowship) and SARC itself for resources and land use fee.”⁷²

“Co-funded EU projects. University of Reading.”⁷³

“Staff time: my department and a minor proportion the Centre for Inquiry Based Learning in the Arts and Social Sciences (CILASS) (and me in my ‘spare’ time).

CILASS paid the first year costs of purchasing and tier on the island, this coming year the costs are being split with the School of Education.

I have paid for stuff on the island up to now: it is prefabs etc. and I did all the landscaping.”⁷⁴

⁶⁴ Michele Ryan, Lancaster University.

⁶⁵ Lorna McKnight, Lancaster University.

⁶⁶ Ian Truelove, Principal Lecturer, Leeds School of Contemporary Art & Graphic Design.

⁶⁷ Gilly Salmon, Professor of E-learning & Learning Technologies, University of Leicester.

⁶⁸ Dr Peter GG Miller, School of Biological Sciences, University of Liverpool.

⁶⁹ Elena Moschini, MA Digital Media course leader, London Metropolitan University.

⁷⁰ Andy Beggan, IS Learning Team Leader, University of Nottingham.

⁷¹ Jane Chandler, Principal Lecturer, School of Computing, University of Portsmouth.

⁷² Dr Franziska Schroeder, School of Music and Sonic Arts, Queen's University Belfast.

⁷³ Dr Shirley Williams, School of Systems Engineering, University of Reading.

“This project is funded by the JISC under the Users and Innovations Programme, with a contribution from SGUL and Coventry University.”⁷⁵

“I have grant money from an internal research-into-teaching project and also a Linden dollar lump sum and loan of the office space from Education UK.”⁷⁶

“The purchase of the island and land fees etc. was funded by a Curriculum Innovation Award from SCEPTRe. The student development time is also being funded through SCEPTRe and possibly a small additional project, through the E-Learning Unit.

We are currently exploring alternative sources of funding; at the moment it is all completed mostly as staff time and staff in their own time.”⁷⁷

“Team pays the subscription. Other people are now developing and paying students and temps to do development work. The web team also support some development and maintenance work.”⁷⁸

“The project is funded by Eduserv.”⁷⁹

“Eduserv Foundation funds and supports SLOODLE. University supports virtuALBA sim.”⁸⁰

“Internal funding via the Institute of Learning Enhancement at the University of Wolverhampton.”⁸¹

“The island upkeep is being paid for out of one of the PVC’s budgets - if the institution decides to use it in earnest I’m sure there will be more formal funding arrangements. Staff are involved in their own time.”⁸²

“The Schome Initiative’s islands (SchomeBase and Schome Park) have been funded by research grants.

Staffing for the Schome Park Programme included a mixture of academic research time (i.e. funded by the institution), research grants (from NAGTY, Becta, The Innovation Unit, CREET and PLAC), and the contribution of volunteers (some of whom were part funded by their employer - e.g. school, City Technology College). Towards the end of Phase 3 of the Schome Park Programme there were around 50 staff signed up with the Schome Park Programme, the vast majority of whom were volunteers.

No additional equipment has been purchased specifically to support the Schome Initiative’s work in virtual worlds. Conference costs, travel and other expenses have mainly been covered by research grants.”⁸³

⁷⁴ Sheila Webber, Senior Lecturer, Department of Information Studies, University of Sheffield.

⁷⁵ Emily Conradi, e-Projects Manager, St George’s University of London.

⁷⁶ Dr Glynn Skerratt, Faculty of Sciences, Staffordshire University.

⁷⁷ Nicola Avery, e-Learning Unit, University of Surrey.

⁷⁸ Tony Hudson, Web Team Manager, University of Sussex.

⁷⁹ Mark Childs, Teaching Development Fellow Elearning, Coventry University.

⁸⁰ Dr Daniel Livingstone, Lecturer, School of Computing, University of the West of Scotland.

⁸¹ Crispin Dale, Principal Lecturer, Technology Supported Learning, University of Wolverhampton.

⁸² Kriss Fearon, Web Coordinator, University of York.

⁸³ Dr Peter Twining, Senior Lecturer, Department of Education, Open University.

“Funding for my role as coordinator of virtual world activity is coming from the Learning and Teaching Office, with individual project funding coming from the relevant projects/departments.”⁸⁴

“Island paid for by internal funding. My time is more or less solely my free time.”⁸⁵

“Initially myself, now full funding from my educational institution.”⁸⁶

“Island and fees covered by Centre for Learning and Quality Enhancement; E-learning Team time as development covered under the ‘Innovation’ strand of our E-learning Strategy. Staff time within schools less ring-fenced, some are working more on their own time at home, though some have received funding and ‘justify playing’ at work.

All schools have been given updated specs for renewing machines to SL specs and most have upgraded hardware to match. We haven’t provided any particular budget for in-world spending, building has been done in house by enthusiasts and students on relevant degrees, though creating a small budget is being kept under review.”⁸⁷

“Computing Services.”⁸⁸

“Largely from grants, both internal and external. Design and scripting is carried out partly by consultants working with us, which helps with the budgeting and time management.”⁸⁹

“The remit of our work is to investigate new and emerging technologies, so we were able to do this as part of our normal work. We haven’t spent anything substantial; a small amount on uploading images, buying clothing for avatars etc.”⁹⁰

“Some central internal funding sources, some school and department funds.”⁹¹

“The JISC Regional Support Centres.”⁹²

“The project is currently funded by the Computing Department at the OU, whose has paid for both the purchase of the island and its content development. Students fees will go towards maintenance costs from October 2009.”⁹³

3.3 What have you developed that is of particular interest (or ‘cool’).

⁸⁴ Anna Peachey, COLMSCT Associate Teaching Fellow, Open University.

⁸⁵ J Ross Nicoll, Research Fellow, University of St Andrews.

⁸⁶ Martin Biron, Senior Lecturer, Faculty of Technology, College of North West London.

⁸⁷ Kate Boardman, Head of E-learning, Centre for Learning & Quality Enhancement, University of Teesside.

⁸⁸ Dr Stuart Lee, Director of Computing Services, University of Oxford.

⁸⁹ Dr Liz Falconer, Manager, E-learning Development Unit, University of the West of England.

⁹⁰ Richard Mather & Andrew Middleton, Learning and Teaching Institute, Sheffield Hallam University.

⁹¹ Simon Walker, Head of Educational Development, University of Greenwich.

⁹² Jane Edwards and Shri Footring, JISC Regional Support Centres.

⁹³ Dr Lucia Rapanotti, Computing Department, Open University.

“A multipurpose Interprofessional learning building. There are art exhibitions for professionals, a birthing pool and other health and social care related environments and events.”⁹⁴

“See <http://vue.ed.ac.uk> for the efforts. My own work involved intelligent interaction rooms for work, play and help (www.aii.ed.ac.uk/project/i-room/).”⁹⁵

“The Saltire Centre and the landmark buildings are of a quality that surpasses the builds of the educational institutions I'm aware of in general, the top-down approach of this university resulted in appearance first, content after while the general (educational) approach appears to be content first, appearances after (if at all).”⁹⁶

“Some of the aforementioned pilot projects already have students working collaboratively on the island. Small scale as yet, but potentially looking at 300-400 students requiring induction during semester A this year.

Student mentors are attending evening classes to get au fait with the environment. They will become mentors and guides on the island for a variety of students; pre registration, transition and first year experience, informal visitors and teaching projects. It is also expected they will work with the BASE staff (our general student support/enquiries/first contact staff based in the 'real' Saltire Centre/Library).”⁹⁷

“Nothing, but my students have.”⁹⁸

“We are in early stages of development and are currently establishing our presence.”⁹⁹

“Still very early days yet, but ideas are starting to develop. One student is working on smart avatars who can act a guides for others and help them find their way around.”¹⁰⁰

“I was quite pleased with how the virtual library I created resembled, albeit vaguely (!), our real life library, and was impressed with the way Second Life allows you to build anything from a small bunch of primitive objects. I have changed the inside of the library so it doesn't resemble our real life library much anymore, but I still think it's a good idea to replicate at least the façade of some buildings to encourage that spark of recognition which, in my experience, can put visitors to this 'strange' virtual world at ease, and also can encourage them to stay and explore the inside, where you can be much more experimental.”¹⁰¹

“The MVP Player that has been developed for SGUL's paramedic scenarios allows students to use real virtual patient cases in a virtual world context (using objects, dummy patients etc.). The chat bot technology and the lip sync machinimas that are used as part of the Coventry scenarios is also original and an exciting way of interacting.”¹⁰²

⁹⁴ Elinor Clarke, Centre for Inter-Professional e-Learning, Coventry University.

⁹⁵ Professor Austin Tate, Artificial Intelligence Applications Institute, University of Edinburgh.

⁹⁶ Ferdinand Francino, Project Manager Web 3.D (Second Life), Glasgow Caledonian University.

⁹⁷ Kathryn Trinder, Research Fellow (e-Learning), Glasgow Caledonian University.

⁹⁸ Dr Judy Robertson, Computer Science, Heriot-Watt University.

⁹⁹ Andy Beggan, Learning Team Leader, Information Services, University of Nottingham.

¹⁰⁰ Will Stewart, E-learning Adviser, University of Bradford.

¹⁰¹ Lindsay Da Silva, Technical Services Librarian, University of Chichester.

¹⁰² Maggi Savin-Baden, Director, Learning Innovation, Coventry University.

“Oh Yes! I have developed a few educational tools and an interactive lecture theatre. I’m also working on an educational Autism ‘Simulator’. I’ve given many Second Life public lectures and special interest talks. I’ve given a simultaneous conference talk in Second Life and Real Life. I’ve been interviewed about the educational use of Second Life by BBC, CNN, ITV and various other media organisations. University of Derby’s Vice Chancellor has signed an educational contract simultaneously in real life and in Second Life. The event was a great success, our first year students, who were controlling the Vice Chancellors avatar, insisted on making him disco dance across the virtual computer lab.”¹⁰³

“Our Second Health movies broke new grounds in professional film quality, and have proven very effective in engaging staff and the public with new proposed healthcare models such as the Polyclinic (which are much more difficult to put across on paper). Extracts have been used by the BBC and others to illustrate these new healthcare models.”¹⁰⁴

“A virtual court room, a module taught within Second Life, and live streaming video into Second Life.”¹⁰⁵

“As part of a research project we developed a prototype to represent a design idea ... although I would consider SL limited ... it provided a very interesting area to collaborate, design and develop new ideas...”¹⁰⁶

“Everything is cool! Mostly we have developed out of world tools, workshops and organisation that will help encourage and sustain our SL involvement. Not much in-world development that is not standard or pre-fab.”¹⁰⁷

“Studying the impact of virtual environments such as Second Life on the creative process, aiming to explore the effectiveness of the system for designing and building new artifacts. Thesis due to be submitted soon, not published yet, more details available on request.”¹⁰⁸

“My colleague, Graham Hibbert, and I have developed a range of experimental artworks, tool and environments. Graham did a particularly great job building Emerge island for JISC. Our students have produced some really interesting work on our 'Studio' island, including sets for graphic novels and performance stages.”¹⁰⁹

“Yes, the Second Life Moderator training Guides:
<http://www.le.ac.uk/beyonddistance/moose/outcomes.html>

Replicated ancient world artefacts and social constructions for archaeology students.”¹¹⁰

“I have a permanently ‘alpha’ gadget called StoryMachine that some people have found ‘cool’ though it isn’t clear whether that equates with ‘useful’.”¹¹¹

¹⁰³ Simon Bignell, Lecturer in Psychology, University of Derby.

¹⁰⁴ Dave Taylor, Programme Lead, Virtual Worlds and Medical Media, Imperial College, London.

¹⁰⁵ Dr Tim Linsey, Head of E-Learning, Kingston University.

¹⁰⁶ Jennefer Hart (MRes Student finished), Lancaster University.

¹⁰⁷ Michele Ryan, Lancaster University.

¹⁰⁸ Lorna McKnight, Lancaster University.

¹⁰⁹ Ian Truelove, Principal Lecturer, Leeds School of Contemporary Art & Graphic Design.

¹¹⁰ Gilly Salmon, Professor of E-learning & Learning Technologies, University of Leicester.

¹¹¹ Dr Peter GG Miller, School of Biological Sciences, University of Liverpool.

“A Second Life Teaching Toolkit - <http://userweb.port.ac.uk/~chandler/HEA-ICS/>”¹¹²

“We are working on an installation/performance environment entitled SL'Étude which is based on the SLProxy application. We used a combination of four different programming languages and applications to send audio in and out of Second Life from a concert venue. In SL'Étude 3D sonic objects can be manipulated in the virtual world which in turn diffuses sound 3-dimensionally in a real life concert venue.

This means we have been able to get SL to interact with the software programming environment MAX (<http://www.cycling74.com/downloads/max5>), which was a ground-breaking project/programming.

See <http://lautnet.blogspot.com> and also Christopher Chong (programming) <http://majorc.wordpress.com/2008/06/20/sletude-sax-max-and-second-life/>”¹¹³

“Some people have said they find the model of the steps in the research process cool, and there is currently a build of a model of information literacy under way. Someone called the island “an information literacy treasure hunt” in an article the other day (<http://www.big6.com/2008/09/29/information-literacy-the-big6-and-second-life-enevs-94-1/>) which seems to imply that the island itself is cool!”¹¹⁴

“The scenarios - including the environment, costumes, and Paramedic equipment box have all been developed for this project. The ‘patient’ is a mannequin with a series of touch sensors and attachment points for the different objects, and the patient can also respond to simple key word prompts.

All the objects, sensors and a heads up display (HUD) that students wear, are linked to a web application that updates the information displayed to the students depending on the decisions they make. All the objects and applications will be made freely available to the community, alongside templates and guidelines on how to create similar scenarios.”¹¹⁵

“Work in progress - not sure it would fall into the category of ‘cool’ though.”¹¹⁶

“We have developed a number of typical things; student gallery, explored the use of video, the campus itself is quite attractive, housing area, student sandbox. The library are now developing their area. Student support and the Inqbate centre (<http://www.sussex.ac.uk/cetl/>) are also in the process of developing areas.”¹¹⁷

“Approximately half of the theatres have been built at the time of this snapshot. These include The Globe Theatre, the Hellerau Festspielhaus, the Theatre at Epidavros and the Theatre of Pompey. Machinima of the theatres are available at <http://uk.youtube.com/user/arcp59>

These can be rezzed on demand using a tool that automatically creates any of the theatres by clicking on their image. The theatre and the environment (landscape, trees, etc.) are all created as required.

¹¹² Jane Chandler, Principal Lecturer, School of Computing, University of Portsmouth.

¹¹³ Dr Franziska Schroeder, School of Music and Sonic Arts, Queen's University Belfast.

¹¹⁴ Sheila Webber, Senior Lecturer, Department of Information Studies, University of Sheffield.

¹¹⁵ Emily Conradi, e-Projects Manager, St George's University of London.

¹¹⁶ Dr Glynn Skerratt, Faculty of Sciences, Staffordshire University.

¹¹⁷ Tony Hudson, Web Team Manager, University of Sussex.

Heads up displays can also be attached to avatars which trigger particularly educational resources as the avatar moves throughout the theatres, providing background information such as text, photographs and videos.”¹¹⁸

“The SLOODLE project integrates Moodle and Second Life, and has just started a second pilot. The software is open-source, freely available, and recently reached version 0.3.1 - is now stable and reliable but still being developed in an ongoing fashion. It is also now starting to be offered by commercial Moodle hosts as an optional plugin for Moodle. <http://www.sloodle.org/>

Standalone items developed under the SLOODLE banner include a collaborative web-browser for Second Life - which allows collaborative viewing and browsing of the web, and is the first in-world browser to support clicking on links! (Developer: Prof. Malcolm Crowe of UWS) <http://www.sloodle.org/browser/>

The ‘QuizHUD’ is a tool for Second Life that allows the creation of assessments that can be delivered inside SL and works in an ‘explore’ mode, where students can learn about an instructor created environment (e.g. clicking on objects for information) or take a test in ‘quiz’ mode - where questions might be multiple choice or might require selecting objects in the 3D environment to provide an answer. (Lead developer - Peter Bloomfield of UWS) <http://www.sloodle.org/quizhud/>”¹¹⁹

“The Archaeology Data Service have done quite a bit of building and a simulation of one of their marine archaeology sites. Unfortunately the member of staff who built this came to the end of his contract before completing the work so it isn’t finished.

We do have a meeting space on there and the project team is experimenting with the challenge of formal communication etiquette online - this is not a skill we anticipated having to relearn.”¹²⁰

“The most interesting things are to do with what we are learning about education systems and learning communities - our current data analysis is informing the development of frameworks for thinking about educational practice - check out the schommunity wiki (e.g. http://www.schome.ac.uk/wiki/Defining_schome) and current and forthcoming publications linked with the Schome Initiative (<http://www.schome.ac.uk/publications/>).”¹²¹

“The university has built up its understanding of what works for our students in this medium and used that understanding to establish an egalitarian learning community that is constantly active and coming up with new ideas - think that’s pretty cool.”¹²²

“Most of my work is administrative, but I have released a free door: <http://www.slexchange.com/modules.php?name=Marketplace&file=item&ItemID=871999>

Doesn’t sound like a lot, but doors are an extremely frequently used script, and this provides a fast, good quality and open source script.”¹²³

¹¹⁸ Mark Childs, Teaching Development Fellow Elearning, Coventry University.

¹¹⁹ Dr Daniel Livingstone, Lecturer, School of Computing, University of the West of Scotland.

¹²⁰ Kriss Fearon, Web Coordinator, University of York.

¹²¹ Dr Peter Twining, Senior Lecturer, Department of Education, Open University.

¹²² Anna Peachey, COLMSCT Associate Teaching Fellow, Open University.

¹²³ J Ross Nicoll, Research Fellow, University of St Andrews.

“Have developed an entire region as a virtual college and commissioned bespoke artifacts.”¹²⁴

“We’re looking forward to bringing many of our students into SL. Our academic portfolio is such that most of the programmes can make use of SL in some way, especially collaboratively. So for example, we have a number of programmes around animation, graphics and illustration (sending graduates to Pixar) alongside 3D architectural design and engineers who need an audience for their builds. Thus engaging students in project work to enable less technically-minded colleagues to have the environment they then wish to provide for forensic, nursing, police, experimental fine art, performing arts, digital music, film and journalism students to carry out learning activities in gives us a really exciting series of scenarios to bring many of our (majoritively off-campus) students together. We already have proved success of the immersive environment with the virtual nursing community Bellwood, and this serves as a blue print to move from a networked lab-based resource to a platform like SL.

After much thought and looking around, we have consciously built a virtual campus that mixes real and not real. As the twin buildings iconically recognisable as Teesside, we have built Middlesbrough Tower and our King Edward’s Square with a certain realism, otherwise left much space for potential - and more creative spaces that we do not have the space or funds for on the physical campus. Many of the learning activities under construction are immersive role play and do have a space assigned to them - e.g. a food factory for trainee quality assessors; others will use the freer space for simply being together and building learning communities from a pile of cushions.

Across campus, we have spent quite a lot of time considering the student response to taking them in-world on an immersive experience. We have therefore planned to work in the first instance with ‘disposable avatars’ - characters for each learning activity to balance immersion with ownership, protecting as far as possible the students from being drawn into the SL addiction unless and until they choose to go away and create their own account to engage on their own time. Presentations given and forthcoming at HEA conference (ethics), ReLIVE08 (identity and collaboration) and AOIR Copenhagen ’08 (creating unbiased virtual learning activities, ‘disposable’ avatars - good or bad idea?).”¹²⁵

“Not really. Just set up an island with spaces for people to move around, discuss, talk, etc.”¹²⁶

“We have now got interview stations for pairs of research students to role play research interviews, with a variety of avatar body languages. We have also got a ride that students can interact with to help them choose their research focus. The most exciting prospect though, is that we are developing and building an event simulation engine that will enable scenarios to be played that avatars can witness, or stop and investigate as they unfold. Investigators will then be able to see the aftermath and interview witnesses, draw up their investigations and then replay the event to evaluate their investigation skills.”¹²⁷

¹²⁴ Martin Biron, Senior Lecturer, Faculty of Technology, College of North West London.

¹²⁵ Kate Boardman, Head of E-learning, Centre for Learning & Quality Enhancement, University of Teesside.

¹²⁶ Dr Stuart Lee, Director of Computing Services, University of Oxford.

¹²⁷ Dr Liz Falconer, Manager, E-learning Development Unit, University of the West of England.

“We created some small examples of how you can create films in Second Life, and made avatars talk realistically using some software called Crazy Talk. This connects with other work to do with learning through producing media.

The virtual world is an accessible environment for film-making, so we have made films and we have carried out research around academic perceptions of this.”¹²⁸

“Developed students' collaborative project in spring 2008 between Schools of Computing, Mathematics and Science and Architecture. The aim was to consider how to exploit the potential within contemporary technology, data collection techniques and 3D modeling to connect the tangible and intangible as urban designers and social entrepreneurs acting in urban space ... and then build it.”¹²⁹

“Circular turrets?!! Well, I was quite pleased with them!”¹³⁰

“We have developed the following:

Daden Navigator - creating the first publicly available web browser for Second Life. Whilst it still operates within the limitations of Linden Lab's web-page-on-a-prim it finally lets you collaboratively surf the web, following links, saving bookmarks and even searching Google.

Bringing Google Maps into Second Life - as part of our work for Birmingham City Council we have found a way of bringing Google Maps into Second Life and allowing people to search for locations on Google Maps. We've also then enhanced this by using any RSS feeds to overlay items onto the map placing a 'map pin' onto the map depicting where in the world, city etc. the news story is from. So for example we have Flickr photos, BBC news, CNN news etc.

Our chatbot driven avatars offer wide opportunities to explore virtual characters in virtual worlds as mentors, non-player characters in eDrama and teaching sessions, as historical characters and even as virtual tutors. Our ultimate goal is to pass the Turing Test in a virtual world. We have had a paper accepted on the topic at the BCS SGAI conference in Cambridge on this in December.

The MVP player has the potential to be a cross-platform authoring tool for eLearning in virtual worlds and the web. We are currently working with our project partners to release it as open source, and to show it working in Active Worlds as well as SL.”¹³¹

“We tend to focus on showcasing best practice and innovation among the academic community rather than taking on development ourselves.”¹³²

“As well as the welcome/orientation area and the traditional sandbox, we have:

- A (rather impressive) auditorium and lecture theatres for large scale events (up to 140 avatars)
- A study area with an exhibition centre, breakout spaces, and staff and students common rooms

¹²⁸ Richard Mather & Andrew Middleton, Learning and Teaching Institute, Sheffield Hallam University.

¹²⁹ Simon Walker, Head of Educational Development, University of Greenwich.

¹³⁰ Pauline Randall, Developer, virtual-e.

¹³¹ Soulla Stylianou, RL Client Director, Daden Limited.

¹³² Jane Edwards and Shri Footring, JISC Regional Support Centres.

- A very cool library areas directly linked into search engines and bibliographical databases; it also includes a custom-made resources store and browser for audio and video material, as well as pdfs, ppts, etc.
- Our beach bar is quite fun with interactive pool tables and dance floor.”¹³³

3.4 Have you done any teaching and learning?

In addition to the responses below, nine other academics answered merely “Yes”.

“Pilot session with seven students. More to follow.”¹³⁴

“I am not a teacher, but many of my colleagues use virtual world sim support of their tutorials, as well as for specific courses. My interests are in the use of VWs for research, outreach and collaboration.”¹³⁵

“Our competition entries are still in development. This work will be fully evaluated and reported on next summer. Entries included:

- Finding the way in Second Life (School of Engineering and Computing).
- Overcoming the barriers of asking for help: The feasibility of Second Life as a platform for students to access support from an Academic Development Tutor without feeling stigmatised (School of Health and Social Care).
- Radiographic exposure manipulation (School of Health and Social Care).
- SALSER: Second Life And Law; Student-led Educational Research (School of Law and Social Sciences).
- Note taking: An individual approach for Anatomy and Pathology 1 (Effective Learning Service).
- Boys will be Girls: Exploring gender issues in Second Life (School of Life Sciences).
- i-CAMPPUS - internet College Articulation and Mentoring Project for Prospective University Students (Caledonian Academy and Centre for Research in Lifelong Learning).
- Exploring nursing students’ learning in a Second Life clinical simulation laboratory (School of Nursing, Midwifery and Community Health).
- Virtual induction programme for CBS postgraduate students and pre-induction videos to showcase the international dimension of the work of the Business School (Caledonian Business School).”¹³⁶

“Not yet, but considering its use for distance learning courses.”¹³⁷

“Plenty. I was recently awarded an excellence award from the University of Derby for ‘Excellence in Learning, Teaching and Assessment’ for work in Second Life.”¹³⁸

“We have carried out research only so far, in order to have a validated approach to teaching in virtual worlds. Our first courses will likely be delivered in 2009.”¹³⁹

¹³³ Dr Lucia Rapanotti, Computing Department, Open University.

¹³⁴ Elinor Clarke, Centre for Inter-Professional e-Learning, Coventry University.

¹³⁵ Professor Austin Tate, Artificial Intelligence Applications Institute, University of Edinburgh.

¹³⁶ Kathryn Trinder, Research Fellow (e-Learning), Glasgow Caledonian University.

¹³⁷ Will Stewart, E-learning Adviser, University of Bradford.

¹³⁸ Simon Bignell, Lecturer in Psychology, University of Derby.

¹³⁹ Dave Taylor, Programme Lead, Virtual Worlds and Medical Media, Imperial College, London.

“Yes; collaborative learning and designing. No teaching, but I can see the potential.”¹⁴⁰

“Assisted on a Masters course that involved designing and building a structure in Second Life as part of a collaborative design project.”¹⁴¹

“We have been running informal inductions and activities in Second Life for a couple of years, and more recently we have been testing out more formal approaches as part of the Open Habitat project.”¹⁴²

“As a learner, I’m a member of the SL Connectivism cohort in Chilbo. I ran a workshop for library staff that had a good vibe but it remains to be seen what the students will make of it.”¹⁴³

“I have participated in academic conferences and seminars in SL; I have introduced my students to SL and supported them in developing their avatars; I have conducted PhD supervision sessions in SL with one of my PhD students who lives in Italy; I have conducted some pilot experiment on teaching and learning tools in SL. I have had virtual tutorials with some students.”¹⁴⁴

“I’ve been meeting final year project/dissertation students in SL, who are doing SL projects. This has generally gone well.”¹⁴⁵

“Forthcoming project in 2009. I will be running a feedback blog with and for the students here - starting around Easter 2009: <http://sarcdrama.wordpress.com/>”¹⁴⁶

“We have run a testing day for twelve students using the paramedic scenarios in Second Life. There have also been a few testing days run for the clinical management scenarios. The scenarios will be rolled out as part of the curricula later on this year.”¹⁴⁷

“A small exploratory project with three Computing Masters students.”¹⁴⁸

“One project so far for Informatics.”¹⁴⁹

“The learning and teaching activities will take place throughout the 2008/2009 academic year.”¹⁵⁰

“Held a small number of seminars with students.”¹⁵¹

“Yes, have been teaching in Second Life for the last two years, and am an active member of the OU learning community in-world.”¹⁵²

¹⁴⁰ Jennefer Hart (MRes Student finished), Lancaster University.

¹⁴¹ Lorna McKnight, Lancaster University.

¹⁴² Ian Truelove, Principal Lecturer, Leeds School of Contemporary Art & Graphic Design.

¹⁴³ Dr Peter GG Miller, School of Biological Sciences, University of Liverpool.

¹⁴⁴ Elena Moschini, MA Digital Media course leader, London Metropolitan University.

¹⁴⁵ Jane Chandler, Principal Lecturer, School of Computing, University of Portsmouth.

¹⁴⁶ Dr Franziska Schroeder, School of Music and Sonic Arts, Queen's University Belfast.

¹⁴⁷ Emily Conradi, e-Projects Manager, St George's University of London.

¹⁴⁸ Nicola Avery, e-Learning Unit, University of Surrey.

¹⁴⁹ Tony Hudson, Web Team Manager, University of Sussex.

¹⁵⁰ Mark Childs, Teaching Development Fellow Elearning, Coventry University.

¹⁵¹ Crispin Dale, Principal Lecturer, Technology Supported Learning, University of Wolverhampton.

¹⁵² Anna Peachey, COLMSCT Associate Teaching Fellow, Open University.

“To date learning and teaching has focused on cascading effective skills training to staff, prior to activities beginning this term.”¹⁵³

“No but our Masters in Elearning uses it for the occasional seminar.”¹⁵⁴

“Yes, just a couple of sessions.”¹⁵⁵

“Two courses in computing and architecture were selected which would allow elements of assessment to be used for the project and which focused on an exploration of how students would gain by learning in a multi-user online environment and being involved in a multi-disciplinary group.”¹⁵⁶

“As part of a course I was taking with Boise State University (student in this case). I had to do a couple of teaching exercises.”¹⁵⁷

3.5 Teaching: How did it go? For both the teacher and the learner?

“Students evaluated the session positively but the objectives were basic (getting into SL, control of avatar, communications etc.) From my perspective (teacher) it was stressful - I had no experience of ‘teaching’ in SL, getting everybody to the right place, trying to enjoy and not be too prescriptive.”¹⁵⁸

“Fun and stressful for me. Fun for learners, mostly, and they learned a lot.”¹⁵⁹

“Hard to evaluate but seemed well received. It’s still early days but it’s going very well.”¹⁶⁰

“Our research showed how immersive experiences in virtual worlds could be most effective. Much of surgical education, for example, makes use of simulations. We have transposed some of these into virtual worlds and examined what makes for effective learning.”¹⁶¹

“Very positive with the provision being expanded this year.”¹⁶²

“Hard to sum up 18 months of experience in a sentence! Overall my experiences have been exciting, perhaps especially when I have been the one learning from teenagers who have developed not only technical and other skills in the environment, but a really effective sense of how to teach!”¹⁶³

¹⁵³ Kate Boardman, Head of E-learning, Centre for Learning & Quality Enhancement, University of Teesside.

¹⁵⁴ Dr Stuart Lee, Director of Computing Services, University of Oxford.

¹⁵⁵ Dr Liz Falconer, Manager, E-learning Development Unit, University of the West of England.

¹⁵⁶ Simon Walker, Head of Educational Development, University of Greenwich.

¹⁵⁷ Pauline Randall, Developer, virtual-e.

¹⁵⁸ Elinor Clarke, Centre for Inter-Professional e-Learning, Coventry University.

¹⁵⁹ Dr Judy Robertson, Computer Science, Heriot-Watt University.

¹⁶⁰ Simon Bignell, Lecturer in Psychology, University of Derby.

¹⁶¹ Dave Taylor, Programme Lead, Virtual Worlds and Medical Media, Imperial College, London.

¹⁶² Dr Tim Linsey, Head of E-Learning, Kingston University.

¹⁶³ Dr Julia Gillen, Literacy Research Centre, Lancaster University.

“It has its limitations ... time lag, design limitations ... but it has huge potential for developing ideas collaboratively ... and can offer great scope.”¹⁶⁴

“Last year a Master’s class was given a project that involved them doing it in-world. This year a different Master’s class will be exploring it and holding discussions there. I have met other teachers and researchers in-world. I have helped other teachers get their virtual legs and I have attended classes and conferences in-world being presented by others.”¹⁶⁵

“Reasonably well, students had a lot of problems building, but at the end said they really enjoyed it and spent more time engaged in building than was required for the course.”¹⁶⁶

“The first Open Habitat Art and Design pilot was very successful, and has helped us to refine and expand our approach. The majority of students involved responded well to the experience, and we witnessed a real progression in the creative practices of several students.

In general, adapting our learning approach to virtual worlds has forced us to re-examine our beliefs about education, and we have developed a deeper understanding of what we do well. Abstracting and testing different learning approaches in virtual worlds has enabled us to apply them more effectively on the real life courses that we manage.”¹⁶⁷

“Excellent.”¹⁶⁸

“The workshop was really a trial run but it went reasonably well, I hope.”¹⁶⁹

“I found SL extremely useful in managing virtual tutorials with students that had difficulties coming to college or that were temporarily away (for example during the summer holidays). The problems are mainly related to the hardware and software requirements; these could be barriers for those students that do not have the right equipment at home.”¹⁷⁰

“There is a lot of preparation work; keeping a group together is hard, both in the same place and in step, if they are working in different RL places. The general view is that it is exhausting.”¹⁷¹

“I found it engaging and exhausting. I enjoy the creative and thinking-on-your-feet side of it, and it is giving me more opportunities to discuss teaching with peers (in-world). I was invited to be a member of the Educator’s Coop in the summer (the others are all in the US and have land in the coop). This is a great opportunity I wouldn’t have had otherwise.

¹⁶⁴ Jennefer Hart (MRes Student finished), Lancaster University.

¹⁶⁵ Michele Ryan, Lancaster University.

¹⁶⁶ Lorna McKnight, Lancaster University.

¹⁶⁷ Ian Truelove, Principal Lecturer, Leeds School of Contemporary Art & Graphic Design.

¹⁶⁸ Gilly Salmon, Professor of E-learning & Learning Technologies, University of Leicester.

¹⁶⁹ Dr Peter GG Miller, School of Biological Sciences, University of Liverpool.

¹⁷⁰ Elena Moschini, MA Digital Media course leader, London Metropolitan University.

¹⁷¹ Dr Shirley Williams, School of Systems Engineering, University of Reading.

There was a spectrum of reactions from students, but it is fair to say there is a spectrum of reactions by students to most things. They did not react to it as 'scary', some found it 'cool' and appeared to be motivated more because of its inclusion, some simply seemed to take it as part of the work for the class, some commented on the additional possibilities it offered up (specifically the opportunity to interview people in different parts of the world). A couple of the postgraduates commented in anonymous feedback that they had not found the SL element very useful, but another couple of students commented that the SL element had helped to provide the creative element that got them an excellent mark for their coursework.

I did induction sessions where people were together in class as well as in-world, and in particular with the first years there was an exercise in which they researched potential dangers of SL for themselves and gave presentations. As I probably said in the last snapshot, I think this was worth doing, to avoid very negative reactions."¹⁷²

"The learners thought it had a lot of potential, and were keen to use it in their course. They found it a useful rehearsal tool, somewhere between paper and real life experiences. The students wanted more feedback from their decisions, and thought it would be useful to combine with some MCQs and links to external resources as well."¹⁷³

"High levels of enjoyment and interest, relatively easy to use and explore, development of objects proved more challenging."¹⁷⁴

"Very good - students were given a project to do using SL to create scenery which would help medical students - each group gave a presentation on their projects."¹⁷⁵

"First year: Went quite well for both. Feedback from students was very positive. Student courseworks included building replicas of local buildings which resulted in some local press coverage.

Second year: Was again a good and interesting class to teach. Given that it was a campus based class, some students did not see the relevance of using virtual worlds (or other collaborative technologies). Other students reported finding it a very interesting and worthwhile class - two students reported (on their graduation day) that they felt it had been the best class of their undergraduate studies. A couple of students had almost the opposite reaction!

I've just started my third delivery of the class 'Collaborative Virtual Environment'. This delivery is the first to include a distance group - with students based on campuses two hours apart. Initial reactions have been positive, and the class seems to be off to a good start."¹⁷⁶

"Good - encourages a different communication dynamic amongst students.

Bad - text based communication can take a long time which can impact upon student concentration."¹⁷⁷

¹⁷² Sheila Webber, Senior Lecturer, Department of Information Studies, University of Sheffield.

¹⁷³ Emily Conradi, e-Projects Manager, St George's University of London.

¹⁷⁴ Nicola Avery, e-Learning Unit, University of Surrey.

¹⁷⁵ Tony Hudson, Web Team Manager, University of Sussex.

¹⁷⁶ Dr Daniel Livingstone, Lecturer, School of Computing, University of the West of Scotland.

¹⁷⁷ Crispin Dale, Principal Lecturer, Technology Supported Learning, University of Wolverhampton.

“The experiences varied! It is difficult to give a concise answer to this question - so much depends upon your views of what ‘effective’ learning and teaching looks like. As always the effectiveness of a technology depends upon what you are trying to use it for and the minutiae how an activity is implemented in practice with different learners in different contexts. We are currently working on analysing data from the Schome Park Programme - which is feeding into the further development of our thinking about education systems and pedagogy - see the schomunity wiki (www.schome.ac.uk).”¹⁷⁸

“Generally very successful in meeting the needs of distance learners - I have better retention than I do with face to face groups.”¹⁷⁹

“Excellent - running one hour classes with groups of up to 15 people.”¹⁸⁰

“Successfully, as it was a learning experience for us to collect (and then to act on) constructive feedback - particularly on the orientation space that we have built, in order to bring users direct to the island and provide them with ‘need to know’ orientation to engage more quickly with the learning activities.”¹⁸¹

“Rather stilted and awkward at first as the students got used to the environment.”¹⁸²

“Although Second Life is virtual it was clear that a number of experiences can have an unexpected emotional impact: in a positive light when students were complemented on their work by [a] casual passersby and in a negative light with students being harassed (and once imprisoned). The investment in time spent creating an avatar builds up much more of a relationship (ownership, even) with the software. This also makes the whole environment more entertaining (addictive) and rewarding (sad, according to friends and colleagues who don’t share the passion!).

The CMS students did feel they achieved a useful degree of learning by the time they handed in their work. The students did not really like the amount of self directed learning they had to undergo, but they did succeed in the end. Because we were starting out with little idea of what was achievable in the timescale the brief was necessarily fluid and this led students to feel directionless at times and constantly needing reassurance of what was expected of them.

With some experience under our belt, if this were to be repeated then a clearer set of guidelines on a finished product should be possible, but it is felt that that the unstructured and flexible learning should be kept as this forces the students to make decisions for themselves. This also helps to prepare the students for the reality of taking responsibility for undirected activity in the real world work environment.”¹⁸³

“Went pretty well on the whole. The first exercise I used voice but overall found voice unreliable (this might be because my internet connection is not at the high end of the scale in terms of speed). My second teaching exercise I did as an interactive exercise which I’m currently developing further. It worked really well - certainly well enough to be further developed.”¹⁸⁴

¹⁷⁸ Dr Peter Twining, Senior Lecturer, Department of Education, Open University.

¹⁷⁹ Anna Peachey, COLMSCT Associate Teaching Fellow, Open University.

¹⁸⁰ Martin Biron, Senior Lecturer, Faculty of Technology, College of North West London.

¹⁸¹ Kate Boardman, Head of E-learning, Centre for Learning & Quality Enhancement, University of Teesside.

¹⁸² Dr Liz Falconer, Manager, E-learning Development Unit, University of the West of England.

¹⁸³ Simon Walker, Head of Educational Development, University of Greenwich.

¹⁸⁴ Pauline Randall, Developer, virtual-e.

“Each has gone better than the last - so we must be learning something! Key lessons so far are:

- The gaming generation has high expectations.
- But don't assume the students are familiar with virtual worlds (that's the 10-12 yr old generation that's VW savvy). So make sure they have a good orientation session and time to play (both to learn more and to get extreme behaviour out of the way) before the main session.
- Have a dummy session first so that they understand how the virtual exercise will work.
- Have lots of (and ideally separate) in-world and real-world support during the first sessions.
- Record everything.”¹⁸⁵

3.6 Have you done any formal or informal assessment of how successful the teaching/learning exercise was?

“We have evidence in learning logs, and their module marks. My colleague did interviews. We are currently writing these up.”¹⁸⁶

“Yes. However, results remain inconclusive.”¹⁸⁷

“Only evaluated our own project through asking other users ... which was positive.”¹⁸⁸

“Yes.”¹⁸⁹

“Not personally, though may be done by course tutors.”¹⁹⁰

“King's College London have carried out a formative evaluation of the first Open Habitat pilot, and we are designing the second pilots in response to this. We will publish a thorough summative evaluation at the end of the project.”¹⁹¹

“Do you mean research? It's ongoing, results soon. Presentation at ALT-C Sep 2008 gave initial findings.”¹⁹²

“I will do formal assessment of the sessions I am going to pilot in 2008/09. In preparation for this I am investigating and assembling a 'SL researcher toolkit'.”¹⁹³

“The 1st year students were being assessed on the work which used SL as one of the learning environments (the class wasn't about Second Life). Their academic work was acceptable to excellent; their grasp of the underlying models of information behaviour

¹⁸⁵ Soulla Stylianou, RL Client Director, Daden Limited.

¹⁸⁶ Dr Judy Robertson, Computer Science, Heriot-Watt University.

¹⁸⁷ Simon Bignell, Lecturer in Psychology, University of Derby.

¹⁸⁸ Jennefer Hart (MRes Student finished), Lancaster University.

¹⁸⁹ Michele Ryan, Lancaster University.

¹⁹⁰ Lorna McKnight, Lancaster University.

¹⁹¹ Ian Truelove, Principal Lecturer, Leeds School of Contemporary Art & Graphic Design.

¹⁹² Gilly Salmon, Professor of E-learning & Learning Technologies, University of Leicester.

¹⁹³ Elena Moschini, MA Digital Media course leader, London Metropolitan University.

was less superficial than in the exercise they did the previous year and the best work was better.

This was partly down to a redesign that might have brought results who/whatever they were interviewing, but SL provided an environment where they could do the research interviews in a more authentic way (authentic in terms of being 'real research'). The postgraduates also produced some excellent work (they had to design interventions which used a variety of learning environments).¹⁹⁴

"No assessment, but we did an evaluation survey and a focus group session. We also have a very brief online survey for people that have demos of the scenarios. We hope to publish the results by the end of the project in March."¹⁹⁵

"An evaluation report is available on the wiki page: 'Second Life could provide an interesting avenue for a number of explorations, and that using Linden Script will be a challenge to those wishing to get activities up and running within Second Life even when students may have backgrounds in Computing related subjects.'¹⁹⁶

"Not me personally."¹⁹⁷

"Yes, a range of feedback instruments were used. Virtual worlds were themselves part of the topic of study - rather than using virtual worlds to study another topic - so a comparison against other methods of teaching the class would not be appropriate. Though the class was praised by students for using a variety of the systems discussed."¹⁹⁸

"Only qualitatively with students expressing what they think about using SL."¹⁹⁹

"At the end of Phase 1 of the Shome Park Programme we published a brief report which summarised our experiences of using Teen Second Life™ virtual world to enhance the learning of 13 to 17 year olds. That report is available from <http://kn.open.ac.uk/public/document.cfm?docid=9851>. We are currently writing up findings from Phases 2 and 3 of the Shome Park Programme - check out <http://www.shome.ac.uk/publications/> for information about relevant publications."²⁰⁰

"Several evaluations in progress, several papers out or pending."²⁰¹

"Yes; ongoing."²⁰²

"Informal - they were designed as learning experiences for us - trial runs."²⁰³

¹⁹⁴ Sheila Webber, Senior Lecturer, Department of Information Studies, University of Sheffield.

¹⁹⁵ Emily Conradi, e-Projects Manager, St George's University of London.

¹⁹⁶ Nicola Avery, e-Learning Unit, University of Surrey.

¹⁹⁷ Tony Hudson, Web Team Manager, University of Sussex.

¹⁹⁸ Dr Daniel Livingstone, Lecturer, School of Computing, University of the West of Scotland.

¹⁹⁹ Crispin Dale, Principal Lecturer, Technology Supported Learning, University of Wolverhampton.

²⁰⁰ Dr Peter Twining, Senior Lecturer, Department of Education, Open University.

²⁰¹ Anna Peachey, COLMSCT Associate Teaching Fellow, Open University.

²⁰² Martin Biron, Senior Lecturer, Faculty of Technology, College of North West London.

²⁰³ Kate Boardman, Head of E-learning, Centre for Learning & Quality Enhancement, University of Teesside.

“Students needed to be self-motivated and demonstrate a high degree of autonomy. They were given a very loose brief, as we were unsure of how easy or difficult the learning processes would be, and the final assessments were to be negotiated between staff and students as the weeks went by. CMS students each successfully produced an interactive game and showed a range of skills in self development and in group work.

Results from the project were presented at the University of Greenwich Learning and Teaching conference ‘Shift Happens’, at Portsmouth’s Second Life workshop, and at the European Learning Teacher Network in Vienna. A two hour Educational and Professional Staff Development workshop was held in 2008, to be repeated.”²⁰⁴

3.7 What improvements to the virtual world you used would help your future teaching/learning exercises?

“The students need to get their own avatars rather than adopting a university one! We need to follow up with another session when the students are back in university. Networks must be upgraded beforehand and servers running. We had some IT issues as SL underwent an upgrade on the day and prior notice was short.”²⁰⁵

“There needs to be a better interface for estate managers. It is currently quite awkward from a teaching administration point of view. Allocating groups, granting access to land etc. is time consuming and annoying.”²⁰⁶

“The Second Life real time ‘Voice’ function is the most useful recent innovation. We can now hold virtual lectures and seminars that run equivalent to those in the real world. We are now at a position where we can think about exploiting the 3D immersive nature of the virtual world to build on and improve existing teaching methods. We have shown that we can teach effectively in the virtual world; now we need to show that we can go beyond real world teaching methods. Physical space of the teaching environment and location of learners is no longer a limiting factor. The virtual world makes sense pedagogically and financially for teaching in 3D multi-user virtual environments. What is more, the students love it.”²⁰⁷

“There are applications for medical and other healthcare students, and in continuing professional development. In particular it is a social and immersive medium that can be used by cross-discipline teams to train together and better understand each other’s points of view. We have also experimented with holding medical focus group meetings (deliberative events) and international seminars in Second Life.”²⁰⁸

“Improve the ease of designing in 3D. Improve the designing tools making it more user friendly. The ability to collaborate is exciting, yet the time lag and difficulty in co-ordinating a number of people proved challenging. The use of voice chat will enhance this, but needs to be improved far more.”²⁰⁹

²⁰⁴ Simon Walker, Head of Educational Development, University of Greenwich.

²⁰⁵ Elinor Clarke, Centre for Inter-Professional e-Learning, Coventry University.

²⁰⁶ Dr Judy Robertson, Computer Science, Heriot-Watt University.

²⁰⁷ Simon Bignell, Lecturer in Psychology, University of Derby.

²⁰⁸ Dave Taylor, Programme Lead, Virtual Worlds and Medical Media, Imperial College, London.

²⁰⁹ Jennefer Hart (MRes Student finished), Lancaster University.

“Access issues for universities, ability to register a bulk group of students, an educator’s tool box of pre-fab things, funding by the platform provider to encourage more research.”²¹⁰

“Better support for collaborative building.”²¹¹

“We have found that students benefit greatly from a pre-Second Life sign-up taster session. We have been using OpenSim standalone for this, but this can be a little tricky to install. A self contained island plus client on a USB memory stick that runs on any standard university PC or Mac would be very useful.”²¹²

“Collaborative tools like wikis.”²¹³

“Improved induction procedures. Larger sim capacities and easier group management. Stability.”²¹⁴

“Using a virtual world that doesn’t need state of the art machines. We wanted to run an event at the School of Education but their machines were not powerful enough for SL.”²¹⁵

“In fact the main improvement is still better computer equipment, and more access for students, here. I don’t blame LL for increasing the spec, myself. Possibly avatars could be rezzed with even more stuff in their inventories, though the current avatars are an improvement. LL could certainly still improve their sales support and admin support (e.g. the problems with allowing multiple sign ups from one location).

I’m not sure about the ‘simpler experience; shorter learning curve’ thing. If something allows you to do complex things, then it takes you time to understand it. Probably there could be some shortening of the curve in learning ‘the basics’, and possibly a rent-an-av service for people wanting ready-mades in bulk for short courses etc. However, the learning curve of understanding the affordances, the culture etc. takes lots longer than the business of how to move about - and that takes longer in any environment. I’m going to take longer discovering what can be done in SL than I am discovering the limits of WebCT for example.”²¹⁶

“Problems with permissions and groups has been causing a bit of problems, as the students need certain rights to be able to ‘rez’ objects. Being able to stream more than one media source into a land parcel would be very helpful. In particular, a media stream being specified on a per-prim basis would be ideal, although obviously there would need to be some sort of limitation on this to prevent performance being unduly degraded by having too many prims each with their own media stream.

Also, some way of making code more re-usable when writing LSL i.e. a method of creating re-usable code modules and referencing these or other scripts from within an LSL script. This would make it much easier to maintain and update code.

²¹⁰ Michele Ryan, Lancaster University.

²¹¹ Lorna McKnight, Lancaster University.

²¹² Ian Truelove, Principal Lecturer, Leeds School of Contemporary Art & Graphic Design.

²¹³ Gilly Salmon, Professor of E-learning & Learning Technologies, University of Leicester.

²¹⁴ Dr Peter GG Miller, School of Biological Sciences, University of Liverpool.

²¹⁵ Dr Shirley Williams, School of Systems Engineering, University of Reading.

²¹⁶ Sheila Webber, Senior Lecturer, Department of Information Studies, University of Sheffield.

In addition, it would be extremely helpful to have a way of backing-up inventory off-line. As well as offsetting the risk of losing items, this would help to make version and source control far easier to manage. Possibly this ability might need to be restricted to full-perms objects, or objects of which you are the creator, to minimize the likelihood of being able to steal, modify or copy objects on which you do not have sufficient permissions.”²¹⁷

“We will have a better idea once additional projects are completed this year.”²¹⁸

“Over time I have increasingly scaffolded the group project selection process - providing more detailed (while still open to interpretation) briefs for projects. I am offering more variety - to allow students who do not want to work in Second Life alternative projects which focus on the underlying software instead. And I have modified the initial ‘orientation’ lab to spend more time on building and less on communications and groups. Instead, the Linden Lab video tutorials are linked to from the course materials, and later labs will spend more time on communications. This is inspired by some of the feedback from the JISC Habitat project.”²¹⁹

“This is a big question - there are changes that are needed at a number of different levels - ranging from low level ‘management’ refinements (e.g. ease of controlling access to the island (or parts of it) for particular groups of people at particular times. Greater integration of tools (e.g. virtual world and wiki) so, for example, that you can sign up to attend an event without having to leave the immersive environment (this is technically possible to implement by passing data back and forth between the virtual world and an external database but ought to be part of the environment’s functionality). Issues to do with service level agreements and the reliability of the environment are important.

I would like to see the development of a hybrid system that is somewhere between an Open Virtual World (OVW) such as Second Life™ virtual world and Restricted Virtual Worlds (RVW) such as World of Warcraft. OVWs have the advantage that you can do whatever you want within them (within the limitations of your expertise and the sophistication of the building and scripting tools) rather than everything having been ‘pre-scripted’. However, they lack any (inbuilt) structures that draw users into the environment and/or provide an indication of progression or ‘success’. Thus one of the common early reactions to Second Life™ virtual world is ‘I don’t see the point of it’ or ‘What am I meant to do?’. This is because Second Life™ virtual world, like real life, is pointless until someone superimposes a purpose upon it.

This contrasts with OVWs where the point is integral to the design of the environment (and often involves a mission to kill something - so there is a clear and obvious indicator of success). Within the context of the Scheme Initiative a useful hybrid system - let’s call it the Virtual Scheme Environment or VSE - might provide structures which act as magnets to draw people into the learning environment and mechanisms which capture data about and make explicit the learner’s ‘progress’. Such mechanisms might be built around notions of communities - the degree to which one had become a member of specific communities - moving through levels from ‘outsider’ through ‘novice’ to ‘expert’ to ‘elder’. Any one person might belong to a number of communities (e.g. builders, physicists, historians, project managers, mediators). Data from the system about what an avatar has done might feed into their ‘progression’ into the community.

²¹⁷ Emily Conradi, e-Projects Manager, St George's University of London.

²¹⁸ Nicola Avery, e-Learning Unit, University of Surrey.

²¹⁹ Dr Daniel Livingstone, Lecturer, School of Computing, University of the West of Scotland.

Thus, for example, data about things you have built and the extent to which they have been used by other avatars might inform progression through levels of membership of 'the community of builders'. More work is clearly needed on thinking through what the most appropriate structures/magnets and mechanisms might look like or how they might work - but I suspect that the VSE would help to overcome some of the problems inherent in OVWs as well as potentially addressing questions about assessment of 'skills'."²²⁰

"Simpler sign up for new users - SL has now made the change to allow new users to teleport direct to a SLURL location missing out orientation - this is a good thing."²²¹

"Main issue for us is accessibility in the real world to access the virtual world i.e. computers and bandwidth. The SL College Region is under constant development to improve the learner experience."²²²

"Many are already coming through - the ability to sign up and be directed straight to our own orientation area on the island. Others would be really useful - more granular and flexible role/access controls, preferably organised in a batch or automatic feed formats (like we are used to with our other 'virtual learning environments'), better automatic registration/creation of accounts, and the APIs to hook in connections with our VLEs.

More flexibility around shared inventories for educational use - in fact generally more openness by LL to engage with the kind of 'workarounds' that we are used to doing - seeing a particular thing could be used for something that the designers didn't plan - don't tell us that's not how it's supposed to work, instead get creative with us! Improved sound provision - ten second .wav clips are too fiddly if you want to provide audio instructions or guides.

Continued improvement in delivering web pages to prims so that you can interact with them, even if it's just scroll down. Potential to show Flash on a prim, whether it's as a web page or more likely a video format. More clarity and support of educational institutions around bulk registration of accounts."²²³

"Better authentication and authorisation."²²⁴

"In the case of Linden Labs and SL, making setting up accounts from the university network less problematic. The issue of only having a five account maximum and two on any day, unless specific IP addresses are set, is a real pain!"²²⁵

"Second Life is an interesting and absorbing environment to work in. It has the potential to provide real world experiences within the safety net of a virtual world and lead to computer based employment opportunities. As in many computer projects, the time needed for development far exceeded the initial ideas of what was required.

²²⁰ Dr Peter Twining, Senior Lecturer, Department of Education, Open University.

²²¹ Anna Peachey, COLMSCT Associate Teaching Fellow, Open University.

²²² Martin Biron, Senior Lecturer, Faculty of Technology, College of North West London.

²²³ Kate Boardman, Head of E-learning, Centre for Learning & Quality Enhancement, University of Teesside.

²²⁴ Dr Stuart Lee, Director of Computing Services, University of Oxford.

²²⁵ Dr Liz Falconer, Manager, E-learning Development Unit, University of the West of England.

Staff and students also need to buy into the idea, and unless effective projects are developed it can be seen as little more than a game or a poor replacement for the web. Tutors need to be able to allow students freedom to develop their ideas but give them sufficient support to behave responsibly in what could be a very public and unstructured environment.”²²⁶

“Less lag - doing anything in the evening (UK time) means that you really hit the busy time and that can be slow even on private islands. Mainland is unbearable.”²²⁷

“Improvements would include:

- Full embedded web browser and access to standard PC apps (e.g. PPT, Open Office etc.).
- Removal of age limits on private islands.
- Easy text on a prim.
- Allow multiple media streams on each parcel.
- Allow more data on HTTP requests (may be fixed in Mono).
- Local hosting/open sim.”²²⁸

3.8 Have you had a look at any other virtual worlds yet? If so, what intrigued you, and why?

“Yes - Olive (Forterra systems - closed environment for simulation), www.thepalace.com, The Croquet Consortium (www.opencroquet.org), Raph Koster’s Metaplace (www.metaplace.com), www.sloodle.org, Project Wonderland (<https://lg3d-wonderland.dev.java.net>), There and The Edinburgh Virtual Environment Centre (www.edvec.ed).”²²⁹

“OpenSim already in use, and could be used for behind the firewall systems, and where we need much more real estate for training and simulation related exercises. Also looking at browser delivered worlds like Lively by Google.”²³⁰

“We are actively looking at Open Simulator which, especially in the light of the collaboration between IBM and Linden lab to realise an interoperable grid, has incredible potential. I’ve looked at other virtual worlds but have not actively joined them apart from the incidental ‘sniffer’ mission. SL and OpenSim have quite a lead, providing a toolkit rather than an end product.”²³¹

“Potential of OpenSim for induction.”²³²

“I have done a lot with Neverwinter Nights 2 for my research project. I like it from a storytelling point of view for young learners.”²³³

“Looked at other systems such as Google’s Lively, OpenSim and Small Worlds. However Second Life is the tool we are currently exploring. We see virtual worlds as having huge

²²⁶ Simon Walker, Head of Educational Development, University of Greenwich.

²²⁷ Pauline Randall, Developer, virtual-e.

²²⁸ Soulla Stylianou, RL Client Director, Daden Limited.

²²⁹ Elinor Clarke, Centre for Inter-Professional e-Learning, Coventry University.

²³⁰ Professor Austin Tate, Artificial Intelligence Applications Institute, University of Edinburgh.

²³¹ Ferdinand Francino, Project Manager Web 3.D (Second Life), Glasgow Caledonian University.

²³² Kathryn Trinder, Research Fellow (e-Learning), Glasgow Caledonian University.

²³³ Dr Judy Robertson, Computer Science, Heriot-Watt University.

potential in the future, and see our current investigations as informing our future development, whether in SL or not.”²³⁴

“Looked at a few, including Edinburgh and Coventry. Also Emerge and Eduserv. [Question interpreted as other developments in Second Life]”²³⁵

“I have also very briefly created a room using Google’s Lively product, again just to investigate this new software. I managed to create a link to our library computer catalogue via the laptop model, and tried to create a ‘comfortable’ area to hold meetings, etc. but I haven’t experimented recently and the room is not public (yet...?!). I look forward to the day when users can create their own content.

Google’s Lively looked graphically very pleasing, and there seemed to be a reasonable amount of free content, but the big drawback, especially for educators, was the lack, at least at the moment, of the ability to create your own content. Also, movement controls were a bit strange, but the ability to have your own private or public space seemed useful, especially for educators who only wanted a particular class, for example, to be able to access a particular room.

I also briefly looked at Small Worlds, and liked the fact that you don’t need to install any software since it runs in your web browser, using Adobe Flash Player. I was impressed with the missions aspect, though it perhaps seemed less geared towards education and more to games and a younger audience? I also liked the way you had to undertake missions (involving learning how to use the application) in order to earn tokens to spend on acquiring furniture etc.

I think this provides a good example of how to overcome the Second Life open-ended ‘there’s nothing to do here’ problem. Maybe it’s up to us to create scenarios which can provide motivation for students (e.g. get free objects for your avatar) to perform certain functions, during which, of course, they are also learning how to use the application as well as whatever we are trying to teach them.”²³⁶

“Project Wonderland was particularly interesting as it allowed groups of people to dynamically edit the same document. The quality of spatial sound was also appealing, and the fact that the platform is Java based and would allow for complex programming.”²³⁷

“Yes. Google’s new virtual world was disappointing and didn’t seem to get the idea of open access community.”²³⁸

“We expect OpenSim to give us more control which will be useful for some of our work. We have looked at Olive and other platforms and are inviting our students to undertake projects in a variety of environments.”²³⁹

“Yes, and other environments including open source environments.”²⁴⁰

²³⁴ Andy Beggan, Learning Team Leader, Information Services, University of Nottingham.

²³⁵ Will Stewart, E-learning Adviser, University of Bradford.

²³⁶ Lindsay Da Silva, Technical Services Librarian, University of Chichester

²³⁷ Maggi Savin-Baden, Director, Learning Innovation, Coventry University.

²³⁸ Simon Bignell, Lecturer in Psychology, University of Derby.

²³⁹ Dave Taylor, Programme Lead, Virtual Worlds and Medical Media, Imperial College, London.

²⁴⁰ Dr Tim Linsey, Head of E-Learning, Kingston University.

"I have read and listened to others who have, but haven't heard anything to take me elsewhere than SL yet. I'm sure it will come."²⁴¹

"Active Worlds is pretty good. I met them at a conference and they took us in-world. I checked out Lively, there.com and others. Just curious if SL was the best one to use."²⁴²

"Yes, signed up to the alpha release of Metaplace and have looked at this, looking forward to Google Lively. Looking at them as this is my field of research."²⁴³

"We have been experimenting with Sun's Wonderland/MPK20, with assistance from the University of Essex via the Open Habitat project. This looks like a very promising conferencing platform. The emphasis of Wonderland is very much on augmenting real life communications and collaborations, and I can see this platform having wide-spread appeal. I think platforms like Wonderland can co-exist quite happily with immersionist environments like Second Life."²⁴⁴

"Wonderland - because of its open source heritage."²⁴⁵

"Yes, several. I realise it's chicken-and-egg but I think we need to sort out the pedagogy a little first so we can identify deficiencies in current worlds more clearly and technical/admin benefits in other worlds."²⁴⁶

"Briefly at a couple, but not enough to comment on. I still need/want to look at a range in detail."²⁴⁷

"No. I am in SL and have spent time and energy there and will stick with this for the time being."²⁴⁸

"Yes. We think it is unwise to be SL centric as so many things are beyond our control."²⁴⁹

"I set up a couple of rooms in Google Lively, because I could, because I was doing a workshop on Web 2 for a conference, and because I have a remote PhD student who hasn't been able to get access to SL. We did eventually meet up in Lively and we laughed a lot, but it was too simplistic (we both looked like sulky teens - you can't do much with your avatar and there aren't the tools and props, let alone the scenery) to seem a good substitute for F2f. There may be further exploration of the use of SL for research students support this year.

I haven't explored others. SL may not last for ever but it's good for a bit yet, and I would rather concentrate on one and try and get to grips with it seriously (plus I like the shopping).

²⁴¹ Dr Julia Gillen, Literacy Research Centre, Lancaster University.

²⁴² Michele Ryan, Lancaster University.

²⁴³ Lorna McKnight, Lancaster University.

²⁴⁴ Ian Truelove, Principal Lecturer, Leeds School of Contemporary Art & Graphic Design.

²⁴⁵ Gilly Salmon, Professor of E-learning & Learning Technologies, University of Leicester.

²⁴⁶ Dr Peter GG Miller, School of Biological Sciences, University of Liverpool.

²⁴⁷ Jane Chandler, Principal Lecturer, School of Computing, University of Portsmouth.

²⁴⁸ Dr Franziska Schroeder, School of Music and Sonic Arts, Queen's University Belfast.

²⁴⁹ Dr Shirley Williams, School of Systems Engineering, University of Reading.

There is another project which Education are involved in which may lead to work with a VW on university servers. I think that some of the learning about teaching in VWs is transferable.”²⁵⁰

“Looked at some interactive gaming programmes - these can be customised to create a bespoke learning object that the author(s) have a greater degree of control of - both in terms of the participants activities and minimising distractions.”²⁵¹

“We are following progress with the Immersive Education group. We have explored some of the Wonderland projects now available. We held initial internal discussions with colleagues in our Department of Psychology to explore the potential voice and other applications integration, creation and re-use of 3D content within Wonderland as an alternative to Second Life, although they want to continue to explore Second Life alongside this for now.

We are continuing to follow progress with Wonderland, OpenSim and other worlds, but have not got a specific project that we could ‘jump in with’ quite yet - although that may be possible within the next year. OpenSim looks a great option but again we do not have budget yet (currently looking) to source technical expertise either internally or externally, it is similar to Wonderland in that the commitment of staff time is expected to be higher than required for Second Life, initially.

We are intrigued by being able to use a range of 3D tools to develop content provides better options for accessibility, usability, sharing and reuse of content. Integration of voice/telephony/web applications also provides greater opportunities for collaboration with others.”²⁵²

“I’ve collaborated with the CEO of Active Worlds Europe on a number of demonstrations to HE. The feedback is that this is an interesting complement to Second Life, due mainly to the lower specification equipment required and the absence of 18 certificate content.”²⁵³

“Am still hoping to have OpenSim and Wonderland servers set up, if possible, for the current class that has just started.

Lively is worth keeping a close eye on - as Google develop and release APIs for getting data into and out of Lively spaces, it could develop into a much more flexible and powerful collaboration/learning space.”²⁵⁴

“No - I’m aware that there are some but haven’t had time to investigate.”²⁵⁵

“Yes. There must be something better than Second Life™ virtual world! It is just a matter of time before Open Virtual Worlds (OVWs) such as Second Life virtual world catch up with commercial products such as World of Warcraft in terms of the sophistication of their underlying technology (e.g. graphics engines). Interoperability will be a key feature of OVWs in the future as will integration of tools (e.g. your avatar being able to edit your wiki page from inside the virtual world).”²⁵⁶

²⁵⁰ Sheila Webber, Senior Lecturer, Department of Information Studies, University of Sheffield.

²⁵¹ Dr Glynn Skerratt, Faculty of Sciences, Staffordshire University.

²⁵² Nicola Avery, e-Learning Unit, University of Surrey.

²⁵³ Mark Childs, Teaching Development Fellow Elearning, Coventry University.

²⁵⁴ Dr Daniel Livingstone, Lecturer, School of Computing, University of the West of Scotland.

²⁵⁵ Kriss Fearon, Web Coordinator, University of York.

²⁵⁶ Dr Peter Twining, Senior Lecturer, Department of Education, Open University.

“Croquet, Twinity, Wonderland, There, OpenSim - I like the projected compatibility of OpenSim with Second Life, and can see a case for having all formal teaching on our own closed OpenSim client, but students who can fly in and out of Second Life and take advantage of all the other things that the world has to offer.”²⁵⁷

“We have an OpenSim grid for testing purposes, but I haven’t looked in depth at any non SL-like virtual worlds.”²⁵⁸

“We are working with <http://www.skills2learn.com>. This has been an ongoing development project. We are currently in phase three and seeking an additional £500k to complete. The programmes produced use a technology referred to as Real World Environments (RWE).

We are additionally investigating and trialling SL open source code to run MUVE on our own college server.”²⁵⁹

“Some work has been carried out around campus in considering other virtual worlds, and updates elsewhere are actively being monitored. The general feeling, despite the usual anxieties about SL, is that none of them currently offer an environment as user-friendly and adoptable as SL. OpenSim does interest us, especially with regard to being able to close access for particular activities, the potential to bulk manage accounts and the opportunity to track activity for learning mapping. Having said that you then lose the potential offered by SL to engage with other users outside of the university.”²⁶⁰

“No, it has taken enough time to get to grips with SL!”²⁶¹

“We have an awareness and we are keeping a watching brief. We plan to look at OpenSim soon due to the potential for local installation.”²⁶²

“Not in any depth.”²⁶³

“I’ve looked at Entropia but can’t (yet) see how that can fit in with what I’m doing. Also looked at Twinity but that’s not there yet. I also had a quick look at Lively - think that may have some possibilities.”²⁶⁴

“Most of them:

- Forterra Olive - enterprise class, but increasingly SL does most of the stuff that Olive does, less the RL app integration.
- Twinity - hate the avatars and hate having to walk everywhere, no interactivity tools yet.
- QWAQ - great app integration but blocky avatars, although new avatars coming, and Croquet/Cobolt family has the most sophisticated tools of any virtual world.

²⁵⁷ Anna Peachey, COLMSCT Associate Teaching Fellow, Open University.

²⁵⁸ J Ross Nicoll, Research Fellow, University of St Andrews.

²⁵⁹ Martin Biron, Senior Lecturer, Faculty of Technology, College of North West London.

²⁶⁰ Kate Boardman, Head of E-learning, Centre for Learning & Quality Enhancement, University of Teesside.

²⁶¹ Dr Liz Falconer, Manager, E-learning Development Unit, University of the West of England.

²⁶² Richard Mather & Andrew Middleton, Learning and Teaching Institute, Sheffield Hallam University.

²⁶³ Simon Walker, Head of Educational Development, University of Greenwich.

²⁶⁴ Pauline Randall, Developer, virtual-e.

- Wonderland - neat audio features but very blocky.
- Active Worlds - looks old fashioned but good tool set and very SL like and may be a good first step for FE/secondary schools.”²⁶⁵

3.9 What kind of support or resources would make it easier for you to do teaching and learning ‘stuff’ in virtual worlds in the future?

“Funding for my time and work (CIPeL do not support any further activity). Acquisition of building skills (so I do not have to rely on students from other departments). Development of a community of practice. I wish to continue the project to include a small number of teaching sessions in a) IPE and b) Midwifery.”²⁶⁶

“Freely available and modifiable good quality in-world and external package of resources for the sorts of things educators use. Good scripts to link externally to systems.”²⁶⁷

“In this university? More adaptability and flexibility from IT. More forward thinking in (teaching) staff. In general? An educational (UK) hub, much like a web portal. A set of region funded by JISC and built by me, so it looks good ☺”²⁶⁸

“Full support from IT (including managers). Help with induction. Getting people, especially staff, registered and finding them time to get to know the world a little is problematic. Perhaps no more so that any other technology (i.e. the rollout of our VLE springs to mind), but this time it has to be done much faster, now, now, now, if we have any chance of really making good use of the affordances of this one. It won't be the technology that we will pass by, this time it and the rest of the world will pass us by, leaving us wondering what happened.”²⁶⁹

“Further work on Moodle to help with the admin side of things. Subject related resources (e.g. simulations). Guides on how to facilitate learner interactions.”²⁷⁰

“The high demands on computers means there is a requirement for computers to catch up. Not all student/university PCs can handle the high demands which make it prohibitive.”²⁷¹

“We see the need for ‘techies’ to do the scripting and designing work as crucial at this stage. Someone to translate what teaching and learning staff and also students want to happen in SL.”²⁷²

“As a Librarian, I see lots of potential in virtual worlds to educate and engage our students and staff in learning how to better use our resources and electronic resources in general, but to achieve this in any real sense there are many hurdles to jump. The development of a meaningful virtual world presence requires more support and resources than just relying on a few enthusiasts working in their own time. A

²⁶⁵ Soulla Stylianou, RL Client Director, Daden Limited.

²⁶⁶ Elinor Clarke, Centre for Inter-Professional e-Learning, Coventry University.

²⁶⁷ Professor Austin Tate, Artificial Intelligence Applications Institute, University of Edinburgh.

²⁶⁸ Ferdinand Francino, Project Manager Web 3.D (Second Life), Glasgow Caledonian University.

²⁶⁹ Kathryn Trinder, Research Fellow (e-Learning), Glasgow Caledonian University.

²⁷⁰ Dr Judy Robertson, Computer Science, Heriot-Watt University.

²⁷¹ Andy Beggan, Learning Team Leader, Information Services, University of Nottingham.

²⁷² Will Stewart, E-learning Adviser, University of Bradford.

permanent presence, such as an island, helps greatly with developing a 'home' for students to start their exploration, and provides an area for starting to develop innovative ideas, and a 'safe' area for experimenting. Providing the hardware to run the virtual world is also important, to avoid sessions with constant crashes and an overall negative view, and, of course, the biggest resource needs to be made available: time!"²⁷³

"More time! A limiting factor for many academics is the lengthy time it takes to learn the skills necessary to give an effective virtual world teaching session. It's much more complicated than it first seems. The future needs to embrace training needs within 3D virtual worlds and also ensure quality is maintained when educational builds are initially set up."²⁷⁴

"IT services and perhaps relevant training."²⁷⁵

"We will build our own."²⁷⁶

"There are still issues, such as the constraints imposed by data protection legislation when using 3rd party environments. Management of accounts, though there is some capability in this respect such as the ability to set up institutional 'surnames'"²⁷⁷

"As long as SL is as commercial as it is (understandably) then considerable money is needed to organise a really worthwhile project."²⁷⁸

"An Idiot's Guide."²⁷⁹

"More tutorial support especially in scripting language. More spatial orientation aspects in terms of finding your way around."²⁸⁰

"A map of the content specific learning objects and islands in-world. Less fragmentation, more organization. Tool box of teaching objects and pre-fab things."²⁸¹

"Funding for land (and self!)."²⁸²

"Dedicated OpenSim standalone workshops with real life technical support. Dedicated in-world (Second Life) support staff."²⁸³

"The training guide produced through MOOSE will be important as it is a starting point to formalise the skills required to teach and learning in Immersive Virtual Worlds/3D MUVES. However, there needs to be more freedom of networks and connectivity from inside institutions to enable more staff to experiment therefore making the tools more 'mainstream'."²⁸⁴

²⁷³ Lindsay Da Silva, Technical Services Librarian, University of Chichester.

²⁷⁴ Simon Bignell, Lecturer in Psychology, University of Derby.

²⁷⁵ Remy Olosoji, School of Distance and E-Learning, University of East London.

²⁷⁶ Dave Taylor, Programme Lead, Virtual Worlds and Medical Media, Imperial College, London.

²⁷⁷ Dr Tim Linsey, Head of E-Learning, Kingston University.

²⁷⁸ Dr Julia Gillen, Literacy Research Centre, Lancaster University.

²⁷⁹ John Mackness, Lancaster University.

²⁸⁰ Jennefer Hart (MRes Student finished), Lancaster University.

²⁸¹ Michele Ryan, Lancaster University.

²⁸² Lorna McKnight, Lancaster University.

²⁸³ Ian Truelove, Principal Lecturer, Leeds School of Contemporary Art & Graphic Design.

²⁸⁴ Gilly Salmon, Professor of E-learning & Learning Technologies, University of Leicester.

“A subject-specific toolkit that would make it easier for students (as well as staff) to become creators.”²⁸⁵

“University-owned land with more extended facilities than the once available to me via my own plot; lower land ownership and maintenance fees for educational use/institutions; more funding opportunities for advanced experimental work in SL.”²⁸⁶

“I think I said this before, I would need the university to dedicate some proper funding and staff resources. I have been relying on students to help with programming, concerts etc. The students are great, but they tend to leave after a year or so and if we (artists and educators) want this to be more stable and sustainable (for teaching and performing), we need a dedicated team, not solely one person within the university!!

Mind you, I am not on a mission to convince the university to invest into virtual environments. I am paid to do my research and cannot waste public money by spending my time liaising with university bureaucrats.”²⁸⁷

“The ability to see the screen that a remote learner has in front of him/her.”²⁸⁸

“I’ve already mentioned the kit, and obviously the pipes that can give sufficient bandwidth. I think there could be more peer (and other?) support within UK and other European educators - I’ve found myself mostly hanging out with American educators which isn’t doing my sleep patterns any good (but it IS useful, in that my focus previously has been on Australia and Nordic countries).

I think the issue of transporting ‘stuff’ between worlds is fraught with intellectual property issues, when it concerns a world where content has been authored by thousands of different people. I assume it will be sorted out, but that aspect is likely to take time (and rightly so if we are respecting people’s creative and moral rights).”²⁸⁹

“Certain limitations to the platform need to be improved, and a major concern is that not all students can access the virtual world easily. One of university computer labs has been upgraded and all the machines can play SL, but the others also will ideally follow suit too.”²⁹⁰

“Access to expertise in building and more time to devote to recruiting students (and staff) to explore and develop approaches to TLA in SL.”²⁹¹

“Financial - so we can recruit both staff and possibly external parties to work with us on projects.

Community - the JISCMail list is good for virtual worlds issues, SLED list is still ok but difficult to keep up with the volume. There are Ning and other communities but it is difficult to keep up with all of these as well.

²⁸⁵ Dr Peter GG Miller, School of Biological Sciences, University of Liverpool.

²⁸⁶ Elena Moschini, MA Digital Media course leader, London Metropolitan University.

²⁸⁷ Dr Franziska Schroeder, School of Music and Sonic Arts, Queen's University Belfast.

²⁸⁸ Dr Shirley Williams, School of Systems Engineering, University of Reading.

²⁸⁹ Sheila Webber, Senior Lecturer, Department of Information Studies, University of Sheffield.

²⁹⁰ Emily Conradi, e-Projects Manager, St George's University of London.

²⁹¹ Dr Glynn Skerratt, Faculty of Sciences, Staffordshire University.

Automatic avatar generation - our staff would like students to enter the island and select a pre-built avatar then go through an orientation with them as part of their other learning activities rather than asking students to set up individual accounts.”²⁹²

“Good dissemination of case students of good practice. More funding opportunities are needed to support its development.”²⁹³

“HEFCE have proposed that as part of their elearning strategy that minimum standards for support provided by IT service departments for innovation could be imposed on universities. These minimum standards should include opening up the infrastructure to enable Web 2.0 applications, providing sufficient bandwidth for applications and the roll-out of Second Life and other virtual worlds. If HEFCE did include these minimum standards then this would turn around the role of elearning in HE, not just for immersive virtual worlds but for a whole range of technologies.”²⁹⁴

“The Rezed/Global Kids Second Life curriculum is a very detailed resource for learning Second Life skills (www.rezed.org/group/GKslcurriculum)

We are working (in the SLOODLE project) to try to develop more tools and systems for supporting learners and teachers working with Second Life (and Moodle) - to support the development of interactive content, assessments, and collaborative working.

There are a number of repositories of resources for virtual worlds. It could be argued that another repository is not required - but a high quality repository to serve the needs of new users, academics (and academic management) investigating virtual worlds for the first time, and current users of virtual worlds might be of significant benefit.”²⁹⁵

“The IT support has been helpful as far as they are able to do so. There are some infrastructure issues with using SL in the institution. That is, the PCs are locked down and SL requires regular updates so therefore can really only be run off a memory stick. There are also profile space issues when using SL on university PCs. Developing resources in SL is time intensive so there could also be provision for more time to do this.”²⁹⁶

“We are really short of technical skills for building. Nobody on the team can do this to a high standard although a couple have reasonable skills, and there’s very little budget. This means that some good project ideas can’t be put into practice yet as they require a ‘built space’ such as an amphitheatre. I’ve looked at the SL tutorials but they’re quite specific. Advice on this, tutorials or suggestions of a good payable service would be great.”²⁹⁷

“More staff time. A repository of ‘resources’ which support immersive activities (e.g. a ‘court case kit’ which includes a court room, judges wig, and all the other things needed to enact a court case).”²⁹⁸

²⁹² Nicola Avery, e-Learning Unit, University of Surrey.

²⁹³ Tony Hudson, Web Team Manager, University of Sussex.

²⁹⁴ Mark Childs, Teaching Development Fellow Elearning, Coventry University.

²⁹⁵ Dr Daniel Livingstone, Lecturer, School of Computing, University of the West of Scotland.

²⁹⁶ Crispin Dale, Principal Lecturer, Technology Supported Learning, University of Wolverhampton.

²⁹⁷ Kriss Fearon, Web Coordinator, University of York.

²⁹⁸ Dr Peter Twining, Senior Lecturer, Department of Education, Open University.

“Investment in high quality reusable, repurposeable learning objects and resources across faculties.”²⁹⁹

“Speaking as someone working on this on a voluntary basis because we have no significant funding, actual paid-for time has to be the priority for us. Beyond that, a content repository for freely available educational content would be useful.

In more general terms, as someone who is trying to start an OpenSim grid for UK academia, I feel a service that differs from Second Life in offering:

- Allowing under 18s to mix with adults.
- Allowing users to backup their own inventories.
- Allowing estate managers to backup their region and everything in it.
- Explicit content forbidden grid-wide (with some exceptions made for teaching biology/medicine, perhaps).
- User accounts only available to those involved in education.

... would be extremely beneficial for the academic virtual world community in general.”³⁰⁰

“Improved physical infrastructure to permit users easy access to their virtual world.”³⁰¹

“Perhaps better built in options for assessment and communication in/out of world - e.g. being able to effectively blog/post photos from in-world, to send IMs in-world from not being logged in. Some of this is beginning to be possible, but it means cobbling together lots of different bits - rather like we used to do to create a VLE as VLEs began to come on stream. Being able to create accounts/login from VLEs/track users into our VLEs would be fantastically helpful in making virtual worlds recognised as part of the now mainstream learning tech provision.”³⁰²

“Again, easier access control tied into our own Authentication and Authorisation systems.”³⁰³

“I guess it is the design and scripting side of things that is the most demanding, so support on how to do that and perhaps a bank of education scripts and designs would be helpful.”³⁰⁴

“We found existing machinima examples very useful - they helped us to communicate the potential of Second Life.

Tutorial materials and how-to guides for student producers would also be very useful.”³⁰⁵

“Staff development workshops, experience of colleagues and readily available advice.”³⁰⁶

²⁹⁹ Anna Peachey, COLMSCT Associate Teaching Fellow, Open University.

³⁰⁰ J Ross Nicoll, Research Fellow, University of St Andrews.

³⁰¹ Martin Biron, Senior Lecturer, Faculty of Technology, College of North West London.

³⁰² Kate Boardman, Head of E-learning, Centre for Learning & Quality Enhancement, University of Teesside.

³⁰³ Dr Stuart Lee, Director of Computing Services, University of Oxford.

³⁰⁴ Dr Liz Falconer, Manager, E-learning Development Unit, University of the West of England.

³⁰⁵ Richard Mather & Andrew Middleton, Learning and Teaching Institute, Sheffield Hallam University.

³⁰⁶ Simon Walker, Head of Educational Development, University of Greenwich.

“Money?!”³⁰⁷

“A good resource of case studies.”³⁰⁸

“A more reliable platform; a better audio system; some integration with other tools so that information can be exchanged more easily.”³⁰⁹

3.10 What’s been the reaction(s) from your peers and institution about your involvement with virtual worlds?

“Interested but not convinced that it is a suitable environment for learning. Some are excited (midwife educators in New Zealand).”³¹⁰

“Very supportive and interested. Growing interest at all levels of university from principal down.”³¹¹

“Differs. Some are very keen and interested, many are indifferent, a handful are plain hostile.”³¹²

“From ‘It’s dreadful depicting these scantily clad women as the face of the university’, to ‘Cool! Can I meet my new students in the virtual Saltire next week?’. Seems to attract extremes of reaction.”³¹³

“Sceptical at first, but have convinced my managers now that it is worthwhile for teaching. Some people are bizarrely hostile to it, for no particularly good reason.”³¹⁴

“Scepticism in some quarters but real enthusiasm in others. As we are fairly early in this process, there is a challenge in understanding what can be done as the medium is so new.”³¹⁵

“Despite giving a presentation, publicising the virtual library on my blog and via posters, etc. I have had practically no reaction, apart from many visits to the virtual library itself, according to the stats counter. I even started a wiki for collaboration, but again, no reaction!”³¹⁶

“The reaction has been one of interest and excitement.”³¹⁷

“Very positive.”³¹⁸

³⁰⁷ Pauline Randall, Developer, virtual-e.

³⁰⁸ Soulla Stylianou, RL Client Director, Daden Limited.

³⁰⁹ Dr Lucia Rapanotti, Computing Department, Open University.

³¹⁰ Elinor Clarke, Centre for Inter-Professional e-Learning, Coventry University.

³¹¹ Professor Austin Tate, Artificial Intelligence Applications Institute, University of Edinburgh.

³¹² Ferdinand Francino, Project Manager Web 3.D (Second Life), Glasgow Caledonian University.

³¹³ Kathryn Trinder, Research Fellow (e-Learning), Glasgow Caledonian University.

³¹⁴ Dr Judy Robertson, Computer Science, Heriot-Watt University.

³¹⁵ Andy Beggan, Learning Team Leader, Information Services, University of Nottingham.

³¹⁶ Lindsay Da Silva, Technical Services Librarian, University of Chichester.

³¹⁷ Maggi Savin-Baden, Director, Learning Innovation, Coventry University.

³¹⁸ Simon Bignell, Lecturer in Psychology, University of Derby.

“Enthusiastic, but IT involvement is slow, partly due to funding and other issues like network support and availability of environment within the university.”³¹⁹

“Healthcare staff at Imperial College and in the PCTs have been very interested in our use of virtual worlds, as have other faculties in the university. The Medical Media and Design Laboratory has an inter-disciplinary approach and can call upon resources from across the university.”³²⁰

“One faculty now purchasing their own island for both learning and teaching and marketing, based on their experiences on using the core island over the last year.”³²¹

“Extremely supportive; the level and quality of interest has been excellent.”³²²

“Mild interest.”³²³

“Mixed reaction from peers ... as there is little understanding about SL and some see its limitations rather than its possibilities. Lancaster University sees the use of SL as an interesting area to explore and it was through their coursework that it was suggested as a means of exploration.”³²⁴

“They are curious and sceptical.”³²⁵

“Mixed - some confusion (‘why are we paying for a virtual island?’), some ridicule (‘why study this, when only nutters use it?’), some disgust (hiding behind an avatar is ‘deeply disturbing’), but also a lot of interest, and some very enthusiastic responses too.”³²⁶

“Reactions have been mostly positive. The ALT and TEL teams have been incredibly supportive, both financially and emotionally. Colleagues across the institution have shown interest, but often struggle to see how they can practically implement virtual worlds into their teaching without additional support and resources.

Securing funding from JISC and hooking up with Oxford and King's College London has helped those who were previously cynical to view our work in a more positive light.”³²⁷

“Strong interest and involvement.”³²⁸

“No formal reaction though there has been a perception voiced centrally that SL in particular is not a good place to invest time in developing as its significance will be transitory. An invited speaker to our in-house Teaching and Learning conference made an unexpectedly positive reference to virtual worlds as being a significant part of the pedagogic future and that may have at least put it on the agenda.”³²⁹

³¹⁹ Remy Olasoji, School of Distance and E-Learning, University of East London.

³²⁰ Dave Taylor, Programme Lead, Virtual Worlds and Medical Media, Imperial College, London.

³²¹ Dr Tim Linsey, Head of E-Learning, Kingston University.

³²² Dr Julia Gillen, Literacy Research Centre, Lancaster University.

³²³ John Mackness, Lancaster University.

³²⁴ Jennefer Hart (MRes Student finished), Lancaster University.

³²⁵ Michele Ryan, Lancaster University.

³²⁶ Lorna McKnight, Lancaster University.

³²⁷ Ian Truelove, Principal Lecturer, Leeds School of Contemporary Art & Graphic Design.

³²⁸ Gilly Salmon, Professor of E-learning & Learning Technologies, University of Leicester.

³²⁹ Dr Peter GG Miller, School of Biological Sciences, University of Liverpool.

“There is a strong interest in potential educational applications of virtual environments; especially in the use of simulated environments within SL. There is a positive and supportive approach to using new technologies and virtual environments for teaching and learning.”³³⁰

“From peers and parts of the institution enthusiasm and/or interest, from other parts of the institution caution.”³³¹

“SARC has been asked to run a pilot project for the entire university. We have not had much feedback so far from the university.”³³²

“Mixed.”³³³

“A few peers have become very interested, notably a colleague (Professor Jackie Marsh) from our School of Education, and Education are starting to use the island. Although there continues to be very active interest from some librarians, the library itself has not got SL on its priority list, and the Computing Services are at time of writing still not allowing SL to be installed in the managed computer labs.”³³⁴

“Overwhelmingly positive. Lots of requests for demos and possible avenues for future collaboration. I think because the demo is so visual, people really enjoy the experience and can see why it works within the SL environment. The scenarios allow the students to rehearse the decisions they would make in the real world, in a safe environment where the students can immerse themselves in their role.”³³⁵

“Little attention thus far.”³³⁶

“We are promoting our involvement with virtual worlds as initial exploratory activity. There is currently not interest from other central services. We held student workshops and a special Second Life workshop for our internal eLearning Practitioners Network in June which generated discussion and the formation of our Second Life community of interest.”³³⁷

“Quite positive.”³³⁸

“They think it’s interesting and ‘cool’ too.”³³⁹

“Associate Dean of research has been very supportive. Many peers have been interested, though few have had time to get involved. Some interest also from other schools of the university.”³⁴⁰

“The attitude of my host institution has been very positive and empowering.”³⁴¹

³³⁰ Elena Moschini, MA Digital Media course leader, London Metropolitan University.

³³¹ Jane Chandler, Principal Lecturer, School of Computing, University of Portsmouth.

³³² Dr Franziska Schroeder, School of Music and Sonic Arts, Queen's University Belfast.

³³³ Dr Shirley Williams, School of Systems Engineering, University of Reading.

³³⁴ Sheila Webber, Senior Lecturer, Department of Information Studies, University of Sheffield.

³³⁵ Emily Conradi, e-Projects Manager, St George's University of London.

³³⁶ Dr Glynn Skerratt, Faculty of Sciences, Staffordshire University.

³³⁷ Nicola Avery, e-Learning Unit, University of Surrey.

³³⁸ Tony Hudson, Web Team Manager, University of Sussex.

³³⁹ Mark Childs, Teaching Development Fellow Elearning, Coventry University.

³⁴⁰ D. Daniel Livingstone, Lecturer, School of Computing, University of the West of Scotland.

“We’ve only had the space since January this year and have kept it quite low key because it’s an informal project and not a lot of resource is going into it - hence we want to keep expectations fairly low at the moment. I think there will be more interest when we have something more substantial to show. Some members of staff are very keen.

It reminds me of the early days of the web when HE web pages were put together by some very unlikely people purely because they had the skills and interest. And there were all the pitfalls of having people working on ‘official’ sites who were basically hobbyists who didn’t necessarily have a great understanding of communication and marketing but who liked playing with HTML. One of our Philosophy lecturers is very keen on SL and has built our meeting space - this is great but you have to wonder whether it’s an effective use of someone’s time, how scalable it is and what will happen when they’re bored of learning the technical stuff and want to move on.”³⁴²

“There is lots of interest in the Schome Initiative’s work within the OU (and more widely). Members of the Schome Park Programme team have been asked to run staff development sessions for diverse internal OU audiences (eg academics, researchers, course managers, administrative staff, etc.) as well sharing papers/seminars at a number of events for the HE, FE and adult education communities.

The success of students (supported by staff) in two national competitions has raised the profile of the Schome Park Programme’s work using virtual worlds integrated with the Schomcommunity website (wiki, forum, blog). Thus, for example, the OU’s Centre for Earth, Planetary, Space and Astronomical Research (CEPSAR) has provided financial support for the Schome Park Programme’s team in the finals of the BNSC/SSTL small satellite competition (see <http://www.schome.ac.uk/blog/?cat=12>) for more info.”³⁴³

“The institution has been cautiously supportive, waiting for evidence that this is a medium we can use to engage students rather than a flash in the pan, but has demonstrated significant commitment in funding my post and supporting an international conference in researching learning in virtual worlds.

We have gathered good evidence from work to date and are delighted to have been shortlisted for the Times Higher Ed award for Outstanding Initiative in ICT. Over the last 12 months we have seen a significant rise in interest from across the university with all sorts of project ideas, and there is a real sense of excitement now about what we can achieve.”³⁴⁴

“Mostly cautious curiosity.”³⁴⁵

“Wow!”³⁴⁶

“Mixed response generally to the use of virtual worlds in HE. Some feel that the skills needed to effectively utilise a virtual world such as SL are beyond them, and believe

³⁴¹ Crispin Dale, Principal Lecturer, Technology Supported Learning, University of Wolverhampton.

³⁴² Kriss Fearon, Web Coordinator, University of York.

³⁴³ Dr Peter Twining, Senior Lecturer, Department of Education, Open University.

³⁴⁴ Anna Peachey, COLMSCT Associate Teaching Fellow, Open University.

³⁴⁵ J Ross Nicoll, Research Fellow, University of St Andrews.

³⁴⁶ Martin Biron, Senior Lecturer, Faculty of Technology, College of North West London.

there is insufficient evidence to date to support expending their time to learn to use them.

Others who have engaged feel the opposite, that the potential easily outweighs the effort required on the learning curve. The institution as a whole has responded positively by encouraging learning and teaching projects through the E-learning Strategy and in supporting larger scale research projects. We also have an enterprise stream focused on Digital City which already brings in external contracts to deliver second world resources.”³⁴⁷

“Minimal interest.”³⁴⁸

“Very mixed - some great enthusiasm, some warm interest and some downright scepticism!”³⁴⁹

“People that took part in our research became very enthusiastic once they understood the opportunities. We discussed with them whether their students would be able to make films, but they thought this would be difficult. We have presented and discussed the work at conferences, and the main question to arise was about who would develop the films. We have previously facilitated projects where students acted as game developers for academic clients, and this is one approach that we have proposed with academics in the university. In general, awareness of 3D virtual worlds is growing.

As a central group of educational developers, we are not are of any imminent groundswell towards using such tools and do not expect this to be case anytime soon.”³⁵⁰

“Positive and interested, but students and some lecturers involved have had some reservations about the potential of SL as it currently stands.”³⁵¹

“A mixture of enthusiasm, curiosity and an interest in understanding the practical issues involved.”³⁵²

“The OU has been conducting research and experiments with SL for some time, and other 2 OU public islands are available. This is the first project which aims at integrating the technology within a p/g degree programme. So far, the institution has been very supportive. Reactions among peers have been mixed - from enthusiastic to sceptical.”³⁵³

3.11 How do you think virtual worlds such as Second Life are perceived in UK universities and colleges?

³⁴⁷ Kate Boardman, Head of E-learning, Centre for Learning & Quality Enhancement, University of Teesside.

³⁴⁸ Dr Stuart Lee, Director of Computing Services, University of Oxford.

³⁴⁹ Dr Liz Falconer, Manager, E-learning Development Unit, University of the West of England.

³⁵⁰ Richard Mather & Andrew Middleton, Learning and Teaching Institute, Sheffield Hallam University.

³⁵¹ Simon Walker, Head of Educational Development, University of Greenwich.

³⁵² Jane Edwards and Shri Footring, JISC Regional Support Centres.

³⁵³ Dr Lucia Rapanotti, Computing Department, Open University.

“Fashionable and okay if you have got the time! Credible academics do not play! (views of health colleagues). Serious games institute (SGI) very supportive.”³⁵⁴

“Interested, but some negativity where people have not yet seriously tried real things, and so are wondering what they can do, or see it just as a 3D poster space.”³⁵⁵

“I think the perception of the local staff as described previously is pretty much reflecting the general (and not just educational) population.”³⁵⁶

“Extremes.”³⁵⁷

“It’s a kind of fashion. I think people are aware of it, and feel universities should be doing it without necessarily knowing the educational implications of it. Some people have a gut reaction against it while others have lost themselves in it.”³⁵⁸

“Very peripheral and still embryonic. But our group appreciates this and feels that virtual worlds will become more sophisticated and user-friendly and will become more relevant with time.”³⁵⁹

“In my experience, many people still don’t seem to have even heard of Second Life, many perceive it as just a computer game and thus not relevant to them or to education, many have only heard of it negatively via the media in stories about the less positive aspects, and lots just don’t see the educational potential of virtual worlds at all. However, this is only my experience, it’s early days yet, and I do read (green with envy!) about the wonderful and exciting things being done in Second Life mainly in America, but also in some (lucky) UK universities!”³⁶⁰

“There is some resistance to the idea of the 3D virtual world as a teaching tool from some academics. However, these almost always turn out to be those that have not seen Second Life being used as an effective teaching and learning tool. When colleagues see the virtual classroom there is often an ‘Ah-ha’ moment where the potential is realised for their subject specialism.”³⁶¹

“Cautiously. Most people don’t really know what to make of the environment at the moment, and for those that are interested, the support is not as good as it could be.”³⁶²

“Still a curiosity with many sceptics, but that’s to be expected at this stage of development. I liken it to the web in 1994 which I pioneered within my then (industrial) organisation. The web was not generally accepted until after 1998. I think the virtual world adoption curve is similar, or could even be slower since people have trouble differentiating it from other online experiences enough to see the benefits (whereas there were only CompuServe and AOL as alternatives to the web). However the

³⁵⁴ Elinor Clarke, Centre for Inter-Professional e-Learning, Coventry University.

³⁵⁵ Professor Austin Tate, Artificial Intelligence Applications Institute, University of Edinburgh.

³⁵⁶ Ferdinand Francino, Project Manager Web 3.D (Second Life), Glasgow Caledonian University.

³⁵⁷ Kathryn Trinder, Research Fellow (e-Learning), Glasgow Caledonian University.

³⁵⁸ Dr Judy Robertson, Computer Science, Heriot-Watt University.

³⁵⁹ Will Stewart, E-learning Adviser, University of Bradford.

³⁶⁰ Lindsay Da Silva, Technical Services Librarian, University of Chichester.

³⁶¹ Simon Bignell, Lecturer in Psychology, University of Derby.

³⁶² Remy Olosoji, School of Distance and E-Learning, University of East London.

applications are proliferating and this year I have found many academics who wish to be involved.”³⁶³

“Mixed. For a number of institutions the emphasis has been on marketing rather than learning and teaching. Students also have mixed opinions based on national surveys that have been run.”³⁶⁴

“Despite the well publicised problems of Second Life I still discern an air of excitement about the possibilities.”³⁶⁵

“With scepticism spiced with ignorance.”³⁶⁶

“Interesting, exciting ... as it is a new medium to explore teaching and learning.”³⁶⁷

“I think they are hopeful but sceptical. I think they are afraid of missing the technology wave as it passes by them, but at the same time, afraid to invest in technology that will not go mainstream or be outdated soon.”³⁶⁸

“Mixed. Some real enthusiasm, some disgust at moving away from the real-world, some apathy. Seem to be viewed as a novel platform that may have many uses, but a useful one has yet to be found!”³⁶⁹

“They are probably seen as a frivolous indulgence by many. I should imagine that the attitude of educators towards virtual worlds varies considerably, depending on which subject area they work in.”³⁷⁰

“General interest but some scepticism about development costs/time vs. benefit.”³⁷¹

“There are a small group of enthusiasts/early-adopters but it will be a slow process of diffusion thereafter before the majority of staff are engaged. I give it 5-10 years depending on the arrival and uptake of new interfaces that make the whole experience more transparent to the new user.”³⁷²

“With a mixture of curiosity and fascination on one hand and intimidation on the other. Some comments I have received referred to the lack of ‘human contact’ in SL communication/relationship with other avatars. This reminds me of the discussions on virtual communities in the late 90s.”³⁷³

“Niche area, useful for exploring immersive experiences. Users are technophiles and high computer demands mean it cannot become a mainstream system at present time.”³⁷⁴

³⁶³ Dave Taylor, Programme Lead, Virtual Worlds and Medical Media, Imperial College, London.

³⁶⁴ Dr Tim Linsey, Head of E-Learning, Kingston University.

³⁶⁵ Dr Julia Gillen, Literacy Research Centre, Lancaster University.

³⁶⁶ John Mackness, Lancaster University.

³⁶⁷ Jennefer Hart (MRes Student finished), Lancaster University.

³⁶⁸ Michele Ryan, Lancaster University.

³⁶⁹ Lorna McKnight, Lancaster University.

³⁷⁰ Ian Truelove, Principal Lecturer, Leeds School of Contemporary Art & Graphic Design.

³⁷¹ Gilly Salmon, Professor of E-learning & Learning Technologies, University of Leicester.

³⁷² Dr Peter GG Miller, School of Biological Sciences, University of Liverpool.

³⁷³ Elena Moschini, MA Digital Media course leader, London Metropolitan University.

³⁷⁴ Andy Beggan, IS Learning Team Leader, University of Nottingham.

“A brave new world ...”³⁷⁵

“See recent DRHA conference and an entire day/panel dedicated to the discussion of SL. There are a lot of people/educators out there teaching and doing interesting things in SL, but it hasn't quite spread to the top level university staff, I feel.”³⁷⁶

“There are various views from questioning that they are a ‘fad’ to unreal expectations as to what can be achieved.”³⁷⁷

“I don't know enough to generalise. I think that universities and colleges haven't worked out their attitude yet.”³⁷⁸

“I think it is very mixed - some are very resistant, especially because of concerns with security. However some view it as a promising and exciting innovation with plenty of potential.”³⁷⁹

“There's a stretch (that, over time, is getting even more elastic) between those who see all sorts of potential and those who have still not heard of it or understand what a virtual world is. My impression is that the majority of academics across all disciplines - but particularly STEM (science, technology, engineering and mathematics education) subjects fall toward the less-engaged end of the spectrum.”³⁸⁰

“I think there is growing involvement but mixed perceptions of value - more interest can be generated, more meaningful conversations can be held and raising of the profile of virtual worlds as a serious academic learning opportunity, with further publication of case studies of learning activities in Second Life. There is a lot of information available, some of which is anecdotal - publication of detailed research and evaluation would help in bringing virtual worlds to the attention of a wider audience.”³⁸¹

“Mixed feelings - some see as having good potential, some see as a bit gamey - I think it is still quite early days and exploratory at the moment.”³⁸²

“One-third mixture of excitement about the potential, one-third trepidation about the user requirements and the lack of support forthcoming from IT ‘service’ departments and one-third bewilderment about what the value of this for education could be.”³⁸³

“A much greater awareness now of virtual worlds (primarily Second Life) and generally a positive one - though not always well understood.”³⁸⁴

“Mixed. It can be viewed as a threat to some people. However, SL is relevant for distance and blended learning.”³⁸⁵

³⁷⁵ Jane Chandler, Principal Lecturer, School of Computing, University of Portsmouth.

³⁷⁶ Dr Franziska Schroeder, School of Music and Sonic Arts, Queen's University Belfast.

³⁷⁷ Dr Shirley Williams, School of Systems Engineering, University of Reading.

³⁷⁸ Sheila Webber, Senior Lecturer, Department of Information Studies, University of Sheffield.

³⁷⁹ Emily Conradi, e-Projects Manager, St George's University of London.

³⁸⁰ Dr Glynn Skerratt, Faculty of Sciences, Staffordshire University.

³⁸¹ Nicola Avery, e-Learning Unit, University of Surrey.

³⁸² Tony Hudson, Web Team Manager, University of Sussex.

³⁸³ Mark Childs, Teaching Development Fellow Elearning, Coventry University.

³⁸⁴ Dr Daniel Livingstone, Lecturer, School of Computing, University of the West of Scotland.

³⁸⁵ Crispin Dale, Principal Lecturer, Technology Supported Learning, University of Wolverhampton.

“Even the ones with a large SL presence don’t seem to necessarily have a clear focus as to what they want to do. We are keen not to be sidetracked by uses that other institutions (e.g. Open) are making of it because we don’t have the same focus on distance learning and consequently don’t have much material in digital format which can enrich the SL environment.”³⁸⁶

“Useful marketing devices and potentially useful tools to support learning - but we don’t know enough about them and they are not sufficiently mature technologies to invest in them significantly yet. I think that this ignores the fact that even though the technology will mature the underlying understanding about how to use them effectively to enhance learning is unlikely to change and thus will be valuable as we move from current Open Virtual Worlds (OVWs) to future ones.”³⁸⁷

“I have seen a significant change in attitudes over the last couple of years, and I think significantly more people are now willing to look at the potential of these worlds rather than dismissing them out of hand.”³⁸⁸

“I think there’s a range of responses varying from ‘next big thing’ to ‘okay, but what is it useful for?’”³⁸⁹

“Interest is growing at a steady pace.”³⁹⁰

“We still feel that some universities want to have a presence in SL because it is perceived as the current educational frontier, though we are not sure how many students some sites are attracting. We have carefully considered how we would want to use a virtual world in the learning and teaching that we do/could do, and have developed with this in mind. This has meant a balance of instant recognisability as our institution, but then used the rest of the space creatively and/or temporarily. We have also focused on creating learning activities or prompts that make the most of the collaborative potential of virtual worlds with the aim of developing real activity in the short and longer term.”³⁹¹

“Again, mixed. There is a great deal of scepticism I’m sure, as at first it can be hard to see the point. That’s why I feel simulation has such promise, as it is something that you can only do in virtual environments.”³⁹²

“The people that know about them recognise their potential importance. It isn’t usually the first resource that we point people to for addressing technology supported teaching requirements.”³⁹³

“As a novelty but with interest.”³⁹⁴

³⁸⁶ Kriss Fearon, Web Coordinator, University of York.

³⁸⁷ Dr Peter Twining, Senior Lecturer, Department of Education, Open University.

³⁸⁸ Anna Peachey, COLMSCT Associate Teaching Fellow, Open University.

³⁸⁹ J Ross Nicoll, Research Fellow, University of St Andrews.

³⁹⁰ Martin Biron, Senior Lecturer, Faculty of Technology, College of North West London.

³⁹¹ Kate Boardman, Head of E-learning, Centre for Learning & Quality Enhancement, University of Teesside.

³⁹² Dr Liz Falconer, Manager, E-learning Development Unit, University of the West of England.

³⁹³ Richard Mather & Andrew Middleton, Learning and Teaching Institute, Sheffield Hallam University.

³⁹⁴ Simon Walker, Head of Educational Development, University of Greenwich.

“With increasing interest. Two years ago most people wouldn’t have known what you were talking about and when they found out would think that you’d lost the plot. Now there is a much higher level of recognition and also more interest in what can be done with this environment.”³⁹⁵

“Very mixed and varies from staff member to staff member. I expect the majority are still either a) unaware or b) dismissing it as games.”³⁹⁶

3.12 Where’s this whole ‘virtual world’ thing going in UK education - increasingly used, mainstream, or niche dead-end novelty?

“I think it will be increasingly used as teachers like to have a number of tools at their disposal. It is important for academic staff and students to have choices in their teaching environments. 3D environments are ‘sexy’, fashionable and student centred - they can just walk away! Good to capitalise on the communication elements, especially for team building and collaborative working.”³⁹⁷

“Mainstream.”³⁹⁸

“Mainstream but it will take some time, just like education in general is now slowly starting to seriously embrace Web 2.0 which is hardly new. 3D internet (be it Second Life - IBM - Open Simulator grid or something new and as of yet unheard of) is not going to go away. 3D Internet is the next logical evolutionary phase of the medium. Period.”³⁹⁹

“I’ve not put much store in the digital immigrants debate, having talked to a lot of students about technology, but I’m starting to really see it now with SL. Staff are wary, not sure, don’t know what to do. Its too beyond most of their experience. Students, well, the younger ones, I watch registering and within ten minutes they’re off buying flexi hair. Many staff can’t grab that concept until they’ve been in-world for several hours. Even many of our usual early adopters.”⁴⁰⁰

“What a question! If only I knew ... Increasingly used, I would say. There are bureaucratic and technical reasons why it won’t be mainstream for a bit. Like bandwidth, and lack of graphics cards. I don’t think it’s a dead end, as there is a lot learners can get out of it. You - yes YOU, John - should be part of preventing it from becoming a dead end. [John: ☺]”⁴⁰¹

“Too early to say, but I expect virtual worlds (in some form) have a place in future learning/research environments because of the unique experiences they offer. However, virtual worlds will need to become easier to use and less demanding on computer specs to become mainstream.”⁴⁰²

³⁹⁵ Pauline Randall, Developer, virtual-e.

³⁹⁶ Soulla Stylianou, RL Client Director, Daden Limited.

³⁹⁷ Elinor Clarke, Centre for Inter-Professional e-Learning, Coventry University.

³⁹⁸ Professor Austin Tate, Artificial Intelligence Applications Institute, University of Edinburgh.

³⁹⁹ Ferdinand Francino, Project Manager Web 3.D (Second Life), Glasgow Caledonian University.

⁴⁰⁰ Kathryn Trinder, Research Fellow (e-Learning), Glasgow Caledonian University.

⁴⁰¹ Dr Judy Robertson, Computer Science, Heriot-Watt University.

⁴⁰² Andy Beggan, Learning Team Leader, Information Services, University of Nottingham.

“Will become more mainstream - part of a larger change in the way we see education. Hopefully!”⁴⁰³

“As I’ve mentioned before, I see lots of potential in virtual worlds, not only because they provide an exciting, new, and usually engaging environment where you can learn and do things you cannot do in the real world, but also because they provide a way of interacting with people which is not reliant on the physical world, and thus have a wide range of benefits. However, as I’ve also already mentioned, there still seem to be many obstacles to overcome, not only technological, but also in fostering the will to engage in the idea of virtual worlds.

It seems to me that UK education seems to be lagging behind some countries, especially America, in starting to explore this whole area. Many universities do seem to be beginning to dip their toes in the virtual ocean by buying islands etc. so maybe things are beginning to change, since it is only after you have a space to experiment and try things out that you can develop concrete ideas which you can then demonstrate to colleagues, and thus create interest and participation.

As more companies start to develop virtual world applications, or better still applications that allow us to create our own virtual worlds, hopefully more people will see concrete examples of how virtual worlds can help in education, and thus more participation will lead to better virtual world experiences for everyone. I think the idea of virtual worlds will not be a dead-end novelty as long as the software gets better with less bugs and continued development, and enough people in UK education see the potential and create examples of virtual world experiences which can be shown to positively benefit the users. This, I’m sure, has already happened in many institutions, we just have to keep going to make sure it happens in more!”⁴⁰⁴

“Increasingly used and once the technology has become more accessible to lower spec systems - mainstream.”⁴⁰⁵

“We plan to expand psychological research into the virtual world. Our teaching islands are now developed and we plan to expand this facility across other faculties in the university. We will be offering real-world training in problem-based learning in Second Life to psychology departments across the country as part of a JISC-funded research programme in collaboration with Coventry and Aston Universities and the Higher Education Psychology Network.

In my opinion, virtual worlds represent the biggest shift forward in learning since the focus on student-centred methods. Educationalists need to embrace the idea that environment and interaction are inseparable. The future educational space will be represented digitally; we must accept the need to reframe the way we think about these learning processes, the objects they involve and interactions between them. Learning takes place inside our minds based upon sensory input, in the mix of thought and experience. The mental representation of experience is often as valuable as the experience itself. It is perhaps why we dream and why we are in thought most of the day.

Virtual worlds can provide a rapid prototyping environment for real world experiences. Safe, anonymous places where we can completely control the learning space or free up traditional constraints imposed by the hierarchical classroom. Structured learning

⁴⁰³ Will Stewart, E-learning Adviser, University of Bradford.

⁴⁰⁴ Lindsay Da Silva, Technical Services Librarian, University of Chichester.

⁴⁰⁵ Maggi Savin-Baden, Director, Learning Innovation, Coventry University.

should no longer be considered to take place just within the school building or the university campus. We now have a great opportunity to put the learner back in the driving seat. In one sense it's unfortunate because I can't see a return to books. However, the knowledge contained in those books is alive and beginning to be embraced by educators in the virtual world. First impressions lead people to believe that the virtual world is exclusively visual; it's not. Imagination is our new blackboard and the lessons we can teach and learn are the product of 'virtual' experiences. When the boundaries of our traditional education system can envelop brave new media, such as virtual worlds, we will begin to develop a generation of independent questioning free thinkers whose place in the real world will be strengthened by the lessons learnt and experience gained from the virtual world."⁴⁰⁶

"I believe it may be more like increasingly used in particular areas (e.g. distance learning). I don't think it'll be mainstream but I'd like to be proved wrong."⁴⁰⁷

"Mainstream of course!!"⁴⁰⁸

"In the short term this will remain a relatively niche activity alongside other Web 2.0 collaborative environments. However we are starting to see improved integration between such virtual world environments and other Web 2.0 applications with the ability to have personal profiles that extend across multiple environments. With this development combined with improved rendering and realism and improving bandwidths the picture may change."⁴⁰⁹

"A part of life. It's hard to imagine anyone would argue against the importance of computers in education, but actually computers are mostly used in a rather narrow way, semiotically (i.e. we spend a lot of time typing black letters onto a simulation of white paper, just as I am doing now). 3D virtual worlds offer us so much more in terms of experience, affordances and thus potential for learning in formal and informal contexts, for all sectors of society."⁴¹⁰

"Looking like a niche dead-end novelty at present - but then they said that about the telephone."⁴¹¹

"I think it will be increasingly used within education ... and will expand into other areas like social networking and business."⁴¹²

"I think it's up to us to determine where it is going. Web3D will be with us for awhile. Whether it's Second Life or another platform, the technology is not declining. So the question is what are we, as educators, going to do with it? Those of us who are part of the early years of this new educational tool need to lay the groundwork for its sustainable future."⁴¹³

"Depends if a suitable use can be found. At the moment many people seem to be experimenting with it as a tool, but as a solution which has yet to find a problem. People keep saying how 'in the future everyone will be using this' - they said this about

⁴⁰⁶ Simon Bignell, Lecturer in Psychology, University of Derby.

⁴⁰⁷ Remy Olasoji, School of Distance and E-Learning, University of East London.

⁴⁰⁸ Dave Taylor, Programme Lead, Virtual Worlds and Medical Media, Imperial College, London.

⁴⁰⁹ Dr Tim Linsey, Head of E-Learning, Kingston University.

⁴¹⁰ Dr Julia Gillen, Literacy Research Centre, Lancaster University.

⁴¹¹ John Mackness, Lancaster University.

⁴¹² Jennefer Hart (MRes Student finished), Lancaster University.

⁴¹³ Michele Ryan, Lancaster University.

the web, and were right, but then they also said it about a Universal Internet Time. If it's useful, people will use it, but at the moment people are struggling to see a value beyond novelty. Time will tell..."⁴¹⁴

"Conferencing platforms like Wonderland are likely to become mainstream. I see them as the natural successors to the current 2D conferencing tools like Elluminate. Role playing environments like Second Life will provide opportunities for much deeper learning through personal development, but the assimilation of this approach into formal education will be limited by the necessary dislocation of the real life student from their constructed character."⁴¹⁵

"With sound pedagogic research already underway in Higher Education, virtual worlds have the opportunity (in a similar way to edutainment devices like mp3 players) to be successfully integrated into mainstream education. These platforms enable us to do things differently, more productively and potentially more engaging than more traditional methods."⁴¹⁶

"I don't think it will go away this time, simply because of the enormous investment. We will also see diminished boundaries with the 2D web that will bring virtual worlds into the mainstream."⁴¹⁷

"I believe that SL (or similar virtual worlds) will become an important component of teaching and learning at some point in the near future. I think that the next two academic years will be focused on pilot studies and experimentation on tools and best practice. A wider adoption of SL might depend on availability of adequate computer/graphic cards/broadband connection as well as on a wider understanding and acceptance of advanced e-learning technologies. I do anticipate a wider adoption for research conference purposes. Conferences and seminars for the international academic community could be a key factor in disseminate the benefits of using SL for education."⁴¹⁸

"Increasingly used - I don't think we have yet reached the peak of interest. Sustainability will depend on stability of virtual worlds, costs and the ability to backup and move around teaching materials and/or penetration amongst 16-25 year olds."⁴¹⁹

"At the recent DRHA I was surprised to see that there are several educators within the UK that really believe in this kind of teaching and use virtual worlds for teaching projects.

I would like to see it used much more. Let's think about the carbon friendly implications virtual education and research can have."⁴²⁰

"I believe in the medium term the use of virtual worlds will remain a niche use; there is too much investment needed to make good general teaching resources."⁴²¹

⁴¹⁴ Lorna McKnight, Lancaster University.

⁴¹⁵ Ian Truelove, Principal Lecturer, Leeds School of Contemporary Art & Graphic Design.

⁴¹⁶ Gilly Salmon, Professor of E-learning & Learning Technologies, University of Leicester.

⁴¹⁷ Dr Peter GG Miller, School of Biological Sciences, University of Liverpool.

⁴¹⁸ Elena Moschini, MA Digital Media course leader, London Metropolitan University.

⁴¹⁹ Jane Chandler, Principal Lecturer, School of Computing, University of Portsmouth.

⁴²⁰ Dr Franziska Schroeder, School of Music and Sonic Arts, Queen's University Belfast.

⁴²¹ Dr Shirley Williams, School of Systems Engineering, University of Reading.

“I think increasingly used. There may be a whole range of virtual worlds emerging which might be used for different purposes and subjects. I think that there will still be value in a ‘messy’, more heterogeneous world like SL, as life is messy and heterogeneous and I don’t think students would be done any favours if they were only allowed in sanitised ‘education only’ silos. However I can see when the low-option easy-entry worlds would be useful; specialised worlds particularly geared to particular subject requirements, and so forth.”⁴²²

“I would argue for increasing use - especially as more and more projects publish their outputs, share their work, and people come to see it as a useful resource rather than a gimmick.”⁴²³

“No doubt it will be thoroughly explored over time but, as you might have gathered, I’m not a particular enthusiast. I can see the application of Web 2.0 opportunities all over the place ... but as for SL development for STEM subjects, I think that this will take [much] longer to realise.

No, I do not think it will become mainstream nor do I think it will be increasingly used and embedded in [STEM] delivery at anything like the pace it may be for other subject areas or as many SL advocates may wish for.”⁴²⁴

“I believe that exploration of virtual worlds will provide increased opportunities for staff and students to learn in ways that they may not be able to do currently due to resources, time and cost.”⁴²⁵

“Hard to say - at the moment it is niche but people at our institution are asking about it quite a lot - supporting it is an issue, as with any new development or area of technology, being able to give time to developing and showing how it can be used is the crucial factor I think.”⁴²⁶

“I’ve blogged about this at <http://cuba.coventry.ac.uk/markchilds/2008/08/15/the-gartner-hype-cycle/>

My blog there is in reference to the Gartner Hype Cycle:

www.gartner.com/pages/story.php.id.8795.s.8.jsp

The hype cycle basically looks at the immediate enthusiasm, the backlash and then people taking things sensibly forward.

What’s also interesting is where they put various different technologies on the cycle and how different it is to where I’d put them. My job’s e-learning, the only people I usually get to talk to in work-related places are e-learning people, so it’s an accelerated cycle I guess. Not only that, but the technologies go through a couple of cycles often, there’s the ‘does the technology work?’ cycle, then there’s the ‘does the technology work (or be allowed to work) in my institution?’ cycle, then there’s the ‘does the technology work in learning and teaching?’ cycle and then - finally I suppose, ‘will the technology be incorporated as the normal part of learning and teaching?’ hype cycle, although I think the only technologies that have made it that all the way through that cycle are the book and the blackboard (the one you write on with chalk, not the VLE).

⁴²² Sheila Webber, Senior Lecturer, Department of Information Studies, University of Sheffield.

⁴²³ Emily Conradi, e-Projects Manager, St George's University of London.

⁴²⁴ Dr Glynn Skerratt, Faculty of Sciences, Staffordshire University.

⁴²⁵ Nicola Avery, e-Learning Unit, University of Surrey.

⁴²⁶ Tony Hudson, Web Team Manager, University of Sussex.

The question is though, with immersive virtual worlds, where are we (e-learning people) on those various cycles?

- Does it work? Slope of enlightenment.
- Does it work in institutions? Hitting the slough of despond.
- Does it work in learning and teaching? Working its way up the peak.
- Will it be incorporated as a normal part of learning and teaching? Still awaiting the trigger.”⁴²⁷

“I expect virtual worlds to become significantly more commonplace in distance and blended learning. These could range from Second Life down to much more basic graphical chat-rooms like IMVU. However, it is likely that virtual worlds will remain rather niche outside of distance learning for another decade or more. It has taken around 15 years from the birth of the web for web-based e-learning to become thoroughly institutionalised (with ongoing pockets of resistance throughout academia).

The 3D internet could easily take as long. Uptake will be driven in part by students - virtual worlds are increasingly becoming everyday, normal, social and entertainment spaces for children. With more options available to educators in terms of platforms available, and with growing amounts of content available to support specific curricula, VW’s will become more attractive to mainstream education over a longer term.”⁴²⁸

“It has some potential for wonderful niche applications.”⁴²⁹

“Some members of staff think that it’s a passing fad which isn’t worth doing because students have moved on to something else that they think is cool. I’m not sure this is necessarily true - students will use the tools available to them if they work well. I think that virtual worlds will find their niche, but like the web it may take five years for this to happen.”⁴³⁰

“I have no doubt that virtual worlds will become mainstream (educational) tools in the future. Actually I think computer interfaces will become like virtual worlds. You won’t open up your Windows desktop and click on MyDocuments to access your files. Instead, when you turn your computer on you will be in-world. You will teleport to your office and pick up the file you want from your desk (or pull it out of your inventory if you had filed it away previously). But that is a few years away yet!”⁴³¹

“Increasingly used but not mainstream for several years, by which time who knows what developments there will be in the capabilities.”⁴³²

“I’d hope to see SL progressing mainstream as its use in education becomes clearer. I’d specifically hope to see:

- Less ‘we re-built our building in Second Life’.
- More talks given by people who are geographically distant from their audience.
- More use of Second Life for things that are infeasible in the real world; recreations of buildings, visualisations for networking, chemistry, physics, etc.

⁴²⁷ Mark Childs, Teaching Development Fellow Elearning, Coventry University.

⁴²⁸ Dr Daniel Livingstone, Lecturer, School of Computing, University of the West of Scotland.

⁴²⁹ Richard Mather & Andrew Middleton, Learning and Teaching Institute, Sheffield Hallam University.

⁴³⁰ Kriss Fearon, Web Coordinator, University of York.

⁴³¹ Dr Peter Twining, Senior Lecturer, Department of Education, Open University.

⁴³² Anna Peachey, COLMSCT Associate Teaching Fellow, Open University.

- More provision of social activities in Second Life, in educational space. At the moment, most islands are dead except for a few researchers working in them, I think it would be fantastic to have social activities going on to keep students around and involved.”⁴³³

“Mainstream for sure!!”⁴³⁴

“Increasingly used for sure, which will identify whether it will be mainstream or dead-end novelty ☺ Just like VLEs have most popularity in some faculties, as the capacity to do some things that currently are more detailed/effective in a 3D web plug-in (e.g. molecules) or in virtual reality (e.g. medical imaging) becomes more present in-world, some disciplines will be able to provide much more colourful learning experiences for students, and many will embrace this. The concept of a 3D space is certainly here to stay and to grow, so the educational possibilities, solutions and creative enterprise will definitely increase for the foreseeable future.

Comment from other staff beginning to teach in SL this term: I think it will be increasingly used to provide learning support and opportunities where we need to tackle geographical issues, disabled access issues and to provide different learners with a variety of delivery approaches to suit their needs. It will become a valuable additional tool and although some academics view it with suspicion and trepidation then we should remember it is not so long ago that we felt the same way about computers and thought they would never take off either! [Angela Addison, School of Science and Technology].”⁴³⁵

“Probably the first step at present. Assume something better will come along soon.”⁴³⁶

“A continuing but slowish take-up, and probably continuing to be mainly for certain types of use such as simulation and distance learning, I would think.”⁴³⁷

“Used increasingly especially for distance learning but only so long as we can provide a sound rationale for its use.”⁴³⁸

“The 3D Web is born! It won’t be the proprietary Second Life owned by Linden Lab in 2015, but the 3D Internet (Open Source/standards) will be there for sure! Second Life will then become one out of many commercial, value-added providers - cf. history of AOL and CompuServe. Thinking otherwise would be like thinking 15 years ago that the (2D) Web will be proprietary, owned and run by a single company like Microsoft!”⁴³⁹

“I think that it will become mainstream but there will be similar problems to getting staff to use VLEs - will educational establishments provide enough technical support or will they expect staff to become SL (virtual world) developers themselves. Really need to learn that we can’t expect teaching staff to be able to do everything.”⁴⁴⁰

⁴³³ J Ross Nicoll, Research Fellow, University of St Andrews.

⁴³⁴ Martin Biron, Senior Lecturer, Faculty of Technology, College of North West London.

⁴³⁵ Kate Boardman, Head of E-learning, Centre for Learning & Quality Enhancement, University of Teesside.

⁴³⁶ Dr Stuart Lee, Director of Computing Services, University of Oxford.

⁴³⁷ Dr Liz Falconer, Manager, E-learning Development Unit, University of the West of England.

⁴³⁸ Simon Walker, Head of Educational Development, University of Greenwich.

⁴³⁹ Maged N Kamel Boulos, Senior (Principal) Lecturer, Faculty of Health and Social Work, University of Plymouth.

⁴⁴⁰ Pauline Randall, Developer, virtual-e.

“Mainstream - in business, social and education - but mainstream is probably around ten years away so these are early days.”⁴⁴¹

“A number of RSCs have offered a range of events and workshops, aimed at delegates with varying levels of experience and expertise. Our feeling is that there is considerable demand in our supported sectors for well informed advice on practical applications of virtual worlds for learning and teaching. We hope that innovators in this field will keep in touch with us so that we can continue to help to share experiences.”⁴⁴²

⁴⁴¹ Soulla Stylianou, RL Client Director, Daden Limited.

⁴⁴² Jane Edwards and Shri Footring, JISC Regional Support Centres.

4. Analysis

This section contains some initial analysis under six categories. Further analysis of this snapshot, and comparisons across the series of snapshots to date, will appear on the Virtual World Watch website⁴⁴³ over the next few months.

4.1 Activities

Sections 3.1 and 3.3 of this report show a particularly wide range of activities involving, mostly, Second Life.

The teaching of classes using Second Life was reported by several respondents, including:

“We will also be using it for a small number of classes and project work in biological sciences and (probably) archaeology.”

“I teach a class using SL.”

“We use Second Life for music network performances, and for teaching students in and about virtual worlds.”

“Formal tutorials on a range of subjects take place on Second Life.”

“Using Second Life as a blended learning platform specifically for students undertaking Gas, H&V NVQs.”

Second Life is being applied to the field of health and medicine in several universities; examples of work include:

“We are developing problem-based learning scenarios for healthcare courses using Second Life.”

“We are teaching undergraduates psychology skills and actively researching psychology.”

“Over the last 18 months we have established and explored novel applications for virtual worlds in healthcare.”

“We are exploring options for using Second Life as a virtual resource for nursing students completing early diagnosis of dementia.”

“A student on work experience in the Surrey Centre for Excellence in Professional Training and Education undertook a survey of the uses of SL for health education and medicine. The wiki he built to host the resources he found was cited on the SimTeach wiki top 20 educational sites in SL.”

“Future plans may involve using SL to support paramedic training in School of Health and Social Care.”

“There are art exhibitions for professionals, a birthing pool and other health and social care related environments and events.”

⁴⁴³ Virtual World Watch: www.virtualworldwatch.net

Some respondents reported developing 'University Islands', for promotion or induction purposes:

"We want to inform (potential) international students about the university, allow them to use the environment during induction so they can join their fellow students without physically having arrived yet."

"We bought an island in SL back in July and are now in the process of designing its layout and considering its uses."

"We recruited two student 'island builders' who are developing Surrey Island at the moment."

"Established the university campus on SL to give online visitors a sense of the university and explore possibilities for its further use for e-learning and marketing and communication."

However, the most cited application of Second Life was as part of research to determine the effectiveness of using such a system in teaching and learning:

"We are also conducting funded research looking at how Problem-Based Learning can be conducted in the virtual world."

"The university has an island on Second Life which we are currently exploring to see how useful this environment could be in enhancing our students' learning process."

"Evaluating the role of Second Life/virtual 3D roles in supporting learning and teaching, particularly in terms of communication and collaboration, within and beyond the institution."

"My previous interest was related to its use for distance learning."

"We are interested in the potential for virtual worlds to accelerate the development of creative skills through building, collaboration and dialogue."

"Looking at the affordances of teaching in a virtual world."

"Investigating the benefits and limitations of using SL to complement teaching and learning - and assessment - in the area of environment and sustainability."

"Dr Lee Gillam has completed an initial analysis of exploring Second Life as an environment for learning and teaching."

"Dr Tereza Capelos plans to examine how Second Life can be integrated in teaching this autumn, with an undergraduate class in political science research methods by testing whether students in a class seminar format perform better than in a seminar held in Second Life environment."

"We are exploring the learning experiences of students using SL as a virtual space."

"Our Pro-Vice Chancellor of Teaching wanted to investigate the potential of Second Life, mainly for teaching and learning."

"We are using Second Life to experiment with a range of uses for virtual worlds in education."

4.2 Funding

Compared to previous surveys, there seemed to be fewer academics developing mainly or solely in their own time, though a few did respond:

“Practically all of my activity in Second Life, apart from demonstrations to colleagues, has been in my own time, on my own computer at home.”

“I have paid for stuff on the island up to now.”

“My time is more or less solely my free time.”

A few started developing in their own time, but then acquired funding:

“Most of the preliminary work so far have been self-funded (I own the land and pay the maintenance fee) but I have recently received some support for future developments.”

“Initially myself, now full funding from my educational institution.”

Healthily, and arguably giving research and development more credibility, external funding has been secured by quite a few academics:

“We were awarded some money through a TQEF project.”

“It’s a JISC funded project.”

“Schome Park has had various funders, including Becta.”

“JISC (Staff time on the Open Habitat project plus Open Habitat island).”

“HEA ICS gave us a grant for the toolkit work.”

“AHRC (Research Fellowship).”

“Co-funded EU projects.”

“This project is funded by the JISC under the Users and Innovations Programme.”

“The project is funded by Eduserv.”

“Eduserv Foundation funds and supports SLOODLE.”

“Research grants (from NAGTY, Becta, The Innovation Unit, CREET and PLAC).”

However, internal institutional funding remains the predominant source of fiscal support for respondents of this survey:

“A mixture of schools, central units at university level and projects.”

“The executive has allocated a substantial budget.”

“The department bought our land.”

“The university’s Academic Development Centre is funding the basic cost of the University Island.”

“The island is paid for by the computing department (Linden fees only).”

“Land was paid for by my department.”

“Primarily the University Library with short-term special funds, the Faculty of Arts and the School of Biological Sciences.”

“This is a strategic project with funding provided through IS.”

“I have grant money from an internal research-into-teaching project.”

“The island upkeep is being paid for out of one of the PVC’s budgets.”

Of the various funders, JISC was mentioned the most by several projects. In addition to the activities they fund that are outlined in this report, JISC have also funded several other virtual world-related projects. Rachel Bruce, Programme Director of the Information Environment, explained to us their interest:

“I have to say I’m really glad that there is work on Second Life in our Innovation Programmes! Understanding how virtual worlds can be, and are being used in learning by creating simulations or immersive environments or even as a type of scenario planning/ testing environment for universities (even for service providers like JISC) seems important to me.

Personally I really like the way in which something like Second Life can bring people together from all over the globe and think it begins to really show how virtual world technologies can support collaboration. I see SL supporting a lot of the pedagogic practice that was really effective in our Digital Libraries in the Classroom projects; these projects were funded well before SL but they allowed collaboration between the US and UK and helped equip students with technical skills as well as experiencing a ‘surrogate’ experience of a real life situation. So that’s my personal view. I know SL is not very accessible or scalable and there are problems with it on those counts, but it shows potential and I think it helps stretch the way people think.

In terms of JISC Policy we have funded some projects as part of the Users and Innovation programme. We haven’t specified SL, the programme is more interested in exploring the use of multi-user virtual environments generally, especially as a way to explore collaboration. I think we at JISC see virtual environments as something that can be used in a variety of ways and I wouldn’t be surprised it’s use emerged in other JISC programmes. There’s definitely a view that SL and other environments should be explored further. I think this is only the beginning.”

Though only mentioned by one respondent, the Education UK islands⁴⁴⁴ are still a major provider of ‘free land’ to UK universities and colleges, especially those developing at the project, or individual academic, levels.

4.3 Teaching and learning

The range of teaching and learning activities using Second Life includes:

⁴⁴⁴ Education UK: <http://www.sleducationuk.net/>

Tutorials and testing:

“We have run a testing day for 12 students using the paramedic scenarios in Second Life.”

“We have been running informal inductions and activities in Second Life for a couple of years.”

Staff training:

“To date learning and teaching has focused on cascading effective skills training to staff, prior to activities beginning this term.”

Researching virtual worlds:

“My interests are in the use of VWs for research, outreach and collaboration.”

Collaborative design:

“Collaborative learning and designing.”

“Assisted on a Masters course that involved designing and building a structure in Second Life as part of a collaborative design project.”

And holding events:

“I ran a workshop for library staff that had a good vibe.”

“Our Masters in Elearning uses it for the occasional seminar.”

Another interesting use of Second Life is for supervisors and lecturers to communicate with remote students:

“I have conducted PhD supervision sessions in SL with one of my PhD students who lives in Italy.”

“I’ve been meeting final year project/dissertation students in SL.”

Several academics are planning future uses of Second Life:

“Considering its use for distance learning courses.”

“We have carried out research only so far, in order to have a validated approach to teaching in virtual worlds. Our first courses will likely be delivered in 2009.”

“Forthcoming project in 2009. I will be running a feedback blog with and for the students here - starting around Easter 2009: <http://sarcdrama.wordpress.com/>.”

“The learning and teaching activities will take place throughout the 2008/2009 academic year.”

Experiences of teaching and learning activities were generally positive:

“Very positive with the provision being expanded this year.”

“Overall my experiences have been exciting, perhaps especially when I have been the one learning from teenagers who have developed not only technical and other skills in the environment, but a really effective sense of how to teach!”

“I have met other teachers and researchers in-world. I have helped other teachers get their virtual legs and I have attended classes and conferences in-world being presented by others.”

“Reasonably well, students had a lot of problems building, but at the end said they really enjoyed it and spent more time engaged in building than was required for the course.”

“The majority of students involved responded well to the experience, and we witnessed a real progression in the creative practices of several students.”

“Generally very successful in meeting the needs of distance learners - I have better retention than I do with face to face groups.”

“I found SL extremely useful in managing virtual tutorials with students that had difficulties coming to college or that were temporarily away (for example during the summer holidays).”

“I found it engaging and exhausting. I enjoy the creative and thinking-on-your-feet side of it, and it is giving me more opportunities to discuss teaching with peers (in-world).”

“The learners thought it had a lot of potential, and were keen to use it in their course. They found it a useful rehearsal tool, somewhere between paper and real life experiences.”

“Encourages a different communication dynamic amongst students.”

However, limitations, problems and other issues in teaching sessions were noted by several respondents:

“It has its limitations ... time lag, design limitations.”

“The problems are mainly related to the hardware and software requirements, these could be barriers for those students that do not have the right equipment at home.”

“There is a lot of preparation work, keeping a group together is hard, both in the same place and in step, if they are working in different RL places. The general view is that it is exhausting.”

“Given that it was a campus based class, some students did not see the relevance of using virtual worlds (or other collaborative technologies).”

“Text based communication can take a long time which can impact upon student concentration.”

“Rather stilted and awkward at first as the students got used to the environment.”

Around a dozen or so respondents reported some kind of assessment of teaching and learning activities. No one technique or method of assessment predominated. Assessment methods included:

- Evaluation of learning logs.
- Interviewing participants.
- Focus group session.
- A range of feedback instruments.
- Evaluation survey.
- Write-ups for presentations and articles.
- Qualitative feedback from students.

4.4 Support and resource needs (the ‘wish list’ question)

Two related questions were asked, the first about improvements needed for easier teaching and learning, and the second concerning desirable support and resources.

As in previous surveys, technical issues that needed to be overcome were reported by many respondents:

“Networks must be upgraded beforehand and servers running.”

“Using a virtual world that doesn’t need state of the art machines.”

“Main issue for us is accessibility in the real world to access the virtual world i.e. computers and bandwidth.”

“The high demands on computers means there is a requirement for computers to catch up. Not all student/university PCs can handle the high demands which make it prohibitive.”

“A major concern is that not all students can access the virtual world easily. One of [the] university computer labs has been upgraded and all the machines can play SL, but the others also will ideally follow suit too.”

“HEFCE have proposed that as part of their elearning strategy that minimum standards for support provided by IT service departments for innovation could be imposed on universities. These minimum standards should include opening up the infrastructure to enable Web 2.0 applications, providing sufficient bandwidth for applications and the roll-out of Second Life and other virtual worlds.”

‘SL on a stick’ was suggested by a brace of university academics:

“A self contained island plus client on a USB memory stick that runs on any standard university PC or Mac would be very useful.”

“There are some infrastructure issues with using SL in the institution. That is, the PCs are locked down and SL requires regular updates so therefore can really only be run off a memory stick.”

Tutors and lecturers often find dealing with groups of students within Second Life demanding. Procedures making it easier to initialise and support groups of people/avatars would be appreciated:

“Allocating groups, granting access to land etc. is time consuming and annoying.”

“The ability to register a bulk group of students.”

“LL could certainly still improve their sales support and admin support (e.g. the problems with allowing multiple sign ups from one location).”

“More clarity and support of educational institutions around bulk registration of accounts.”

“In the case of Linden Labs and SL, making setting up accounts from the university network less problematic. The issue of only having a five account maximum and two on any day, unless specific IP addresses are set, is a real pain!”

“Management of accounts, though there is some capability in this respect such as the ability to set up institutional ‘surnames’.”

An ‘education kit’ of pre-built content or scripts would be a timesaver for academics. There is potential here for a funded project, perhaps for an academic design department:

“An educator’s tool box of pre-fab things.”

“Freely available and modifiable good quality in-world and external package of resources for the sorts of things educators use.”

“Subject related resources (e.g. simulations).”

“Tool box of teaching objects and pre-fab things.”

“A subject-specific toolkit that would make it easier for students (as well as staff) to become creators.”

“There are a number of repositories of resources for virtual worlds. It could be argued that another repository is not required - but a high quality repository to serve the needs of new users, academics (and academic management) investigating virtual worlds for the first time, and current users of virtual worlds might be of significant benefit.”

“A repository of ‘resources’ which support immersive activities. (e.g. a ‘court case kit’ which includes a court room, judges wig, and all the other things needed to enact a court case).”

“Investment in high quality reusable, repurposeable learning objects and resources across faculties.”

“A content repository for freely available educational content would be useful.”

“A bank of education scripts and designs would be helpful.”

Tutorials and guides, specifically developed for academics and students in UK universities and colleges, were desired:

“Tutorial materials and how-to guides for student producers would also be very useful.”

“More tutorial support especially in scripting language.”

“An Idiot’s Guide.”

“Guides on how to facilitate learner interactions.”

As usual, and with this being academia, the funding to start or continue virtual world activities is a key issue:

“Funding by the platform provider to encourage more research.”

“Funding for land (and self!).”

“An educational (UK) hub, much like a web portal. A set of region funded by JISC and built by me, so it looks good :)”

“More funding opportunities for advanced experimental work in SL.”

“I would need the university to dedicate some proper funding and staff resources. I have been relying on students to help with programming, concerts etc. The students are great, but they tend to leave after a year or so and if we (artists and educators) want this to be more stable and sustainable (for teaching and performing), we need a dedicated team, not solely one person within the university!!”

“Financial - so we can recruit both staff and possibly external parties to work with us on projects.”

“More funding opportunities are needed to support its development.”

“Actual paid-for time has to be the priority for us.”

4.5 Virtual worlds other than Second Life

Many respondents had used, or were considering examining, virtual worlds and online environments other than Second Life. A dozen such applications were cited. Nine of these were mentioned three times or fewer:

- Olive
- The Palace
- Croquet
- Metaplace
- There
- Neverwinter
- Small Worlds
- Active Worlds
- Twinity

However, three in particular were mentioned by eight or more respondents each.

OpenSim has generated much interest. Despite the relatively technical requirements, especially when compared to browser-based worlds such as Google Lively, various academics have been testing and using OpenSim. The closed nature of this particular environment was an attractive attribute for some respondents:

“OpenSim already in use, and could be used for behind the firewall systems, and where we need much more real estate for training and simulation related exercises.”

“SL and OpenSim have quite a lead, providing a toolkit rather than an end product.”

“We expect OpenSim to give us more control which will be useful for some of our work.”

“OpenSim looks a great option.”

“I like the projected compatibility of OpenSim with Second Life, and can see a case for having all formal teaching on our own closed OpenSim client, but students who can fly in and out of Second Life and take advantage of all the other things that the world has to offer.”

“OpenSim does interest us, especially with regard to being able to close access for particular activities, the potential to bulk manage accounts and the opportunity to track activity for learning mapping.”

“We plan to look at OpenSim soon due to the potential for local installation.”

Google’s Lively also drew significant interest. However, respondents who had used it found it generally lacking in what was required for their academic needs:

“Google’s Lively, looked graphically very pleasing, and there seemed to be a reasonable amount of free content, but the big drawback, especially for educators, was the lack, at least at the moment, of the ability to create your own content.”

“Google’s new virtual world was disappointing and didn’t seem to get the idea of open access community.”

“We did eventually meet up in Lively and we laughed a lot, but it was too simplistic (we both looked like sulky teens - you can’t do much with your avatar and there aren’t the tools and props, let alone the scenery) to seem a good substitute for F2f.”

Wonderland was mentioned by nine respondents, its communication toolset being positively commented on:

“Wonderland was particularly interesting as it allowed groups of people to dynamically edit the same document. The quality of spatial sound was also appealing, and the fact that the platform is Java based and would allow for complex programming.”

“The emphasis of Wonderland is very much on augmenting real life communications and collaborations, and I can see this platform having wide-spread appeal.”

“We held initial internal discussions with colleagues in our Department of Psychology to explore the potential voice and other applications integration, creation and re-use of 3D content within Wonderland as an alternative to Second Life.”

4.6 Perceptions

Three of the twelve questions in the survey asked about perceptions and attitudes surrounding Second Life and virtual worlds:

1. Within the respondent's own institution.
2. Within UK academia more generally.
3. What the respondents themselves thought the likely path would be (mainstream or niche).

The last question was deliberately provocative/simplistic (no third way?) in order to elicit responses from perhaps more passive respondents.

On the issue of attitudes within their own institution, the overall picture was more positive than in previous snapshots. More respondents reported positive reactions from their peers:

"Others who have engaged feel the opposite, that the potential easily outweighs the effort required on the learning curve."

"Extremely supportive; the level and quality of interest has been excellent."

"Overwhelmingly positive. Lots of requests for demos and possible avenues for future collaboration."

"The attitude of my host institution has been very positive and empowering."

Perhaps not surprisingly, funding (especially) and collaborative partners can positively change attitudes locally:

"Securing funding from JISC and hooking up with Oxford and King's College London has helped those who were previously cynical to view our work in a more positive light."

Many respondents receive a mixed reaction to their Second Life activity locally:

"Mixed reaction from peers ... as there is little understanding about SL and some see its limitations rather than its possibilities."

"Scepticism in some quarters but real enthusiasm in others."

"Mixed."

"From peers and parts of the institution enthusiasm and/or interest, from other parts of the institution caution."

Some, however, reported strong negative reactions:

"A handful are plain hostile."

"From 'It's dreadful depicting these scantily clad women as the face of the university'..."

"Some people are bizarrely hostile to it, for no particularly good reason."

"Some disgust (hiding behind an avatar is 'deeply disturbing')..."

It should also be borne in mind that several previous snapshot respondents who reported negative peer reactions on this issue did not seem to be actively developing or using SL any more; some of these will have discontinued because of a lack of continuation funding, whilst others may have given up due to a lack of peer support. Their responses, had they participated, may have made the overall picture more negative. There is potential for a follow-

up survey to find out why some UK academics are no longer actively developing in virtual worlds such as Second Life, although this could pose practical difficulties.

When asked about the perceptions of UK academia in general, again the predominant response was of a 'mixed' view, with that word in particular being used by several people:

"Mixed feelings - some see as having good potential, some see as a bit gamey - I think it is still quite early days and exploratory at the moment."

"Mixed. For a number of institutions the emphasis has been on marketing rather than learning and teaching. Students also have mixed opinions based on national surveys that have been run."

"Again, mixed. There is a great deal of scepticism I'm sure, as at first it can be hard to see the point."

"Mixed. It can be viewed as a threat to some people. However, SL is relevant for distance and blended learning."

Several respondents argued that to appreciate the 'usefulness' of Second Life and virtual worlds, you have to have some experience of it first:

"The people that know about them recognise their potential importance."

"There is some resistance to the idea of the 3D virtual world as a teaching tool from some academics. However, these almost always turn out to be those that have not seen Second Life being used as an effective teaching and learning tool. When colleagues see the virtual classroom there is often an 'Ah-ha' moment where the potential is realised for their subject specialism."

"...some negativity where people have not yet seriously tried real things, and so are wondering what they can do, or see it just as a 3D poster space."

The majority (though not all) of virtual world users who responded to the mainstream vs. niche question choose the former. However, many of those qualified their answer with a significant time span before such tools would become mainstream:

"There are bureaucratic and technical reasons why it won't be mainstream for a bit."

"Mainstream but it will take some time."

"Conferencing platforms like Wonderland are likely to become mainstream."

"I don't think it will go away this time, simply because of the enormous investment. We will also see diminished boundaries with the 2D web that will bring virtual worlds into the mainstream."

"I would argue for increasing use - especially as more and more projects publish their outputs, share their work, and people come to see it as a useful resource rather than a gimmick."

"I expect virtual worlds to become significantly more commonplace in distance and blended learning."

“I have no doubt that virtual worlds will become mainstream (educational) tools in the future.”

“Increasingly used but not mainstream for several years.”

“The concept of a 3D space is certainly here to stay and to grow, so the educational possibilities, solutions and creative enterprise will definitely increase for the foreseeable future.”

The technical burden of using Second Life, i.e. graphics cards, bandwidth and sufficiently specified machines, was repeatedly cited as a reason against virtual worlds becoming mainstream:

“Once the technology has become more accessible to lower spec systems - mainstream.”

“There are bureaucratic and technical reasons why it won’t be mainstream for a bit. Like bandwidth, and lack of graphics cards.”

“With this development combined with improved rendering and realism and improving bandwidths the picture may change.”

“A wider adoption of SL might depend on availability of adequate computer/graphic cards/broadband connection as well as on a wider understanding and acceptance of advanced e-learning technologies.”

“Virtual worlds will need to become easier to use and less demanding on computer specs to become mainstream.”

5. 'Roll Call' of respondents to the October 2008 snapshot

Note

Respondents in (brackets) didn't fill in the current survey form, but instead sent other content. That which was in the parameters of the survey questions has been included.

Universities

- Birmingham: (Jerry Foss)
- Bradford: Will Stewart
- Chichester: Lindsay Da Silva
- Coventry:
 - Maggi Savin-Baden
 - Mark Childs
 - Elinor Clarke
- Derby: Simon Bignell
- East London: Remy Olasoji
- Edinburgh: Austin Tate
- Glasgow Caledonian:
 - Ferdinand Francino and Kathryn Trinder
- Greenwich: Simon Walker
- Heriot Watt: Judy Robertson
- Imperial College: Dave Taylor
- Kingston: Tim Linsey
- Lancaster
 - Julia Gillen
 - John Mackness
 - Jennefer Hart
 - Michele Ryan
 - Lorna McKnight
- Leeds Metropolitan: Ian Truelove
- Leicester: Gilly Salmon
- Liverpool: Peter Miller
- London Metropolitan: Elena Moschini
- Nottingham: Andy Beggan
- Open University
 - Peter Twining
 - Anna Peachey
 - Lucia Rapanotti
- Oxford: Stuart Lee
- Plymouth: (Maged Kamel Boulos)
- Portsmouth: Jane Chandler
- Queens Belfast: Franziska Schroeder
- Reading: Shirley Williams
- Sheffield: Sheila Webber
- Sheffield Hallam:
 - Richard Mather and Andrew Middleton
- St Andrews: J Ross Nicoll
- St Georges U. of London: Emily Conradi
- Stafford: Glynn Skerratt
- Surrey: Nicola Avery
- Sussex: Tony Hudson
- Teesside: Kate Boardman
- West of England: Liz Falconer
- West of Scotland: Daniel Livingstone
- Wolverhampton: (Crispin Dale)
- York: Kriss Fearon

Colleges

- Bromley: (Clive Gould)
- North West London: Martin Biron

Developers

- Daden Limited: Soulla Stylianou
- virtual-e: Pauline Randall

Other

- JISC: (Rachel Bruce)
- JISC Regional Support Centres:
 - Jane Edwards and Shri Footring

We will be collecting information for the next snapshot report from December 2008 onwards. Feel free to submit updates of what you are doing, have done, or will do, in Second Life and other virtual worlds. Updates, news and downloadable survey forms will appear on the Virtual World Watch website (www.virtualworldwatch.net). Thank you.