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### **Published paper**

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Second Life: the seventh face of the library?

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Viewpoint/Discussion Paper

#### **Purpose**

This paper gives a brief introduction to Second Life, an outline of how one academic librarian has got involved with using it and reviews the issues that have arisen from a library perspective.

#### Approach

It offers a reflection on whether library activities in Second Life are different to library services in the real world and suggests that Second Life is just another 'face' of the library.

#### **Findings**

Second Life is still in the very early stages of development. There are various barriers and challenges to overcome before it can be used widely within universities. However, this paper shows it does provide an opportunity to experiment and explore what information resources are required in this environment and how librarianship and librarians need to evolve to cater for users in a three dimensional world.

#### Originality/value

This paper is based on personal experience and offers as many questions as answers.

Keywords: Second Life, Virtual Organisations, Librarians, Skills

#### 1. Introduction

Librarians have been concerned for some time that they are losing their role as the primary information provider for students starting their research, as the 'Google effect' gains momentum. The 2006 OCLC study, *College Students' Perceptions of Libraries and Information Resources*, showed that despite massive investment in electronic resources and online services, books are still seen as the primary library brand (OCLC, 2006). There was no runner up. Combined with the statistics from that report that 89% of college students use search engines to begin their assignment rather than library databases, it is no wonder that librarians are revisiting their marketing strategies and considering their roles in supporting learning and teaching. The report concludes that "Libraries, many of their resources and services, and the information experts who work in libraries appear to be increasingly less visible in a universe of abundant information" (OCLC, 2006, p.6-1).

Why is this? Librarians have been working hard to embed their services within the environments in which their users are studying and working and the number of these environments, physical, virtual and social, is increasing rapidly. In competing with Google to provide desktop access and seamless transfer of full text, our users no longer perceive these resources and services as part of the library. There are numerous arguments as to whether librarians are welcome within social networking spaces, such as Facebook, MySpace and so on, and yet that is where the majority of our users are communicating. How then can we raise our profile, improve our image and widen student perception of our services so as not to be bypassed by the Net Generation?

Farkas (2007) reminds us that there is no point in just being where our customers are, what is necessary is being useful by providing access to resources, interactive reference services and information literacy sessions. There must be content and purpose and the technology should not take precedence over the pedagogy. Bruce (1997) has written about the "Seven faces of information literacy", identifying different ways of experiencing information literacy: information technology for retrieval and communication, information sources, information process, information control, knowledge construction, knowledge extension and wisdom. These facets rely on the interdependency between groups and individuals in the information literacy experience. This author considers that this also applies to the outward faces of a library and the ways librarians are now promoting their services. It is more urgent than ever that information professionals should consider each 'face of the library', whether physical or virtual, and determine what services are required and the best fit for each, whether online or face-toface interaction, whether print or electronic, adapted to the local circumstance and purpose. Librarians have moved from being custodians of a physical collection of books to being managers of libraries as learning and social spaces. The design of new library buildings, such as the Information Commons at the University of Sheffield (http://www.shef.ac.uk/infocommons/) and the Saltire Centre at Glasgow Caledonian (http://www.gcal.ac.uk/thesaltirecentre/), reflects the importance placed on the social function of the library and the shift in learning and teaching methods to a more collaborative, participative approach (Secker, 2008). Developments in the library's virtual space have also happened rapidly with a shift away from static web pages to the incorporation of Web2.0 software to offer more dynamic services employing blogs, wikis, instant messaging reference services, and Facebook accounts to market events, amongst other technologies. Online library support for staff and students is not limited to the website. Personalisation of services is offered through the university portal and the 'face of the library' can be altered to suit the customer logging on, pushing particular services and information at the user. Services are also integrated into the university's virtual learning environment (VLE), providing seamless access to online resource lists, course readings and interactive information literacy tutorials; all embedded into particular modules as required by the academic delivering the course. Librarians are now managing multiple facets (or faces) of the library:

- the physical collection of books;
- the learning and social space;

- the website;
- the university portal;
- the virtual learning environment;
- social networking tools such as Facebook;
- and, more recently, 3D virtual worlds such as Second Life.

What scope do these new virtual worlds give us to rethink our strategies and roles? Will the key issues remain providing access to resources, offering information literacy sessions and timely reference services, and designing suitable spaces for learning and teaching? Is Second Life just the seventh face of the library?

#### 2. What is Second Life?

Second Life (SL) is a 3D virtual world launched in 2003, developed and run by Linden Labs but created entirely by its Residents (http://secondlife.com/). It has its own economy, its own money called Linden dollars (185 Linden dollars is equivalent to US\$1) and its own social network and culture. It is an example of a Multi-User Virtual Environment (MUVE), accessible over the Internet, a 3D world with persistent features and inhabited by avatars, users' 3D representations of themselves. SL is not the only MUVE by any means but it is certainly the best known, with items featuring it appearing regularly in the press and on the television. According to Wikipedia (2008) over 20 million accounts have been set up globally since its launch. Linden Lab gives the figure, at the time of writing, in March 2008, as "over 12,485,596 (and growing)". However, only about 1.5m of these have been active in the last three months. Users can have multiple avatars and only 40,000-50,000 accounts are typically logged in at any one time. There are two types of accounts, basic and premium. Basic accounts are free but do not include the right to own land. The land itself must be purchased either from another player, or from Linden Labs, and rent is charged in the form of land fees. Islands purchased from Linden Labs are priced at US\$1,675 for 65,536 square meters (about 16 acres). Monthly land fees for maintenance are tiered; the cost for 65,536 acres is US\$295. Premium accounts cost US\$9.95 per month which covers rent for 512 square meters of land. However, it is generally possible to find free 'office space' on one of the education islands, such as the Edusery Foundation, to experiment and investigate the software more fully before making any major financial outlay.

There is a growing interest in the potential of Second Life to support learning and teaching not just because the Gartner Report of 2007 (Gartner, 2007) states that "80% of active internet users will have a 'second life' by 2011", but also to explore the delivery of collaborative educational experiences within these immersive environments. An increasing number of colleges and universities are also exploring the use of games to enhance learning. The EDUCAUSE Learning Initiative (ELI) considers that "Games represent active, immersive learning environments where users integrate information to solve a problem. Learning in this manner incorporates discovery, analysis, interpretation, and performance as well as physical and mental activity" (Antonacci & Modaress, 2005). The potential of 3D environments in teaching various subjects, whether fashion design or architecture, law, health or business has been demonstrated in both formal and informal

learning situations (Kribble, 2007a; Stott, 2007; Bleacher and Stockman, 2008). Various reports have been produced listing the institutions involved in SL and attempting to outline their stages of development. They are intended to provide a baseline for the application of the technology specifically for educational purposes and, highlight interesting examples of its use. Kirremuir (2007a, 2007b) has provided snapshots on the use and uptake of SL by UK higher and further education in July and September 2007 with additional updates planned for March and September 2008. Jennings and Collins (2007) conducted a similar study of 170 US accredited colleges, universities, and schools and focused on what "educational institutions look like in this virtual environment, the types of spaces educational institutions are creating or simulating, and what types of activities are being conducted" (p.180). The New Media Consortium (NMC) also conducted a survey in spring 2007 contacting individuals on the consortium's list of contacts, the Second Life Educators (SLED) listserv (https://lists.secondlife.com/cgibin/mailman/listinfo/educators) and those people who had elected to be listed in the NMC Campus Online Directory (http://sl.nmc.org/directory/). Institutions interested in SL are able to identify themselves via the SimTeach Wiki (Kemp, 2008) and the list grows daily. The growth and development of SL has been compared to the growth of the internet in the 1990s as a testing ground for new ideas and ways of networking.

#### 3. Issues

The range of challenges, issues and concerns which need to be considered before introducing students to SL is considerable. It requires a fairly powerful PC with a good graphics card. It is not compatible with dial-up internet, satellite internet, and some wireless internet services and is not yet available on the managed desktop for all students. The software is updated frequently and can take time for revisions to settle down, often crashing the user out at inopportune moments or the author's personal nightmare of your avatar appearing naked in a room full of people, waiting for your clothes to download! Given that the majority of use is by Americans, and therefore in the evening for the UK, this means extending the working day to participate or catch up through chat logs. The learning curve to functioning proficiently in SL, walking around without falling over or bumping into things, flying and social niceties like waving or laughing, is relatively steep, although potentially easier for gamers and the net generation. All avatars have to go through 'Orientation Island' and learn how to move around by walking, flying or teleporting, change their appearance, communicate and record their activities. Other tasks to be mastered include learning how to sit, use the camera to take photos, locate places, people and events, make different gestures, join groups, make friends, play video and other presentations. Course developers need to consider carefully what activities they build for their students so that they provide them with a secure learning environment, engage them and they see the educational benefits of the environment rather than just another social networking area where they can 'hang out' with their friends.

Learning activities need to be built from scratch as there are no templates within SL. Basic building and scripting are available and in world courses are held by other more experienced Second Lifers, but each simulation or interactivity has to be designed as required. Scalability may be an issue as only so many avatars can inhabit individual areas

at any one time, generally around 40 avatars. From a security perspective, students need to be aware of potential risks, although Linden Labs banned gambling in July 2007, and, as with any social networking tool, students need to learn how to protect their identity and learn how to evaluate other people's authenticity and credentials. SL is open to the public, it is an adult-only world and not everybody is an educator; others are involved for recreation or commerce. Some islands do have mature content and activities and students need to be aware of this. Certain avatars, called 'griefers', set out to cause chaos. There is a separate Teen Grid for the under 18s and it is possible to make an island private and authorise who can enter and/or build in particular areas. A recent upgrade included a patch on age verification so that visitors to particular islands need to supply their details to confirm their age before being allowed to enter. It is also possible to prevent editing and copying of objects, or only on payment with Linden dollars. Communication can be by chat, instant messaging or Voice. Voice is a relatively new feature and requires additional equipment (such as a headset with a microphone and a sound card for the PC or Mac), something that not all university machines have as standard. Chat can be logged and voice can be recorded to form a record of any discussion.

Despite all these issues, both formal and informal education is starting to take place within SL. The advantages for many outweigh the disadvantages and there is continual development to overcome many of them. In a discussion on SLED, the e-mail distribution list for Second Life Educators, Tom Werner (2008) listed the following attributes of SL:

- Movement in 3D space.
- Machinima animated filmmaking within a real-time virtual 3D environment, tactics such as in an emergency response (see http://www.machinima.com/).
- Appreciation of space such as in the reproduction of Roma and the Globe Theatre.
- Interactions in a space such as managing a hotel.
- 3D and scale such as in the simulation of a heart murmur or molecules.
- Role playing avatars and interactions with different groups such as ageing, schizophrenia, patients or customers.
- Virtual psychology and sociology.
- Building and design architecture, interior design, urban planning.
- Clothing design.
- 3D exercises and testing.
- Constructivist activities.
- Role-play scenes from books.
- Building of something to illustrate a concept.
- Creative arts writing, photography, music.
- Decision making, running a business.
- Visualisation of data weather, planes in flight, Standard and Poor's 500 index, IBM Wimbledon tennis.
- Rapid prototyping and co-design NASA CoLab (http://colab.arc.nasa.gov/), Tech Museum (http://www.thetech.org/).

With the advent of personalisation and user generated content within Web 2.0 and now 3D visualisation, simulation and immersion within Web 3.0, the potential impact of these new technologies on the delivery of education is tremendous. But, what does this mean for libraries and librarians, with respect to the provision of library services and the role of library staff in supporting learning and teaching? Do these developments threaten traditional library and information services or are they yet another opportunity to integrate the library into the students' learning environment and embed information literacy into their curriculum? Do they offer librarians the potential to do anything differently or is it just another place to push resources and services already being offered elsewhere? How are students reacting to courses held in SL? What support do they need in terms of induction and technology? How does the course leader ensure student security and privacy and design meaningful activities accessible to all the students? This particular author still has more questions than answers (Parker, 2008).

#### 4. What services are libraries offering in Second Life?

Librarians are already in SL in considerable numbers (The *Librarians of Second Life* group listed over 700 members and the Second Life Library Friends group had over 1400 members in October 2007 (Kribble, 2007b)) providing reference services, offering tours, building libraries, linking to digital collections, web pages and sharing information. The Alliance Library founded by Lori Bell and Kitty Pope in April 2006 as a single shop front grew to over 30 islands by August 2007 and has an international team of volunteer librarians providing 50 plus hours of 'in world' reference service per week. The archipelago of islands receives around 6000 visitors per day, and the Eye4YouAlliance Island in Teen Second Life receives 2000-3000 teen visits (Hurst-Wahl, 2007). Various reference functions are offered using Question Point software via e-mail, chat or instant messaging. The reference desk is an open area circular platform rather than a desk and volunteers walk up to visitors rather than wait to be approached. Various services are on offer:

- teleport co-ordinates to other libraries;
- notecards with 'how to guides' and links to further information;
- suggestions of places of interest to visit;
- help with finding things, people or information.

Outreach activities include book discussion and visits by authors. These discussions can be enriched by avatars adopting different characters and speaking from their perspective, or putting on plays in a Second Life theatre. Abridgments of complete texts are available in the Caledon Library of 19<sup>th</sup> century books in Second Life, where copyright is not an issue (http://www.thelibrarymilitant.net/blog/about-the-library-militant.html). Various classes and seminars are held on induction, professional development for librarians, searching effectively and building scripts to create objects in SL. As the libraries are grouped together on adjoining islands, rather than within their own institutions, there is greater opportunity to collaborate and interact with people from around the world, share expertise and discuss issues, problems and trends. Librarians are also integrating their SL services with their real-life (RL) services and social networking tools. University College Dublin was the first Irish library in SL and its SL branch is included on its web pages with details of their services: "a reader survey, query box service, e-mail service, access

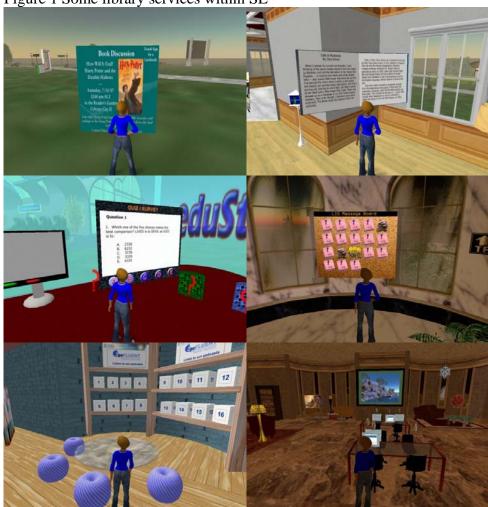
to web-based resources and blogs, presentations and some e-books"

(http://www.ucd.ie/libraryandarchives.htm). People with Facebook accounts can show their availability online in SL through Facebook, advertise and market events and publish videos and presentations on SL on Slideshare or YouTube.

Figure 1 shows various library services within SL include Book Discussions, Turning page books, surveys, notecards with reference questions, podcasts of seminars, and links to web-based services.

#### Take in Figure 1

Figure 1 Some library services within SL



#### 5. Skills required for library staff offering services through Second Life

Beyond the standard orientation skills needed by all 'newbies' to SL, librarians need to be able to customise their avatar effectively. Appearance within SL is important and can affect how we behave and how others behave towards us. An avatar's appearance can be altered in minute detail as to the shape, colour and texture of the skin, colour and shape of the eyes, clothing (both top and bottoms) and accessories. So how should librarians

present themselves within Second Life? From the colour and length of your hair to the type of clothes that you wear; what does your avatar say about you? Is colouring your hair purple in Second Life the equivalent to becoming a punk rocker in RL? How many of us re-create ourselves as closely as possible in SL, make ourselves look how we would wish to look in RL or even have a different looking avatar for different days of the week? (Amdahl, 2006) Should we be adopting a professional image as part of the university corporate brand or can we be more relaxed within the social environment of SL? Many people's avatars look totally different to their counterparts in RL and may even be a different gender, age group, race or marital status. Not everyone reveals their true self within their profile. Being able to be different and to experiment and experience life as someone other than oneself may be important for role playing within SL but how does this impact on librarians? How can we teach evaluation of information if we cannot verify who the author is and what their credentials may be?

There may also be a breakdown of roles within the educator/student relationship. Robbins (2006) considers that "the lack of role markers encourages equality among the class" and the way we communicate rather than the way we look affects how others perceive us. She argues that within instant messaging "our text is all we can rely on to represent who we are. We have little in the way of intonation to relay our mood or our tenor". SL encourages a more casual style of communication, multiple conversations can be going on at once and with chat, brief succinct messages work best. Librarians need to work at developing these new communication and presentation skills without lapsing into information management 'speak' or losing their professional outlook. They need to be aware of how to facilitate discussions in SL, both in groups but also one to one to conduct reference interviews. The one-to-one interviews are very similar to conducting an Ask a Librarian chat, but holding and chairing virtual seminars is a skill in itself; when considering protocol, how much time to spend on introductions and whether to reveal the real you or just your avatar's details, keeping a track of what has been said if parallel discussions start up and summarising the main points. As avatars can gesture, in a more formal conference setting, especially if voice is being used, the practice is to raise your hand when you wish to comment, but in a more informal seminar setting, using the chat function, avatars just type and, depending on how fast they type, the discussion points appear in the history. These can then be saved and posted for further reflection. The chat logs from the various discussions held in the Centre for Information Literacy Research (CILR) are available from http://sleeds.org/chatlog/archive.php.

Figure 2 shows 'Maggie Kohime' in SL (Lyn Parker in RL) wearing a free Tshirt from the CILR

Take in Figure 2 Figure 2 Librarian avatar in SL



We need to design our virtual social space from a completely blank design sheet. Do we replicate our campus buildings or envisage more open areas? Some would argue that by recreating the RL buildings they are creating a bridge for new users who will recognise where they are and be able to navigate within the new environment. Others take the opposite view and want to move away from the "physical and psychological limitations of RL environments" by utilising the full capacity of the technology (Kirremuir, 2007c). We need to be inventive about how we design our libraries. Providing a 'wallpaper' of stacks of books is frustrating for users wanting to read those books but providing the equivalent of the British Library's Turning Book technology for even just one volume takes up a considerable amount of file space and can be slow to download and come into focus. Grassian and Trueman (2007) offer the following advice:

"The first point to consider is how the library is to be used. Will it be used to support academic classes being taught in Second Life? Will it be used to explore continuing education and collaboration within the library or with other library facilities? Will it be used as a marketing tool for the library or for the institution? Other points to consider are location, provision of resources and staffing." (p.88)

Podcasts have proved to be an effective communication medium into and out of SL, and many residents have created podcast listening stations and/or are podcasting from SL to RL. Video tutorials are also popular both streamed into SL and available to view from YouTube or the Second Life Wiki (Linden, 2008). Various tips of the week videos have been created from how to get started and how to build to step-by-step tutorials on how to embed and view YouTube videos inworld. Machinima are videos created inworld by avatars using other avatars as actors. Chatbots, using artificial intelligence software, offer responses to basic reference questions, whilst displaying facial expressions and other forms of nonverbal communication. They use natural language conversation whilst interacting with their virtual environment (Daden Limited, 2008). Most of this technology is available for sale within SL and does not need to be built from scratch!

However librarians will need to develop some technical skills to manipulate the objects and to understand how they can be customised for their situation.

Newbies in SL value personal contact and interaction. Many of the islands in SL have few residents online at all times of the day and night. On InfoIsland, with its rota of volunteer librarians, there is nearly always someone to chat to, to ask questions however basic. As academics develop courses and research within SL, librarians have an opportunity to work with them to embed information literacy into the curricula and course assignment as they are designed. The learning and teaching style within SL is generally constructivist in approach and learners need to develop critical thinking skills to evaluate information resources. Grassian and Trueman consider that "librarians are uniquely positioned to help people learn how to learn, to turn potential users into critical thinking, knowledgeable, effective information "detectives". Ouestions such as "Who sponsors that Second Life site? What are her/his credentials? What is the purpose of the site – entertainment, education, persuasion, sales? How accurate, complete and up-to-date is it?" are standard evaluation questions that librarians use in helping students evaluate information, it is just the environment that is different (Grassian &Trueman, 2007 p. 87). The search engine within SL is still primitive at present and assistance is required with finding information, again librarians are used to fulfilling this function, so definitely a continuation of our role in the immediate future.

#### 6. Conclusion

Second Life is still in the very early stages of development. It is not the only MUVE under development and it could be overtaken by others in the future. Not all materials or resources will be available or even usable in Second Life but it does provide us with an opportunity to experiment and explore what information resources are required in this environment and how librarianship and librarians need to evolve to cater for users in a three dimensional world. Even in the short time we have been involved there has been a move away from providing access to information to providing a social hub, places for people to meet and a location for events; similar to the evolution in design of our physical libraries as a social space rather than just a collection of books. The development will continue whether we are there or not. There is a steep learning curve and Second Life does have a 'darker' side but security and verification tools are being developed and educational sites, restricted to particular cohorts of students, created. It would seem we are only restricted by the scope of our imagination. SL provides opportunities for collaboration and networking on a global scale. It offers an added dimension to learning situations that is not matched by other technologies. Yes, it has a steep learning curve and there are barriers to its use but it is continually being revised and work is ongoing to make it easier to use and integrate it with other technologies (SLoodle is an integration of Second Life with Moodle). Will it replace existing learning environments and libraries or is it just another 'face' to the Library, another opportunity for us to meet our users, and provide them with the services that they need and expect from us? This particular librarian is continuing to experiment and investigate and ask questions.

References (All URLs were checked March 13<sup>th</sup> 2008)

Amdahl, K. (2006), "Secrecy, identity, truth and lies", *Second Lifers Journal*. Available at: <a href="http://community.livejournal.com/second\_lifers/165743.html">http://community.livejournal.com/second\_lifers/165743.html</a>

Antonacci, D. M. and Modaress N. (2005), *Second Life: The Educational Possibilities of a Massively Multiplayer Virtual World (MMVW)*, presentation to the EDUCAUSE Southwest Regional Conference, February 16, 2005 (Austin, Texas). Available at: <a href="http://www2.kumc.edu/tlt/SLEDUCAUSESW2005/SLPresentationOutline.htm">http://www2.kumc.edu/tlt/SLEDUCAUSESW2005/SLPresentationOutline.htm</a>

Bleacher, L.V. and Stockman, S. (2008), "Second Life: a venue for informal education and participatory exploration", *Lunar and Planetary Science* XXXIX, 1167.pdf. Available at: http://www.lpi.usra.edu/meetings/lpsc2008/pdf/1167.pdf

Bruce, C.S. (1997), The Seven Faces of Information Literacy, Auslib Press, Adelaide,

Daden Limited (2008) *Chatbots and Automated Avatars in Second Life*. Available at: http://www.daden.co.uk/pages/000406.html

Farkas, M. (2007), Social Software in Libraries: Building Collaboration, Communication and Community Online, Information Today Inc., Newark, New Jersey,

Gartner (2007) *Gartner Says 80 Percent of Active Internet Users Will Have A "Second Life" in the Virtual World by the End of 2011*. Available at: <a href="http://www.gartner.com/it/page.jsp?id=503861">http://www.gartner.com/it/page.jsp?id=503861</a>

Grassian, E. and Trueman, R. B. (2007), "Stumbling, bumbling, teleporting and flying . . librarian avatars in Second Life", *Reference Services Review*, Vol. 35 No.1, pp. 84-89.

Hurst-Wahl, J. (2007), "Librarians and Second Life: it's a source of information, a platform for networking, an opportunity to try out new approaches before you take them to the real world", *Information Outlook*, Vol. 11 No.6, pp.44 – 53. Available at: <a href="http://findarticles.com/p/articles/mimoffwe/is-6-11/ai-n19311772/pg-1">http://findarticles.com/p/articles/mimoffwe/is-6-11/ai-n19311772/pg-1</a>

Jennings, N. and Collins, C. (2007), "Virtual or virtually U: educational institutions in Second Life", *International Journal of Social Sciences*, Vol. 2 No.3, pp.180-187.

Kemp, J. (2008), SimTeach Wiki. Institutions and Organizations in SL. Available at: <a href="http://www.simteach.com/wiki/index.php?title=Institutions">http://www.simteach.com/wiki/index.php?title=Institutions</a> and Organizations in SL

Kirremuir, J. (2007a), *A July 2007 "snapshot" of UK Higher and Further Education Developments in Second Life*, Eduserv Foundation, Bath. Available at: http://www.eduserv.org.uk/upload/foundation/sl/uksnapshot072007/final.pdf

Kirremuir, J. (2007b), *An update of the July 2007 "snapshot" of UK Higher and Further Education Developments in Second Life*, Edusery Foundation, Bath. Available at: http://www.edusery.org.uk/upload/foundation/sl/uksnapshot092007/final.pdf

Kirremuir, J. (2007c), "The Second Life of UK academics", *Ariadne*, No.53, Available at: <a href="http://www.ariadne.ac.uk/issue53/kirriemuir">http://www.ariadne.ac.uk/issue53/kirriemuir</a>

Kribble, M. (2007a), "A law librarian's Second Life", *American Association of Law Librarians Spectrum*, Vol.12 No.2, pp. 13-15. Available at: http://www.aallnet.org/products/pub\_sp0711/pub\_sp0711\_Second.pdf

Kribble, M. (2007b), *NSU Libraries Second Life Workshop*. A workshop for Nova Southeastern University Librarians, Florida. Available at: http://www.slideshare.net/mak506/nsu-libraries-second-life

Linden Research Inc. (2007), *Second Life: Economic Statistics*. Available at: <a href="http://secondlife.com/whatis/economy\_stats.php">http://secondlife.com/whatis/economy\_stats.php</a>

Linden, T. (2008), *Video Tutorials*. Available at: <a href="https://wiki.secondlife.com/w/index.php?title=Video\_Tutorials&oldid=56642">https://wiki.secondlife.com/w/index.php?title=Video\_Tutorials&oldid=56642</a>

New Media Consortium (2007), *Spring 2007: Educators in Second Life*. Available at: <a href="http://www.nmc.org/pdf/2007-sl-survey-summary.pdf">http://www.nmc.org/pdf/2007-sl-survey-summary.pdf</a>

OCLC (2006), *College Students' Perceptions of the Libraries and Information Resources: A report of the OCLC Membership*, OCLC, Dublin, Ohio. Available at: <a href="http://www.oclc.org/reports/perceptionscollege.htm">http://www.oclc.org/reports/perceptionscollege.htm</a>

Parker, L. (2008), "More questions than answers: the reflections of Maggie Kohime, a virtual librarian in Second Life", *ALISS Quarterly*, Vol. 3 No 2, pp13-17. Available at: <a href="http://eprints.whiterose.ac.uk/3624/2/More\_questions\_than\_answers-1.pdf">http://eprints.whiterose.ac.uk/3624/2/More\_questions\_than\_answers-1.pdf</a>

Robbins, S. (2006), "Image Slippage": Navigating the Dichotomies of an Academic Identity in a Non-academic Virtual World, Second Life Community Conference 2006 presentation. Available at: <a href="http://www.secondlife.intellagirl.com/2006/08/14/slcc-presentation-image-slippage">http://www.secondlife.intellagirl.com/2006/08/14/slcc-presentation-image-slippage</a>

Secker, J. (2008), *Social Software, Libraries and distance learners: literature review.* University of London, London. Available at: <a href="http://clt.lse.ac.uk/Projects/LASSIE\_lit\_review\_final.pdf">http://clt.lse.ac.uk/Projects/LASSIE\_lit\_review\_final.pdf</a>

Stott, D. (2007), "Learning the second way", *British Medical Journal*, Vol. 335, pp. 1122-1123. Available at: <a href="http://www.bmj.com/cgi/content/full/335/7630/1122">http://www.bmj.com/cgi/content/full/335/7630/1122</a>

Werner, T. (2008), [SLED] Presentation on SL Saturday 1 March 2008. Available at: <a href="https://lists.secondlife.com/pipermail/educators/2008-March/019335.html">https://lists.secondlife.com/pipermail/educators/2008-March/019335.html</a>

Wikipedia (2008), Second Life. Available at: <a href="http://en.wikipedia.org/wiki/Second\_Life">http://en.wikipedia.org/wiki/Second\_Life</a>