

ACADEMIC AFFAIRS COUNCIL

AGENDA ITEM: 6.D

DATE: July 26, 2010

SUBJECT: Second Life Committee Report

Many educational institutions have a customized presence in Second Life that allows them to collaborate, offer instruction, and explore the vast possibilities of three-dimensional spaces. In 2008, BHSU and SDSU established islands within Second Life. Since then DSU and USD have also started to become engaged in activities within Second Life. AAC received a report of these activities last year ([AAC Agenda Item 5.B, April 2009](#)). AAC recommended that an ad-hoc committee be formed to summarize activities within the system and to prepare a set of recommendations for consideration and this was formalized ([AAC Agenda Item 5.C, May 2009](#)).

Attached is the report from the Second Life Committee containing information on the campuses' activities in Second Life and a series of recommendations including a set of recommended next steps. Members of the Council should be prepared to discuss these and to consider taking action on the recommendations made.

RECOMMENDED ACTION

Discussion and approval.

**Second Life Committee Report
June 25, 2010**

A special thanks to Cathy Anderson, EUC Director, for leading this committee!

Overview

“Second Life has accomplished what no other 3D virtual environment has done: bring the words ‘3D virtual environment’ a bit closer to the mainstream.” Kelton (2008), *EDUCAUSE Review*

Second Life™ is a free worldwide “virtual world” which according to its [website](#) is an “online 3D virtual world imagined and designed by you. From the moment you enter Second Life, you'll discover a universe brimming with people and possibilities.” Second Life has an estimated 13 million users 18 and over; there is also a Teen Grid for those aging from 13-17. Created by Linden Labs, Second Life has been in existence since 2002 as a virtual world that has supported social networking, eCommerce, and education. We also retrieved the following from Linden Lab's website: “*Second Life provides a virtual home for some of the world's most prestigious universities and academic institutions. Virtual classrooms at MIT allow for online collaboration, while Notre Dame makes use of Second Life as a cost effective solution to distance learning.*”

Second Life is both immersive and persistent (it exists when you are not there). Immersion is “a sense of belief that one has left the real world and is now persistent in the virtual environment... Immersion is embedding students inside lifelike problem-solving situations where characters are investigating simulated scenarios, situations, and collation that are not possible in a classroom setting” (Annetta, Folta, & Klesath, 2010).

Second Life allows real time text and voice chat and has customizable avatars – a virtual version of the self. Users transport by walking, flying, and teleporting to other locations. SL has its own currency, the Linden dollar; approximately 268L\$=\$1US. SL time is Pacific Time. Everything you see is SL was built and is owned by users. A “build” program uses geometric shapes called “prims” and applies “textures.” A scripting language makes objects interactive. For example, an avatar may sit on a chair or take a “notecard” containing information from a box.

More than 150 educational institutions in 14 countries have a presence in Second Life (these institutions have paid for land purchases and maintenance). There are also other education and training entities in Second Life, as well as non-profit associations, museums, libraries, historic sites, science sites, theater, virtual businesses, and sites of other countries. The Second Life Education (SLED) list has more than 4,700 subscribers. According to the blog Pixels and Policy, the University of Texas at Dallas “made a name for itself building virtual laboratories in Second Life. The future of virtual research will be much more ambitious,” (http://www.pixelsandpolicy.com/pixels_and_policy/2010/04/vw-srt.html).

“In a survey of 25 academic institutions in 15 countries, 94% of instructors said they plan to use Second Life again as an educational tool,” Bowers, Ragas, & Neely (2009).

Possibilities for Second Life might include having a class in Shakespeare conduct plays in the old Globe Theatre, having a sociology class study avatar behavior, having a business class form a small business within the virtual economy, having medical students role play patient encounters in a simulated environment, having architecture students experiment in design, or holding a ball at the Lincoln White House!



It is important to know that regions within SL are assigned maturity ratings:

- G = General – areas such as universities, conference organizers, and real-world businesses
- M = Moderate – other areas (stores, galleries, music venues, parks, social clubs)
- A = Adult – sexually themed content, spaces, or activities; representations of intensely violent acts – warn your students about these!

Benefits of Second Life for Educators

1. Real time communication (text chat & voice).
2. Audio & video capabilities (in conjunction with QuickTime); can display posters and slides.
3. It provides the feeling that you are actually in a real place.

4. There are many other educational sites already there from around the world.
5. A multitude of subject matter can be explored in a sensory-rich immersive environment.
6. Learners from many locations appear to be physically there with you (social presence).
7. It is ideal for course design using constructivist learning theory.
8. Some students with disabilities gain the freedom and opportunity for experiences they may not be able to have in real life.
9. It makes it possible to visit places or time periods you could not get to in real life.
10. It is good for role playing in a simulated environment.
11. It enables experiences that would be otherwise impossible (e.g., flying and viewing objects from all angles, swimming underwater without equipment to view sea life close up).
12. It could be used for collaboration and co-teaching across programs or institutions.
13. It could be used for meetings or conferences.
14. Students and educators may attend some of the same events held by other organizations.
15. It is useful for student group projects. For example, students could display artwork for visitors to the campus.
16. It's fun and motivational. The younger generation brought up on video games may especially find learning in a visual environment to be enticing.
17. Marketing (others can visit your site, student avatars can wear promotional t-shirts to visit other sites)
18. There is a wealth of information available on different websites, listservs, and wikis regarding "how-to" and the experiences of other educational users. In addition, there are numerous free workshops and other activities held by educational groups within Second Life.
19. If you use the Moodle course management system, there is a program called Sloodle which links Moodle with the Second Life program.



A building class in Second Life

According to Anetta, Folta, & Kelsath (2010), “one could argue that videoconferencing software such as Elluminate provides a platform for real synchronous instruction. However, 3D Virtual World Environments provide a cognitive framework in that students are always on screen and cannot readily take a passive role in learning... As avatars, students can interact both spatially and socially.” The report *Best Practices in Virtual World Teaching* suggests that virtual worlds such as Second Life are ideal for problem-based learning due to their potential for simulations and exploration.

Constraints of Second Life for Educators

1. It has a steep learning curve for both instructor and students.
2. Good graphics cards and a fast Internet connection are required.
3. There are no natural facial expressions or body language.
4. Other avatars must be far enough away from class that you won't “hear” their conversations.
5. Software crashes are common.
6. “Griefing” may take place (behavior such as pushing, shooting, setting off bombs, unwanted sexual advances). *Teach students and instructors what to do if this happens* (e.g., teleport elsewhere, exit the program, take a snapshot of the griefer, report to Linden Labs).
7. The tutorial at which new users automatically find themselves on Orientation Island is poorly done and confusing. (*Note:* There are better tutorials on other islands, such as ISTE Island (International Society for Technology in Education), ASTD (American Society for Training & Development), or Virtual Abilities Island.
8. If installed at computer labs on campus, someone with administrator privileges must download software updates.
9. Instructors may not wish to take the time to learn to use it in their classes.
10. Some students may dislike it.
11. There is no screen reader for the visually impaired.



ISTE Island tutorial

How SD Educational Institutions are using Second Life

In 2008, South Dakota State University and Black Hills State University established islands in Second Life. SDSU's Island is located at JackSDState: <http://slurl.com/secondlife/Jacks%20SDstate/127/131/22>. Black Hill's State's island is located at BHSU <http://slurl.com/secondlife/BHSU/128/128/27>. Other South Dakota universities have also become involved in Second Life activities.

BHSU Activities in Second Life

By Devrim Ozdemir, Instructional Designer, Educational Outreach

We have developed our own island in Second Life. It has been used in a psychology course that resulted in positive reviews. The instructor was able to display a PowerPoint presentation and have students ask questions interactively. It was also used in a library course. At the start of the course, they had negative feedback primarily because students didn't know how to navigate in Second Life. That issue, however, was resolved after the instructor had an orientation demonstration with the students. So far only these two courses have utilized Second Life. BHSU is still in the design stage for the most part. The Educational Outreach Program provides orientation to faculty.

DSU Activities in Second Life

By Risë L. Smith, Digital Design & Access Librarian

1. 11/08 to present: rent and co-manage "DSU and UCM Learning Commons," 3936 sq. meters on Cybrary Island. Plot of land for use by faculty and students as well as librarians at Dakota State University and the University of California, Merced. Includes building, building space, presentation tool examples, survey tool example, etc. Co-manager is Teal Smith, User Communications & Instruction Librarian, Kolligian Library, UCMerced.
2. Fall 2008: Took 3 short courses in SL offered by the University of Illinois, Urbana-Champaign (UIUC) -- Setting up an Educational Presence in Second Life (8 hours); Setting up a Library in Second Life (12 hours); and Virtual Librarianship (8 hours)
3. 9/2008: Presented live demo of SL for DSU Planning Council.
4. 10/08: Provided 50-minute live demo of SL for Children's Lit class
5. 5/08 and 12/08: Presented two one-hour Faculty Development sessions. Part 1 was live demo. Part 2 brought faculty into SL for tour of sites.

6. 1/09: Provided student with slideshow presenter and space on DSU & UCM Learning Commons for a presentation to his professor in Second Life for EDFN 465 Multimedia Web Development in Education.
7. Spring 2009: Attended 1 short course (8 hours) in SL "Managing a Class in Second Life" (8 hours), offered by UIUC.
8. 4/09: Provided 50-minute live demo of SL for Rhetoric class at DSU.
9. 4/09: Provided two 50-minutes sessions in SL for Information Society class with students creating avatars and doing orientation activities in the first session and then visiting assigned sites in the second session.
10. 10/09: Presented live demo of SL at the South Dakota Library Association annual conference.
11. 2009-present: Continue to forward SL news to nine DSU faculty who requested that I continue to do so; periodically answer student or faculty questions about SL.



View of the DSU campus

This year, 2009-10, I have primarily just kept a short list of interested faculty informed of SL news, interesting sites, activities, etc. while maintaining the DSU & UCM Learning Commons.

Projects by faculty include:

Dr. Barbara Myers [4/27/2010]: "I am planning on using second life as a learning tool for my students. One of my senior project students (Nate) developed a building and questionnaire area—he is going to work with me this summer to complete the development of the questionnaire to demonstrate to the students what they need to learn in the Office Suite of Programs." She will use this area primarily for CSC 105 Introduction to Computers. Dr Myers' project is being built on the DSU and UCM Learning Commons.

Dr. Mark Geary [4/27/2010]: "We use Second Life in support of Pitler and Marzano's Using Technology with Classroom Instruction that Works, specifically chapter 11, on generating and testing hypothesis. Students complete the discussion board activity by sharing screen shots of places in Second Life they would use to have students test hypothesis. This is for EDFN365."

SDSU Activities in Second Life

By Shouhong Zhang, Manager, Instructional Design Services, SDSU

SDSU started using Second Life in 2008 and presently has about five structures within Second Life. At SDSU's site students can communicate in real time through both audio and video. It is also designed for new student orientation as well as faculty conferences. Students can click on posters throughout the site to view messages or go to specific pages. One obstacle that has come up with students who are interested in learning in Second Life has been with the bandwidth and hardware required to effectively run the program. One other area that is currently being worked on at SDSU is program simulation and finding ways to make this easier to do. They're hoping to possibly hire on a part-time programmer to help develop simulations for courses such as chemistry and biology.

On average it usually takes about two hours for a student orientation comprised of approximately thirty students, who usually pick up on it very well; whereas, orientation for an instructor usually takes about four hours. The critical component for instructors is to find the point where you can apply the pedagogy using a specific application. Currently, this orientation occurs face-to-face since it is hard to conduct online. SDSU, however, is encouraging instructors to start using Second Life in their online classes. The Instructional Design Department maintains the island and provides orientation to students and faculty.



USD Activities in Second Life

By Susan Santo, Associate Professor of Adult & Higher Education, Educational Administration

USD currently does not have a site in Second Life. One of the problems they ran into at USD was not having the hardware and graphics cards needed to support the program (our labs have half size graphic cards). However, if it was used for distance learning, students themselves may have the program capabilities necessary to operate the site on their own computers.

2010/09/08 conference participation: I will be conducting a session on Second Life in Education for the ESA Summer Symposium in Sioux Falls on June 4, 2010. On April 21, I conducted a session on *Is Second Life Useful for Education?: Graduate Student Impressions* for the 2010 TCC Worldwide Online Conference. I presented on Second Life for Adult Learners at the AAACE 58th International Conference in November 2009. I also presented on *Teaching in Second Life* at the Great Plains Conference on the Teaching of Psychology in October 2008.

2010/09/08 – I held various informational sessions at USD: I spoke on this topic at the Distance Education and Continuing Education meeting in Spring 2010. For the USD Center for Teaching and Learning I spoke on *Second Life: Virtual Worlds for Higher Education* (with Elizabeth Simmons) in April 2008. I have also given a presentation for the Information Technology Advisory Council (with Elizabeth Simmons).

2008/09: I took a group of graduate students through Second Life in my online course AHED 765: Distance Education. Students obtained accounts and logged in during my sessions. Their reactions to it were very positive. My students were required to write essays about the benefits

and disadvantages that they had seen. Second Life gives you a sense of being around other learners that you wouldn't otherwise get from other distance learning tools. One benefit the students really liked was being able to get a different view of learning, such as an island they visited that was created for biology. There they were able to actually go into a cell to see what it looked like. Students also really liked the site created for the Theorist Theory. We also visited North Carolina State University's Wolflands site – a combination of a representation of the real campus with fantasy, where we were fortunate enough to meet an employee who spoke with the class.

Students were not impressed by seeing places that looked exactly like classrooms. One disadvantage noted was that some students had issues with being able to move around/navigate the site. Also, some students noted that they had an experience with other avatars in a particular site that were harassing them while they were trying to hold a class. None of my students had difficulty running Second Life on their computers, although the lag time varied depending on the speed of their Internet connection (*lag* may cause the avatar to freeze or for the scenery to appear at a slow rate). I also used SL in a previous course, Advanced Educational Technologies, with positive comments from students.



August 2008: I earned a Second Life for Educators certificate from the Sloan Consortium. I attended a continuing education course on “Working with a Class in Second Life” presented by the Illinois Alliance Library System and the Graduate School of Library and Information Science, University of Illinois at Urbana-Champaign.

David Alexander, our Digital Access Manager for USD University Libraries, developed a model within Second Life to demonstrate how the USD Library first floor might be remodeled. This model was placed within land he leased through the Educators Coop in Second Life. The model is to scale complete with computer monitors and chairs. “The casual comments I received were along the lines that it was much easier to visualize the plans when you could see it in a 3D model in this way.” He has also explored many libraries within SL and notes that “many of the library builds are centered on a particular collection or collections... Among the most common library social activities is the book discussion group. Book discussions are frequently held in Second Life... The virtual library space may be populated with people physically located thousands of miles apart in the real world.”

Purchasing or Renting Land

There are many options to developing a presence in Second Life, one of which is to get your own island. Detailed information on purchasing an island is located at the specialorders.secondlife.com website. It costs \$700.00 to purchase an island and \$147.50 a month for a maintenance fee. Many objects are free; others may be purchased if you do not wish to create them.

Owning land enables you to do permanent builds and eject undesirable users. If you do not own land, students may practice building in a public sandbox where content is erased periodically. Land may be made *public* (accessible to anyone) or *private* (accessible only to designated users).

Other options for trying out Second Life are also available to educators; however, they come with a price as well. The New Media Consortium requires a membership to the consortium which identifies itself as follows:

The New Media Consortium (NMC) is an international not-for-profit consortium of learning-focused organizations dedicated to the exploration and use of new media and new technologies. Its hundreds of [member institutions](#) constitute an elite list of the most highly regarded colleges and universities in the world, as well as leading museums, key research centers, and some of the world's most forward-thinking companies. For more than 15 years, the consortium and its members have dedicated themselves to exploring and developing potential applications of emerging technologies for learning, research, and creative inquiry. The consortium's [Horizon Reports](#) are regarded worldwide as the most timely and authoritative sources of information on new and emerging technologies available to education anywhere.

Membership fees for the NMC are as follows: Regular - \$2,500 per year, Corporate Partner Sustaining Level - \$5,000 per year, Corporate Partner distinguished level - \$10,000 per year, Corporate Partner Platinum Level - \$25,000 per year.

Some educational groups provide the **free use of land for special events** (e.g., ISTE Island). **Leasing land** is also a possibility. For example, a small parcel of land could be rented for one year to try out with a couple of classes.

Other Virtual Worlds

Other virtual worlds that are popular with educators include [Active Worlds](#), [Reaction Grid](#), and Open Simulator (see http://opensimulator.org/wiki/Main_Page for information).

Active Worlds Educational Universe (AWEDU)

An example of another program used before Second Life is Active Worlds. Active Worlds and Active Worlds Educational Universe (these are **two separate** programs) are earlier environments. Although AWEDU has excellent content, it is not nearly as sophisticated as Second Life, especially with regard to the avatars and the building capability. Susan Santo at USD used AWEDU as a supplement to one of her courses before she discovered Second Life.

Reaction Grid and Open Sim are both very much like Second Life and are in fact built on Second Life technology. **Reaction Grid** provides the user much in support, affordability and functionality. For a basic \$50 start up fee and \$25 monthly maintenance fee, a user can explore, build, script objects and collaborate with others in a “Second Life” like environment. Other plans are also available that allow for more ‘prims’ which are the number of “objects “one is allowed to have on a site (like allowable MGs). The drawbacks are that traffic is very low; some aspects of the environment are very primitive. Microsoft and others have established a site in Reaction grid here lately. They provide self-hosting and hosting solutions.

OpenSimulator is for the more technical savvy user. Open Sim can be downloaded onto one’s PC or own server for free. From there the user will have to develop them and host them on his own. “OpenSimulator is a 3D Application Server. It can be used to create a virtual environment (or world) which can be accessed through a variety of clients, on multiple protocols. OpenSimulator allows you to develop your environment using the technologies you feel work best.”

Recommendations

There seems little point in spending all your teaching time with lectures based on PowerPoint. **The power of Second Life resides in its immersive ability and sense of presence**, as well as

simulations (e.g., for science), role plays (e.g., in historic sites), being able to visit other places (e.g., museums) and educational institutions, and utilizing all the different associations located within Second Life that are willing to help learners.

Second Life has a directory listing educational sites within Second Life that may be interesting and helpful to attend or look into. These may be able to provide more professional development opportunities with regards to virtual worlds. There are also Groups that can be joined within Second Life that provide professional development opportunities. Examples include:

- Educator's Coffee House
- SL Educator and Researcher Network (SLEARN)
- ISTE: Education Technology Asso. (be sure to visit ISTE Island)
- USDLC (United States Distance Learning Consortium, check out also USDLC Star Island)
- Educators New to SL
- Distance Educators
- Virtual Nurse Educator
- Real Life Education in Second Life (Linden Lab sponsored)
- SITE: Soc for InfoTech & Teacher Ed
- SLED Buddies (Second Life Education Project)

Other recommendations are:

1. Conduct a needs assessment on faculty interest in using SL.
2. Consider what scale you want – an entire campus? A few buildings? An area for course activities? An area for socialization and relaxation? Do you want to reproduce your actual campus or create a learning environment that could not exist in the real world?
3. Form a multidisciplinary team to design the site.
4. Consultants who specialize in the design of virtual worlds are also available. They offer training services as well. It may be advisable to consider looking at the services and pricing of one of these.
5. Consider also that interested students can be trained to help build a site.
6. Train technical support staff (e.g., Help Desk).
7. Train interested faculty members to use SL and design courses effectively for the medium.
8. Conduct evaluation studies on student attitudes toward SL and learning.

So far there does not seem to be any research on quantitative evidence regarding whether or not Second Life improves student learning in some way. It could be that the program is not far enough along to determine that type of information yet. The idea that needs to be focused on is: **What can Second Life do that other technologies cannot. There is no point in replicating what other technologies can do as well or better.**

A new version, Second Life Viewer 2, is now available in Beta. *We do not recommend downloading this at this time as it contains numerous technical problems; however, it seems easier to use which may eventually eliminate some of the problems regarding ease of use.*

Overall, the Second Life program is worth pursuing. ***The trends show that the use of Second Life and other virtual worlds for higher education are expanding rapidly and will be used more in the future.***

Next Steps

1. Develop a survey which individual campuses may use to evaluate faculty awareness of teaching and learning in virtual worlds and to identify specific training and support needs. The survey should be administered in a manner appropriate for each campus (i.e., through a distance education, instructional technology, faculty development, or other arm of a university rather than coming from a central BOR office).
2. Compare the features of Elluminate Live, a real-time distance communication system already in use at South Dakota BOR campuses, to Second Life. Elluminate has strengths and weaknesses when compared to SL and a more thorough review should be made.
3. Monitor future developments regarding virtual worlds and higher education.

Recommended Resources

Annetta, L. A., Folta, E., & Klesath, M. (2010). *V-learning: Distance Education in the 21st Century through 3D Virtual Learning Environments*. NY: Springer Verlag.

Best Practices in Virtual Worlds Teaching: A guide to using problem-based learning in Second Life. (In press). University of Derby, University of Aston, and the Higher Education Academy Psychology Network.

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Weber, Aimee, Kimberly Rufer-Bach, & Richard Platel (2007). *Creating Your World: The Official Guide to Advanced Content Creation for Second Life*. Indianapolis: Wiley.

White, B. A. (2008). *Second Life: A Guide to Your Virtual World*. Brian A. White (2008). Indianapolis: QUE.