When Real and Virtual Worlds Collide: A Second Life Library

By Chase Baity, Pam Chappell, David Rachlin, C. Vinson and Marilyn Zamarripa

Libraries are attempting to face a future in which almost every fixed point has disappeared. Users are changing; content is changing. (Law 2009)

Abstract: A virtual world is a simulated environment, accessed by multiple users through an online interface; Second Life (SL) is the best known virtual world. Volunteers created libraries in virtual worlds with the primary goals of investigating library services there, attracting new users to traditional libraries, and meeting librarians from around the world. The most successful virtual libraries in SL are independent, run by volunteers, and not affiliated with a traditional library. Studying virtual libraries with a usability theoretical framework can offer insight to their potential value, i.e. whether they can offer efficient, effective, and satisfying services. These core usability factors affect two prominent library user groups: the patrons receiving services and the library employees that deliver them. This research takes a holistic approach, studying traditional public libraries, their virtual SL branches, and independent SL libraries using surveys, focus groups, and interviews; over 350 users and 15 staff members participated. These data show that the SL-only virtual libraries are more successful than the SL branches of public libraries, the churn in the users suggests that libraries in SL likely serve a niche population, marketing seems problematic for all SL libraries, SL is not as usable as it could be for libraries, and the public library staffs experimenting with SL have very different perspectives on it, which may generate conflict.

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INTRODUCTION

The emergence of social networks such as MySpace and Facebook has resulted in new ways and channels for people to communicate and collaborate. However, technology has not stopped with two-dimensional networks. The graphical, three-dimensional technology of virtual worlds "create[s] a new stage of collaboration, cooperation, communication with an even higher level of interaction, complexity and value creation." (Fetscherin and Lattemann 2007, 4) A virtual world is a simulated environment, accessed by multiple users through an online interface.

Second Life is probably the most well known and largest social Virtual World existing today, and at any one time there are between 35-50,000 avatars online (Frank 2008, 2). Second Life was created by Linden Labs and opened to the public in 2003 (Frank 2008, 1). While it had a reputation early on as being mainly a place to socialize and play games, that appears to no longer be the case. Collaborative work, information sharing, and learning activities have become more popular and have taken over as the major activities in Second Life.

Interest in virtual worlds has grown considerably in recent times. More than 60 colleges and universities have established virtual campuses (Kroski 2007) with over 120 libraries. These virtual libraries were predominantly created and supported by an army of volunteers with the primary goals of investigating library services in virtual worlds, attracting new users to traditional libraries, and meeting and collaborating with librarians from around the world.

This research team completed a needs assessment pilot project in the Spring semester of 2009 for a Second Life public library, managed by a real life library in the mid-west. This study builds on the findings from that project and represents an attempt to understanding the dynamics

of trying to balance the needs and demands of real and virtual world libraries within the framework of usability. The three research questions this study addresses are:

1) *what are the integrated goals between the real world and virtual world libraries?*

2) *what is the optimal way to deliver services to reach these goals that are highly usable for employees and patrons?*

3) *how usable currently is the virtual library?*

LITERATURE REVIEW

Libraries and librarians in Second Life

One might ask why libraries and librarians have become so integrated within Second Life. As users become more comfortable in the Second Life environment, they begin to demonstrate information-seeking behaviors that lead them to places like virtual libraries. Therefore, libraries should become comfortable with Second Life and similar programs, "where potential library users are active and assess how library services might be integrated into these environments. Many individuals now involved in Virtual Worlds may not be traditional library users." (Bell and Trueman, Introduction 2008, xvi) While most libraries and librarians are struggling with what to do in this new medium and asking questions about how best to use this new vehicle, many have decided to be present at the beginning instead of playing catch-up (Bell and Trueman, Introduction 2008, xii). They feel that the knowledge they are gaining now regarding virtual worlds will be of benefit in the future. Many librarians feel so strongly about this that "they are willing to explore Second Life outside of their usual administrative

structures," (Frank 2008, 5), spending their own time, and possibly money, on Second Life

projects. Even if librarians are not connected to a library in Second Life through either an

independent Second Life Library or a branch of a brick-and-mortar library, many come to

Second Life to meet with their peers from across the country and from around the world to share

experiences, learn from each other, and for general camaraderie. Librarians are involved in

meetings for professional development and information sharing, gaining new opportunities for

networking, creating collaborative projects, and adding to the culture of Second Life itself.

Library Services in Second Life

Until the emergence of virtual worlds, most human interaction with information was

strictly two-dimensional. While books themselves are three-dimensional objects, reading is still

a two-dimensional activity. The digital revolution and websites are also two-dimensional.

virtual worlds, on the other hand, offer a three-dimensional experience. "[Y]ou can fly around

and through a large molecule, skip through a sculpture garden that conveys both visual and

auditory information, experience a tsunami or other natural disaster, or blast off in a rocket ship."

(Peters, Ten Conditions 2008, 17) Libraries in Second Life need to capitalize on this third

dimension if they want to attract users. Early collections in Second Life were mainly links to

web resources, (Bell, Pope and Peters, The Universal Library 2008) but experience has shown

this does not attract many users or encourage return visitors. In the Virtual World there should

be a "shift away from object-oriented information systems to experience-oriented information

systems…. to create an interesting, engaging, and immersive information experience." (Peters,

Ten Conditions 2008, 16) Virtual worlds are not conducive to traditional library services; they

are not the best place to read large quantities of text. Virtual world collections tend to play a

more minor role than those in real world libraries, while events and exhibits provide a greater value and interest. Three-dimensional learning experiences are library services that virtual worlds can offer that are, at this point, not available through any other easily accessible medium.

The single traditional service that thrives in Second Life is the reference service. At the Alliance Virtual Library, volunteer librarians from all over the world staff the information desk more than 80 hours a week, providing reference service to Second Life users (S. Thompson 2008). They assist virtual residents in finding and evaluating online information, but they primarily answer questions about using Second Life itself, including how-tos and offering suggestions of places to visit. They provide this service in a variety of languages using Babbler software to translate the text (Bell, Pope and Peters, The Universal Library 2008).

Public Libraries in Second Life

All of the traditional types of libraries, public, academic, school and special, exist within Second Life. For the purpose of this paper, only public libraries are being examined.

There are many virtual branches of public libraries in Second Life that are tied to real life public libraries. The InfoIsland Library Directory lists ten public libraries in this category (Infoisland Archipelago Directory of Libraries and Organizations). These include: Cleveland Public Library (Ohio), Glenview Public Library (Illinois), Mark & Emily Turner Memorial Library (Maine), Maryland Library System, Monroe County Library System (New York), Olathe Public Library (Kansas), Orange County Library System (Florida), Society Hill SC Public Library, The Public Library of Charlotte & Mecklenburg County (North Carolina), and the Topeka & Shawnee County Public Library (Kansas). These Second Life libraries are sponsored by the real life library and built by librarians, generally, as our study found, on their own

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personal time. Each library provides a variety of services. They may be a replication of their associated real life library and provide similar services in an attempt to attract people in the real life library's local geographic area, or they may provide additional services and events, reaching out to the larger user base of Second Life.

There are also libraries that are "born virtual." Theses do not have a single real life library connection. They are built cooperatively by librarians or other volunteers from around the country or around the world. Two well known libraries in this category, both of which contributed to this study, are the Alliance Virtual Library and the Caledon Library System. The Alliance Virtual Library (AVL) is a project of the Alliance Library System (ALS), a regional library system in East Peoria, Illinois. The ALS provides a variety of services including continuing education, consulting, grant writing, and new technology initiatives (Bell, Peters and Pope, Enjoying Your First Life?). The Alliance Virtual Library and reference desk serves the general population of Second Life, just as a real life public library serves their local geographic area. As of August 2008, the AVL, now called Info Archipelago, had 43 islands, or plots of land associated with it. The library consists of such areas as the Genealogy Research Center, Library Gallery, Mystery Manor, Performance Center, Science Center, SF/Fantasy Center, and Health Info Island.

Caledon is a popular 19th-century themed area in Second Life where residents dress in Victorian attire and the shops and homes are required to be of a19[th]-century "steampunk" style. The Caledon residents wanted a branch library, so librarians, working together, worked on creating programs, services, and staffing. Residents were actively involved in the planning and creation of library services in their virtual community (Bell, Peters and Pope, Enjoying Your First Life?). The Caledon Library System consists of nine branches throughout the Caledon

Second Life area, with the main branch being the Whitehall Memorial Library at Caledon
Victoria City.

Second Life Libraries

"There is no serious expectation that patrons will download and use the Second Life
software for the exclusive purpose of gaining access to library services," (S. Thompson 2008,
62) however, Second Life residents are interested in the material, service, and community that
in-world libraries provide. They have learned that the library islands are places to gather, where
they can meet people and participate in interesting conversations. Programs and events are
popular and are attended by a variety of people from around the Second Life grid. "These events
are the lifeblood of the [AVL] library even more so than a bricks-and-mortar library…. During
2007, the Second Life Library hosted an average of three to five events per week with audiences
of four to five to 60 to 70 avatars. Most programs drew 25-35." (Bell, Pope and Peters, The
Universal Library 2008) The programs are varied, and many of these programs are not possible
in real life, such as a jousting tourney on Renaissance Island or a speaker that a small library
branch might not be able to afford. Most residents do not read while in Second Life, but they
will attend book discussions and author visits; they gather for discussion of ideas, to meet new
people or old friends, or to experience new things. Librarians in Second Life need to realize that
just re-creating a virtual version of their real life library can be boring to users in a Virtual
World. Successful libraries "do something more innovative, exciting and most importantly,
INVOLVE THE COMMUNITY instead of assuming … they'll flock to you. 'If you build it,
they will come' does NOT apply in Virtual Worlds!" (Patel 2009)

There are a variety of ways to attract residents to a library in Second Life. The question, "What are your users doing elsewhere that they could be doing in your library," applies to both real world and virtual world libraries. The key to creating relevant experiences for library users comes down to knowing the community - knowing and understanding the culture of Second Life. Libraries cannot just build great Second Life buildings, beautifully groomed grounds, and provide static displays. Residents in virtual worlds want to participate in content creation and interact with other people (Stimpson 2009).

Real Library Organizational Issues

Libraries must take several things into consideration when trying to decide how they will or if they will become involved in Second Life, or in any virtual world. They need to decide if and how they will support the technology; are they going to provide access for their patrons, are they are going to support their staff in developing the necessary skills and understanding of Second Life, and are they are going to build an online presence for their own library? These issues are similar to those faced by real life libraries with the advent of the Internet and the decisions that had to be made about building a library website. Listed below are some of the specific areas that a library will need to consider.

- Providing computing power necessary for running virtual worlds for both the real world patrons at their library and for librarians building and maintaining the library's virtual world branch.

- Finding a location for a Second Life library where Second Life users are. There may be 50,000+ users logged on, but they are spread out across a large area. Therefore, population density and traffic patterns must be taken into consideration (Frank 2008, 18). The virtual library could also be built in a residential area instead of alongside all of the

other libraries, involving the community in the design and services (Peters, Issues 2008, 18).

- Funding for the project - the potential of serving patrons from around the world paid for by local funds. This is an area where innovation will help. Ideas include renting out space and services of the Second Life library to in-world organizations and individuals. Create a building on the property, in back of the library for residents to live – it would be fun to live at the library! (Peters, Issues 2008, 18)

- Timing. Some people argue that Second Life and other virtual worlds are still new and still tentative for real development, while others say that libraries should develop a presence in virtual worlds now versus later. They point to the "wait-and-see attitude arguably adopted by libraries and librarianship toward the early rapid development of information systems and services on the Web. Second Life is a hot technology, but today it is far from being mainstream.

- Organizational baggage: assumptions, structures, and constraints. These issues may slow or misdirect the efforts of forward-thinking libraries and librarians (Peters, Introduction 2008, 5).

- Additional technical issues. Second Life does nothing to "assist with bridging the digital divide, and in fact [it] widen[s] it… Only patrons operating quite current computers can access SL at all." (S. Thompson 2008, 66)

Issues for Real Life Librarians

Librarians must also consider how they will or will not become involved in Second Life. Nearly all of the librarians in Second Life are volunteers, and most of the librarians are working independent of their real life library. They may or may not have the backing and support of the real life library they are employed by, but even if they do, the majority of the time they spend in Second Life, if not all of it, is during their non-working hours. Becoming involved in Second

Life and understanding its value takes a real commitment of time. Listed below are some of the issues that must be considered in making the investment in a Second Life library, or a library in any virtual world:

- The social challenges of "managing communities, plugging into social networks, and becoming accustomed to the cultures within a Virtual World. " (Sanchez, Conclusion 2008, 35)

- Consideration for the status of librarians in a future where virtual librarianship may be dominated by freelance professionals rather than by libraries and related organizations (Peters, Introduction 2008, 6).

- Staffing a Second Life library. Evenings and Sundays are the busiest times in Second Life and the best time to meet people (Bell, Peters and Pope, Enjoying Your First Life?). Therefore, if a library wants to interact with Second Life residents, this must be done on off-hours from real life librarians.

- A huge issue that most librarians in Second Life deal with is whether they will be allowed to work in Second Life, especially on their real life library branch, during normal work hours. This is a management issue and a peer issue; trying to get management and peers to see Second Life as a value, not a game.

- The most successful library initiatives in Second Life have been achieved primarily by library professional working and collaborating in a freelance or pro bono fashion, not necessarily under or with a real life organization (Peters, Introduction 2008, 5).

- While there may be limited benefits to libraries and library users to get into Second Life at this time, there may be benefits to librarians. Dealing with virtual worlds and understanding the content that users may be looking for is a learning experience. This is similar to when librarians first authored web pages; learning the how and then learning the content needs. This new interface, which may change in the future as technology evolves, will have similar elements of a 3D interface and a social, immersive environment (Greenhill 2007).

- Collaboration elements of Second Life help break down the barriers of professional isolation. Librarians meet with and share experiences with librarians from across the country and around the world to "gain experiential knowledge on how to deliver library services in these virtual environments." (Peters, Librar-Things 2008, 9)

Summary

Despite initial expectations not being met, libraries should continually look at how Second Life and other virtual worlds will fit into their future, particularly as virtual worlds move more towards a medium used in education (Patel 2009). "As a profession, librarianship needs to work through its tendency toward denial … and begin exploring how librarianship can survive and thrive in Virtual Worlds." (Peters, Introduction 2008, 5) Librarians, especially, should become familiar with the technology and what it can provide for them personally and professionally, even if they do not have the backing of their own real life library. There is a lot to be gained from the collaborative experience of working, meeting, and talking to librarians across geographical borders. Libraries should decide how they will become involved and what the timing of developing Second Life projects should be. While libraries may decide they do not want to jump full-force into building a Second Life branch, they should be aware of virtual worlds and Second Life, and support their librarians who wish to become involved and knowledgeable with this technology.

DATA COLLECTION METHODS

Data for this study was collected using a variety of methods. In order to streamline the tasks of data collection, the researchers split into teams. One team focused on data collection

from library users on the Second Life end, while the other focused on data collection from

Olathe Public Library's brick and mortar branch in Olathe, Kansas.   All of our surveys were

administered using the online tool SurveyMonkey.com. SurveyMonkey.com obeys many of the

design principles in Dillman et. al. (2009).

Initially, Skype interviews were scheduled with the head of the Second Life committee

and the library director at the Olathe Public Library. Questions were asked related to the purpose,

goals, planning, and promotion of the project. Specific questions were put forth related to time

spent on the project, usability, and to gauge interest in the project.

Nine people were identified as being Olathe Second Life team members. An anonymous

survey was sent out to them via SurveyMonkey and six people responded. It was made clear that

their participation was completely confidential and voluntary. Similar questions as those used in

the interview with the head of the Second Life committee and the library director were posed to

these team members. This was in an effort to compare the perceptions of the head of the Second

Life committee and the library director to the other Second Life team members.

An online survey was given via SurveyMonkey to Olathe's real life patrons to see how

internet savvy the library patrons were and to see if there was any interest in a virtual library.

Twelve questions were asked and there were fifty-nine respondents. To further investigate the

interest of Olathe's real life patrons, a focus group was scheduled via teleconference through

Second Life with five participants. The patrons met in a room at Olathe public library and were

led in discussion by the Second Life committee head, and were able to communicate by

microphone with the Olathe team through the conference feature in Second Life. The computer

screen was projected for them so they could "tour" Second Life and see some of its functions and

uses. Researches asked questions similar to those in the real life patron survey, then showed a

demonstration of Second Life. After the demonstration, further questions were asked relating to virtual libraries and the patrons' perceptions of them.

Data from Second Life library users was collected through online surveys via Surveymonkey.com. The library user surveys were delivered via kiosks (designed to look like lecterns so as not to interfere with the library's decor) placed in Second Life at participating Second Life libraries. Survey kiosks were available in Second Life at the Alliance Virtual Library, the Caledon Library, the Olathe Public Library and the Topeka/Shawnee Public Library.

Survey Kiosk (Lectern)

When a user's avatar approached the kiosk, the kiosk handed the user a note card explaining the research project and including a URL link to the online consent form and survey. A clickable URL was also generated within the Second Life environment that the user could use to link out directly to the consent form and survey. Surveys were left open for six weeks. Participants received 10 Linden dollars (the Second Life in-world currency), valued at approximately $.04 USD at the current exchange rates. Questions were asked to determine the

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demographics of the user, why they use the library, and what resources they expected to see in a Second Life library. There were over 280 respondents to the library user survey.

General Second Life users were asked a total of six questions through an online survey. This was an effort to try to determine why they use Second Life, their information needs, and if they were aware of the presence of libraries in Second Life. Survey participants received 10 Linden dollars for completing the survey. Kiosks and ad boards, which had the same functions as those used for the library user survey, were set up at ten different high-traffic non-library locations in Second Life. There were ten respondents to the general user survey.

Members of the research team set up in-world interviews with four librarians in Second Life who were known and regarded for their contributions to librarianship in virtual worlds. The team interviewed Leeorie Alter (names used are Second Life avatar names) of the Olathe public library (the Second Life coordinator), Cindy Elkhart of the Topeka/Shawnee Public Library in Second Life, Abbey Zenith of the Alliance Virtual Library and Rocky Vallejo of the Kansas State Library in Second Life. All of these librarians are deeply involved with librarianship in Second Life, and we asked them questions about their experiences in building and running libraries in a virtual world.

To help write the survey questions, we used principles from Dillman et al. (2009). Some examples of these include not requiring answers to all questions (pp. 209-210) in case the respondents do not have answers, using a small prepaid financial incentive to create a social obligation on the part of the respondent (p. 18), choice of the first question as closed-ended but hopefully interesting (pp. 157-159), and many other aspects of the survey and questions.

OLATHE PUBLIC LIBRARY AND SECOND LIFE: A CASE STUDY

The Olathe Second Life Library

Second Life is a virtual world, inhabited by almost 200,000 adult residents who build communities for a large variety of interests, just as in the real world. The Alliance Library System is a regional system in Peoria Illinois that supports real life libraries of all types in its region and it works with librarians all over the country to create libraries in the virtual world of Second Life. The Olathe Second Life Library is a branch of the Olathe Public Library and it is part of the Alliance Library System.

Olathe, Kansas is a community of about 122,500 people, it is located twenty miles southwest of Kansas City, and it is the fourth largest city in the state of Kansas. The vision of the Olathe Public Library is to, "meet the lifelong informational, educational and recreational needs of the community through quality services and resources." Prior to starting a needs assessment for this library, a meeting was held with Lorie Hyten who leads Olathe's Second Life project and who has done most of the work building the library. The objective of this meeting was to obtain background information on the library and to determine her expectations for the assessment.

A Tour of Olathe Second Life Library

Entry Foyer - displays and message board
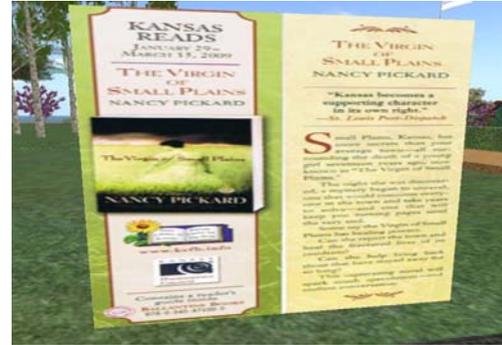

Roof – meeting, relaxing and dancing for fun

Left room -touch screens for information

Right room - easy reading and Kansas information

Information provided – rare books

… and Kansas reads

The Olathe Second Life Library is rich with information on Kansas and this is their main contribution to the Second Life community. They have many programs that are provided both in real life and in Second Life. Their objective is to make a global audience aware of their local heritage and culture. The library promotes the city of Olathe and the state of Kansas.

The Olathe Second Life Library Project

The Olathe Second Life Library is a relatively new project. Lorie went to the director of the real life Olathe Public Library with a proposal approximately a year ago and the director approved the project. There currently is a committee of five (including Lorie) that meets once a month for about two hours to discuss projects for the library. Each supervisor approved the participation of their employees on the committee. There is no formal management structure and most of the work in Second Life is done on the employees' own time, which is true of many librarians in Second Life.

There approximately 125 libraries in Second Life, mainly university and special libraries. The few public libraries that do exist in Second Life are there with the primary aim of promoting their own real life library. The Olathe Second Life Library wants to find a niche. They do not

want to duplicate any of the resources or activities of the Alliance group of libraries, nor do they want to simply duplicate their real life library. They want to explore ways to serve the Second Life community and those Second Life citizens in their geographic area. They want to provide additional projects on or related to Kansas, attracting local people as well as those across the country and around the world.

When our research team first piloted a needs assessment of a Second Life library in the spring of 2009, the Olathe Public library was recommended by Abbey Zenith of the Alliance Virtual Library system in Second Life. Our initial findings were that the Second Life branch of the Olathe Public Library was not getting much user traffic. Our desire to further explore the dynamics between a public library and an associated virtual library branch and the usability of virtual libraries prompted us to continue our study. Olathe's support, enthusiasm and encouragement prompted us to ask them if they would be willing to work with us again.

OLATHE PUBLIC LIBRARY RESULTS

Interview with Head of Second Life Committee and Library Director

Separate Skype interviews were conducted with the head of the Second Life committee and the director of the library. Both agreed that the initial purpose of the Second Life Library project was experimental and exploratory. Clearly there is a desire to offer library resources to virtual patrons, but there are also potential benefits for the staff such as networking, virtual conferences, and educational opportunities. Olathe did not do any formal research prior to beginning the Second Life Library project. For Olathe, one staff member had the passion and interest to develop the project. She started out as a volunteer and when she wanted to expand, she

sought approval from the director, who agreed. A committee was formed for the project that is very loose and has a lot of freedom.

When asked why resources should be allocated to the Second Life project, the library director and committee head gave several reasons. They stated that libraries always need to look at what new technologies and services are available, and what is coming down the pipeline. Eventually there will be more of a demand for the virtual services in the virtual worlds. It is critical that librarians be exposed to virtual services now. The Second Life project presents an opportunity for librarians to be leaders in new technologies rather than followers. Also, the overall expense of the Second Life project is relatively small. The largest expense is staff time.

It is a known issue with Second Life that it is normal for real life librarians to do a great deal of their Second Life Library work on their own time, and the situation at Olathe is no different. Librarians find that there is not adequate time to manage the Second Life project at work, and other library duties take precedence. A large part of learning about Second Life consists of exploring, playing, and experimenting in-world, and unless you are willing to spend some of your own time at home learning about the environment, it can be difficult to balance Second Life with other tasks in a normal work setting. Without the passion and drive of Olathe's Second Life committee head, the project would probably not exist, and would certainly not be where it is today. Until such time as managing a virtual library is accepted as a legitimate work duty, these qualities are what will drive Olathe's Second Life branch and any other virtual library.

When asked to rank perceived interest of the Second Life project on a 1-10 scale (1 being the lowest and 10 being the highest), it is clear that both the director and the Second Life committee head are aware that there is not a consensus of a positive or negative perception

within the Olathe public library. The interest of the library director, the head of the committee, and the committee itself all rated high. The interest of staff not involved with the project, real life patrons, and supervisors was rated low. That being said, overall interest in the project was rated on the high end with a 7 by both the library director and the Second Life committee head. In a similar sense they both felt that it is a minority that is against the project, not the majority. Both agree that there has not been a lot of interest in Second Life from real life patrons. It was stated that low interest was being addressed by publicity, marketing, and more introduction to the technology. It was also mentioned that for those who do not "get" Second Life and why it is so appealing, numbers speak volumes, so there was a need to increase visitation to the Second Life branch.

The director and committee head recognize that the project could be marketed more to library patrons. Although Second Life is not advertised on the Olathe website, there are plans to have some promotional materials up within the next month. The director and committee head also plan to start promoting Olathe's Second Life presence on Facebook and Twitter. It was mentioned that patrons may understand these social networking sites better than Second Life, but such service as they provide are more restricted than those they can be offered by Olathe's Second Life branch.

Survey of Second Life Team Members

The Second Life Team Members represent different areas of the Olathe public library. The areas they represent are adult services, young adults, electronic resources, technical services, and children's services. A survey was given to nine Second Life Team Members and six people responded. Questions were asked relating to their perceptions of the Second Life project.

The primary goals of the project were viewed as exploratory, experimentation with a new technology, community outreach, professional development, to reach a new population and to promote the library. Almost everyone recognized that there is a huge learning curve with Second Life. When asked about the usability of Second Life, answers were distributed as follows:

Almost everyone recognizes that there is a huge learning curve with SL. How easy to use do you think Second Life is?											
Answer Options	1	2	3	4	5	6	7	8	9	10	Response Count
Rate Second Life's ease of use on a 1 to 10 scale, 1 being the lowest and 10 being the highest.	1	0	1	0	0	2	1	1	0	0	6
	16.67%	0.00%	16.67%	0.00%	0.00%	33.33%	16.67%	16.67%	0.00%	0.00%	
								answered question			6
								skipped question			1

Library programs to teach patrons about Second Life could help patrons adapt more easily to the virtual environment. When asked about such programs, some saw them as necessary to increase visitation to places like Second Life. Others said that they did not believe that patrons would be interested.

Regarding the issues of using personal time to work on the Second Life library, according to those members of the Second Life Team surveyed, they spent only two hours of personal time

on the project. When asked how they felt about spending personal time on the Second Life branch of Olathe, most felt that is was necessary or appropriate. This permissive attitude was attributed to budget cuts, the advancement of the project, or "if the person doing the work wants to do the work and doesn't mind doing it on their own time then it is fine." Concern was also expressed that the project interferes with other responsibilities, or that there are difficulties seeking compensation for the extra hours worked.

When asked to rank perceived interest of the Second Life project on a 1-10 scale (1 being the lowest and 10 being the highest), Second Life Team Members also did not see a consensus either way. First, all Second Life Team Members surveyed felt that the interest of real life patrons and those Olathe employees not involved with the project was low In comparison, the majority of respondents felt that the interest of existing Second Life patrons was high. Team Members also agreed that interest was high for the director and for the other Second Life Team Members (non-supervisors). The interest of the supervisors of Second Life Team Members was ranked as split down the middle, with 50% ranking 2 or lower and 50% ranking a 5 or better. The team was also split when asked to rate their own personal interest in the project—33% chose low with 2 or lower, 33% chose midway with a 5 or 6, and 33% chose high with a 9. This is most telling because here they are ranking their own personal interests and not what they perceive others' interest in the project to be. Similarly, satisfaction with the project was also split with 33% choosing low with 2 or lower, 50% chose midway with a 5 or 6, and only 16% chose high with a 10.

Olathe Second Life Library Staff

Rate the interest of staff and patrons on a 1 to 10 scale, 1 being the lowest and 10 being the highest.											
	1	2	3	4	5	6	7	8	9	10	Response Count
How would you rate your interest in the OPL SL Library project?	16.7% (1)	16.7% (1)	0.0% (0)	0.0% (0)	16.7% (1)	16.7% (1)	0.0% (0)	0.0% (0)	33.3% (2)	0.0% (0)	6
How would rate the interest of the director in the OPL SL Library project?	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	16.7% (1)	16.7% (1)	16.7% (1)	16.7% (1)	33.3% (2)	0.0% (0)	6
How would you rate interest among SL Team Members (non-supervisors)?	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	33.3% (2)	0.0% (0)	66.7% (4)	0.0% (0)	6
How would your rate interest among the supervisors of SL Team Members?	16.7% (1)	33.3% (2)	0.0% (0)	0.0% (0)	16.7% (1)	0.0% (0)	16.7% (1)	0.0% (0)	16.7% (1)	0.0% (0)	6
How would you rate the interest of those Olathe employees not involved with the project?	33.3% (2)	33.3% (2)	0.0% (0)	16.7% (1)	16.7% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	6
How would you rate the interest among real-life patrons?	33.3% (2)	33.3% (2)	16.7% (1)	0.0% (0)	0.0% (0)	0.0% (0)	16.7% (1)	0.0% (0)	0.0% (0)	0.0% (0)	6
How would your rate the interest among SL patrons?	0.0% (0)	20.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	20.0% (1)	20.0% (1)	40.0% (2)	0.0% (0)	0.0% (0)	5
									answered question		6
									skipped question		1

To further illustrate this disparity we can look to the candid open ended responses of the survey. When asked about the future of the Second Life project a positive respondent foresaw a "bright" future but recognized that some efforts need to be made to increase visitation. An unsure respondent stated that it was important to be open to all ideas. More than one person felt that resources would be better applied to other technologies like Facebook, Twitter, or Flickr. In conclusion, the majority saw it as a limited resource or not viable at all.

It was reiterated throughout the survey that there was no interest in the Second Life

branch among RL patrons, though due to the anonymity of the survey it was impossible to

determine if this was the response of more than one team member. More than one person

expressed concerns about a lack of communication about the project, its benefit to Olathe's

patrons, and that Second Life as a technology is not user-friendly for patrons and staff.

Survey of Olathe Public Library Real Life Patrons

A survey of the Olathe Public Library's real-world patrons was conducted over a one

month period, using SurveyMonkey. There were fifty-nine respondents. The majority of survey

takers were regular users of Olathe.

How often do you use the Olathe Public Library?		
Answer Options	Response Percent	Response Count
At least once a week	55.9%	33
A couple times a month	32.2%	19
Once a month	8.5%	5
Once every six months	1.7%	1
Once a year	1.7%	1
Never	0.0%	0
	answered question	**59**
	skipped question	**11**

Most patrons (98.3%) use the library to borrow books, while more than half use the

library to borrow videos and/or to obtain information. By comparison, the majority of patrons do

not use Olathe to attend library programs, for a quiet place, or to use the internet.

In an effort to determine how internet-savvy patrons were, questions were asked relating to internet usage and Olathe's online resources. Results are indicated in the chart below:

How often do you use the internet in a typical week?		
Answer Options	**Response Percent**	**Response Count**
Less that 1 hour per week	3.4%	2
1-5 hours	22.0%	13
6-10 hours	25.4%	15
11-20 hours	20.3%	12
21+ hours	28.8%	17
answered question		**59**
skipped question		**11**

The majority of surveyed patrons use the internet primarily at home. About a fourth used the internet at school or work. A small percentage used the internet at public access locations such as the library, cafes, etc.

In the last month, what percentages of your time on the Internet were you using it from the following locations?		
Answer Options	**Response Average**	**Response Count**
At school/work?	26.94	47
At home?	66.79	56
At public access locations (libraries, cafes, etc)?	15.83	41
answered question		**59**
skipped question		**11**

All surveyed patrons use email on a regular basis. Only 63.2% use social networking sites regularly. Instant messaging, chat rooms, blogs, and online games were not particularly popular with the patrons. This is interesting to note because the primary mode of communication in Second Life is text chatting, the same kind of communication as instant messaging and internet

chat rooms. Also, Second Life's virtual environment is similar to that of a game. Patron's lack of interest in these forms of internet tools may be a reflection of their interest levels in the Second Life project.

Answer "yes" if you use the following Internet tools regularly and "no" otherwise.			
Answer Options	Yes.	No.	Response Count
Email?	100% (57)	0.0% (0)	57
Instant messaging?	29.3% (17)	70.7% (41)	58
Social networking sites?	63.2% (36)	36.8% (21)	57
Internet chat rooms?	5.3% (3)	94.7% (54)	57
Blogs?	43.9% (25)	56.1% (32)	57
Online games?	33.3% (19)	66.7% (38)	57
		answered question	59
		skipped question	11

Olathe's online resources are easily accessible from the Online Resources tab on Olathe's homepage. There are Electronic Databases, Subject Guides, Cool Sites for Kids, Downloadable Books and Music, and New at the Library. Electronic Databases is the only online resource used on a regular basis. The other resources were rarely used and a good portion of patrons (30-40%) said they had never heard of them. Perhaps these resources need more promotion. When asked if there were any other online resources that they would be interested to see Olathe offer, patrons asked for user-friendly search options, improved online tutoring for college students, RSS feed of New at the Library, eBooks, and more resources in Spanish.

Questions were also asked related to 3-dimensional virtual worlds. These were in an effort to determine interest in the 3-D virtual environment of Second Life. The majority of patrons did not know that the Olathe public library was involved with Second Life.

Did you know that the Olathe Public Library is involved in the 3-D virtual world Second Life?		
Answer Options	Response Percent	Response Count
Yes	11.9%	7
No	84.7%	50
Not sure	3.4%	2
	answered question	59
	skipped question	11

When asked how interested they would be in a 3-D virtual world extension of their public library, only a small number of patrons indicated that they were very interested.

How interested would you be in a 3-D virtual world extension of your public library?		
Answer Options	Response Percent	Response Count
Very interested	10.2%	6
Might be interested	37.3%	22
Not interested	25.4%	15
Not sure	27.1%	16
	answered question	59
	skipped question	11

When asked how interested they would be in a library program to teach them about a 3-D virtual world (living, playing, learning—more than just with the library), the results were very similar to those of the previous question.

Whether you answered "yes" or "no," how interested would you be in a library program to teach you about a 3-D virtual world (living, playing, learning—more than just with the library)?		
Answer Options	Response Percent	Response Count
Very interested	15.5%	9
Might be interested	39.7%	23
Not interested	29.3%	17
Not sure	15.5%	9
	answered question	58
	skipped question	12

When asked about what services they would look for in a 3-D virtual library several expressed that they did not understand what a 3-D virtual library was. That being said, many people had suggestions: they would look for ease of navigation, novel technologies, things not offered in the physical library, virtual book clubs, chatting with other patrons, reference, eBooks, programs, classes, reader's advisory, book reviews from other users, more in depth information of books and authors, and educational material. One respondent commented that they would want it to be safe, confidential, and entertaining.

All further suggestions were related to the real-world library. The comments were in reference to customer service, self service issues, email correspondence, lack of diversity in available material, more community oriented programs, noise, and parental attendance to children. These suggestions have been forwarded to the library for further review.

Focus Group with Real Life Olathe Patrons

Regular patrons of the Olathe public library (OPL) were sought out to participate in a focus group. They were asked questions prior to and after a demonstration of Second Life, in order to gauge if their perceptions changed after learning more about it. Five people showed up for the focus group. They used OPL or materials from OPL on a daily basis. Their main reasons for using OPL was to check out books and gain access to computers and the internet. When asked if they used any online resources, one patron used the Electronic Databases, two used the Subject Guides and the Downloadable Books and Music. No one used the Cool Sites for Kids or the New at the Library.

When asked if they would be interested in a 3D virtual extension of their public library their initial response was that it would be more suitable for "kids." Yet when they were informed

of some examples of the possibilities of the virtual world their interest increased. For example, the participants still felt that flying, changing your appearance, etc was still more applicable to children. They were more interested in meeting and communicating with people across the state, country, and world. When they were asked if they would be interested in a library program to teach about Second Life there were two yeses, two maybes, and one person who was already involved. Some services that they expected to see in a virtual library were audio books, documentaries based on RL dramas and watching Shakespeare plays (without the need for costume changes). A teacher expressed interest in using Second Life as a tool to inspire children to read.

After the demonstration the participants' interests were clearly peaked. When asked what services they would be most interested in they were full of suggestions and ideas, and seemed impressed that essentially anything that could be dreamed was possible in a virtual world. One person liked the idea of asking a librarian a question in-world without having to get up and go find someone. A teacher enjoyed the idea of virtual tours. Another person liked the idea of visiting other places like Europe and Africa—places he may never get to see, or might like to "tour" before he decided to visit in real life. In conclusion, when asked if they were interested in Second Life and saw it as something that they would continue to use in the future, all five participants voted "yes."

SECOND LIFE RESULTS

Second Life Library User Survey Results

     A noticeable trend among the survey results was the high number of new users, many of whom had created avatars that very day. Shirky argues that Second Life attracts many users who create an account but ultimately do not stay, but also a smaller dedicated group of persistent users. The survey data from Second Life libraries support this interpretation: 69.1% of those surveyed had used Second Life for less than a month, but aside from brand new users, the number of people who had used Second Life for two years (9.6%) outnumbered those who had used it for shorter periods of time. This division between people who embrace Second Life and those who are disinterested can polarize the library staff of traditional libraries who work on Second Life projects: Among Olathe's staff, pro-Second Life members give the project near-maximal ratings while con-Second Life members give it near-minimal ratings. Likewise, the pro-SL and con-SL groups disagreed on how enthusiastic the patrons are about Olathe's Second Life library, which suggests either one of the groups, or both, are biased about how other users perceive Second Life.

Is this your first visit to this library in Second Life? Do you use it regularly? If so, how often do you visit it?
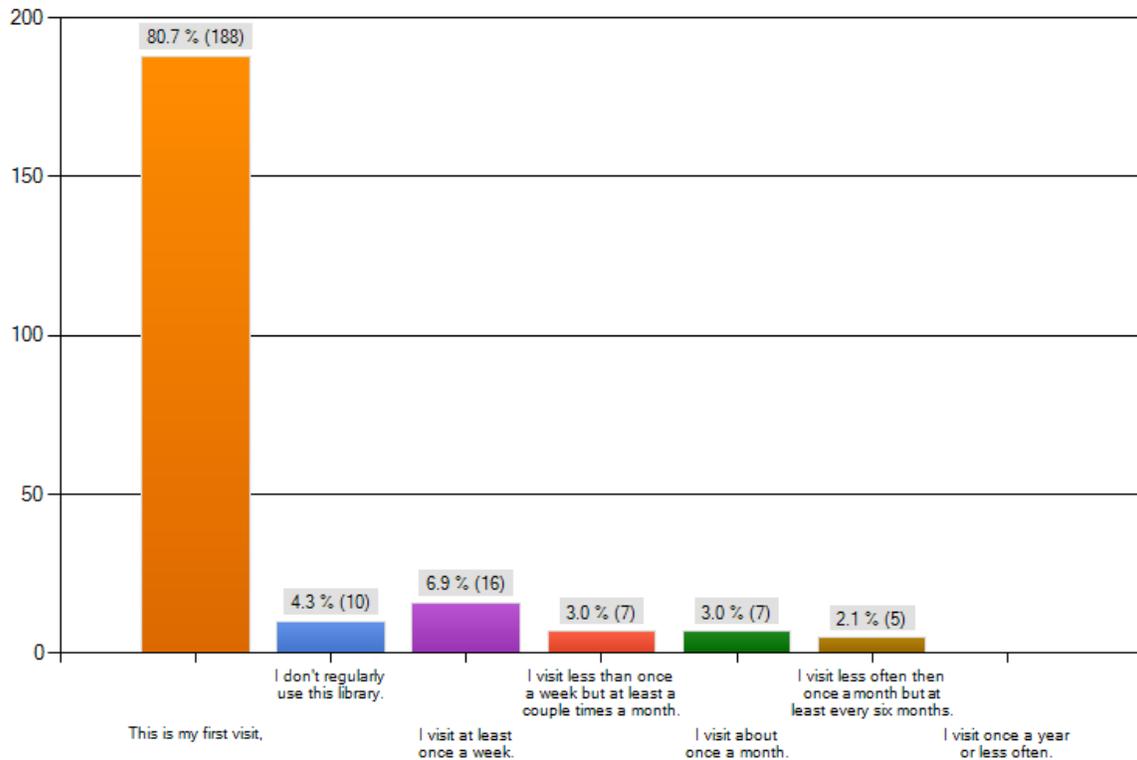
Within Second Life, libraries have a problem similar to Second Life's problem of persistence: most of their traffic comes from first-time visitors; e.g. 80.7% of survey-takers were visiting a given library for the first time, and even 32.4% of those with more than a year of Second Life experience were visiting for the first time. The situation seems worse for the Second Life branches of real life libraries, as according to the surveys they had no repeat visitors at all. Also, many visitors to Second Life libraries, 26.2%, either work or volunteer at a library in real life. Given the rate of librarians in the general population, Second Life libraries may be more interesting to librarians than to the general public. Moreover, a small but significant number of

users indicated they were doing research on Second Life libraries, which accounted for their visit.

Looking at the survey results, the Second-Life-only libraries were far more popular than the Second Life branches of real life libraries, as the former returned 285 responses versus 7 responses from the latter. However, the surveys indicated no clear reasons for the difference and no real patterns in the use of desire for library services. In general, not many users really engaged with the library, as 79.0% never talked with a librarian at the library they visited, 75.3% did not come to the library looking for a specific resource, and more than 68.5% did not use any resources while they were visiting the library. Of the reasons users mentioned for visiting, there was no requested service or resource that appeared more than a few times, suggesting that there is no single service or resource a library can offer that would be guaranteed to bring in a large number of users.

Most users, 69.8%, found the library by exploring Second Life: this suggests that most real life patrons would never find a Second Life branch without better advertising, and that depending on their goals, Second Life libraries may want to market themselves rather than wait for potential patrons to wander in. Likewise, of Olathe's real life patrons, 84.7% did not know that Olathe has a Second Life branch, suggesting that the lack of awareness of Second Life branches of real life libraries extends into the real world.

There are some differences between Olathe's real life patrons and the typical users of Second Life libraries. In general, Olathe's real life patrons are less familiar with the Internet compared to the general Second Life library users, as they use a smaller variety of Internet tools and services and spend far less time on the Internet.

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How often do you use the internet in a typical week?		
Answer Options	Response Percent	Response Count
Less that 1 hour per week	3.4%	2
1-5 hours	22.0%	13
6-10 hours	25.4%	15
11-20 hours	20.3%	12
21+ hours	28.8%	17
answered question		59
skipped question		11

Olathe Public Library patrons

How often do you use the Internet in a typical week? Pick the range in which your use falls.		
Answer Options	Response Percent	Response Count
Less than 1 hour per week.	2.2%	5
1 to 5 hours per week.	7.0%	16
6 to 10 hours per week.	15.2%	35
11 to 20 hours per week.	23.0%	53
21 or more hours per week.	52.6%	121
answered question		230
skipped question		55

Second Life library users

One important difference is that Olathe and Second Life library users spend different amounts of time on the Internet in public access areas, 15.83% and 7.48% respectively. This indicated that Olathe users might be more willing to come to the library itself to learn about Second Life, but also might not use it as much as people who can log in from home.

Second Life General Users Survey Results

The survey of general Second life users yielded only 10 responses, despite efforts to place survey kiosks and ad boards in high-traffic areas. Of the respondents, the majority (80%) use Second Life for fun, while 20% use it for work. Users were split down the middle regarding needing assistance in Second Life with issues such as moving around and finding places. Of those that answered that they had needed help or had questions, two mentioned that they needed

a lot of help learning about all aspects of Second Life in general. Other issues mentioned were making money in-world and finding hot spots to hang out and meet other people.

Most of the respondents (70%) were aware of the existence of libraries within Second Life, though only 1 respondent (10%) had used one. That respondent used a library to learn about object-building, which is in keeping with the findings of the Alliance Virtual Library reference desk that most questions posed there relate to Second Life issues. No respondents offered concrete answers when asked, "Do you have any thoughts or ideas on how libraries could assist Second Life users?"

The research team had a couple of theories as to why there was so little response to the general user survey kiosks, while the library patron kiosks were experiencing quite a bit of traffic. The first theory is that the general user kiosks were simply not prominent enough. In a place that is not bound geographically it can be hard to get a sense of where people "gather", and high-traffic areas like nightclubs are not generally interested in hosting a research study kiosk. Also, the Second Life grid is so vast that avatars will generally teleport (Second Life's preferred method of travel) from one area to another, eliminating the possibility of catching a "passerby's " attention. The other theory is that the general Second Life user wandering around in high-traffic areas like malls, gaming areas or dance clubs is not that interested in Second Life libraries. A user who has an interest in libraries might be more likely to simply look up a library or a library group using Second Life's search function and teleport directly to that area. The admittedly limited general survey data seems to bear out the latter theory, in that most respondents knew about the existence of Second Life libraries but had never visited one.

Interviews with Second Life Librarians

Through the interviews with librarians who do a lot of work in Second Life, we discovered that many of these professionals share the same goals and outlooks regarding virtual libraries. When asked what the primary goal of their Second Life library was, all of them mentioned the community aspect of Second Life. Being associated with a Second Life library offers opportunities to learn, network and collaborate across geographical borders in ways that would not be possible without the internet. The librarians valued the ability to learn from and work with other library and information professionals all over the world.

Despite the culture of project planning and management in librarianship, most of the librarians interviewed did not do much pre-planning for their Second Life libraries. Three of the librarians started doing their own research about Second Life and the possibility of creating a library branch, and took the initiative of approaching the directors of their real life libraries to ask about launching one. Libraries were supported and funded in different ways. Second Life charges fees for "land" ownership, though these are generally discounted for educational institutions and the original site of the Kansas State Library was free. The real life branch of the Alliance Library System supports the Alliance Virtual Library through contributions and grants, and the land was purchased by an anonymous donor. The Olathe branch and the Kansas State Library were paid out of library funds, though for the last two years, the Kansas State librarian has paid land fees out of his own pocket. The librarians can purchase buildings, furniture and objects using Second Life's in-world currency, or build their own. There seems to be a strong support network where librarians can find out where to get resources to create their virtual libraries.

The issue of doing work in Second Life libraries on personal time was mentioned before in this paper, and all of the librarians interviewed followed this practice. Most could only put in an hour or so per week of actual on-the-clock work time, though the virtual library is sponsored by their employers. They spent many more hours of their own personal time working on and in the Second Life libraries, mainly because they personally feel that the libraries are of great value, essentially making them volunteers. In general, the real life library administration seemed supportive of the Second Life projects, but not to the extent of setting aside time out of a regular work day to maintain them. The librarians, while understandably expressing how nice it would be to be able to do Second Life work at their place of work, were all right with this arrangement. They noted that there often wasn't time to do Second Life work during the workday, and that other people misunderstood what they were doing when they worked on the Second Life library at work. This ties in to the perception of many people that Second Life is just a game, with no educational value.

When asked why many people started using Second Life and dropped out quickly due to the high learning curve, every librarian interviewed said that the key to getting people to stick with it was to get them involved in a community and interacting with other participants. Suggestions for new users included joining groups you're interested in, taking classes, and attending lectures and events in Second Life. Everyone stressed the importance of finding a purpose for being in Second Life beyond "dancing and shopping". Most of the libraries offered classes in real life and/or Second Life to teach users how to navigate the virtual environment.

The final interview question addressed the perceived future of Second Life. All of the librarians interviewed reiterated the opportunities created for networking and collaboration between libraries that are geographically distant. Most saw Second Life continuing to move in

an education-based direction, with possible increasing participation from government entities and businesses. The 3-D environment lends itself particularly well to learning demonstrations that are difficult or impossible to recreate in the real world, such as medical dummy simulations at the University of Wisconsin at Oshkosh, or the moon landing simulation at Elon University. One noted that as librarians are expected to be leaders in technology, they will be expected to guide other users through new technologies like Second Life. All foresaw the continuing relevance of Second Life to the field of librarianship.

CONCLUSIONS

We can now provide some answers to our original research questions:

1) *what are the integrated goals between the real world and virtual world libraries?*

Real world and virtual libraries all want to provide valuable services to their patrons, and make sure that patrons have access to the most up-to-date resources possible. Traditional librarianship has been around long enough that librarians are quite good at delivering traditional services to patrons. However, with the arrival of new technologies such as the internet, it is becoming more difficult to keep up with the desires and needs of patrons, particularly as the face of librarianship changes. Clearly there is a lingering unwillingness for librarians to explore and accept the newest information tools available, as indicated by the fact that Second Life librarians work on an almost entirely volunteer basis.

The library patrons surveyed and interviewed also expressed trepidation about Second Life, which could be either due to a lack of interest in the opportunities offered by

Second Life, or a lack of support and promotion from the library. Most of the librarians supporting Second Life mentioned that it is crucial for librarians to take the lead in new technologies or be left behind. Going by the results of the focus group with Olathe public library users, the key seems to be showing patrons what is possible, with Second Life and any other service or resource. Librarians need to be proactive about demonstrating the services their libraries can offer.

2) *what is the optimal way to deliver services to reach these goals that are highly usable for employees and patrons?*

Most of the libraries studied either offered classes to introduce users to Second Life, or planned to do so in the future. The Olathe public library was planning to start promoting their Second Life branch though the library website, Facebook and Twitter, and the Kansas State Library promoted their branch on the library's website. All of the librarians working on Second Life libraries stressed the importance of being available to new users, to bring them into the community and help them adjust to the Second Life experience. In order to optimize the delivery of services, librarians should make an effort to familiarize themselves with such services, and prepared to serve as leaders for others who are experiencing them for the first time.

3) *how usable currently is the virtual library?*

The Olathe public library, in its current state, is usable in that the Second Life area itself is easy to navigate and offers a number of useful and interesting collections. The problem is that not many people are actually using it. This is because the Second Life branch is not particularly well promoted in real life, and as this study found, many of the Olathe public library patrons were even not aware of its existence. The library staff are

working on stepping up their promotional efforts on the public library website, and are planning to offer seminars for library patrons to learn more about Second Life, virtual libraries and what they have to offer. Making this link between real life and the virtual world should help bring more Olathe public library patrons into the Second Life environment. Also, the Second Life branch could benefit from offering library services unique to Second Life, such as community events like classes and 3-D exhibits.

This study was also designed to examine if Second Life library branches are viable options for expanding real life library services in general. The high proportion of new users, a persistent phenomenon in Second Life, suggests that Second Life will always be a niche interest. Public libraries have historically provided services for niche client groups - they do not intend for every resource to serve every audience. When designing services, libraries need to view Second Life from this perspective.

Coordination problems between the Second Life branches of traditional libraries and the real life libraries themselves abound, as the real life patrons were often not aware of the existence of the Second Life branches, and may not have the technical skills to engage even if they did have interest in exploring and using them. The polarization effect apparent between those who become long-term Second Life users and those who stop after a month also occurs among the library staff responsible for creating and maintaining Second Life projects. In turn, polarization spurs conflict within the library staff members and may cause some of the coordination problems. There also seem to be perception issues at play between those who see Second Life as a valid educational tool and those who see it only as a game. This seems to be the reason that so many Second Life librarians do their work on their own personal time.

While the survey results indicated that Second-Life-only libraries are far more popular than Second Life branches of public libraries, there are no clear indications of what makes a Second Life library more or less popular. When surveyed, users had many suggestions for services that Second Life libraries could offer, but they did not agree on what services they wanted to see. However, the Caledon Libraries and the Alliance Virtual Library, both extremely popular in Second Life, seem to be taking advantage of the niche market afforded by a 3-D environment. Both libraries offer virtual surrogates of traditional library collections, but seem to spend more energy on community programming and exhibit creation. The Alliance Virtual Library offers the reference desk, which provides live help to Second Life users, and they also offer classes on building, object creation, networking within Second Life, job seeking and many other topics. Caledon offers dramatic readings and storytelling events using in-world audio, live music and book clubs.

Second Life libraries attached to real life public libraries could benefit from examining what works for these Second-Life-only libraries. They tend to focus on delivering services that have no equivalent in real life libraries, and would be impractical if not impossible to deliver in a real life setting. The librarians who were active in Second Life all acknowledged that the key to having a valuable experience in a virtual world is tapping into a community, and offering community-based services that cross geographical barriers is one way that libraries can maximize Second Life's potential as a medium for delivering information services.

Libraries should also consider ways to use Second Life's 3-D environment to create experiential learning opportunities. While three of the researchers were interviewing Rocky Vallejo of the Kansas State Library in Second Life, he mentioned how a friend and associate of his had used the 3-D qualities of the virtual environment to build a hypercube to demonstrate the

nature of 4 dimensions. Within seconds, that associate, who was sitting in on the interview, had

recreated the hypercube and placed it in the middle of the room. The researchers were able to

walk around it and see and experience exactly what Rocky had been describing just a moment

before. This kind of interaction demonstrates the strength and potential of Second Life as an

immersive educational tool. By avoiding duplication of real-life services and thinking of

innovative ways to use Second Life's interface to deliver information and services, virtual library

branches can be a viable option for expanding services in a brick and mortar library.

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APPENDICES

Appendix A: OLATHE INTERVIEW AND SURVEY QUESTIONS

Interview Questions for Olathe director and Second Life Committee Head

1. What are the primary goals and purpose of the SL Library project?

2. To what extent is the project aligned to district and library (RL) goals? For example, the vision of OPL is "To meet the lifelong informational, educational and recreational needs of the community through the quality services and resources." (Via the website) How does the SL Library project do this?

3. What type of planning and research went into the SL Library project? How did you determine that SL would be a positive extension of your RL library?

4. Emily, as the director of Olathe, why do you want to allocate resources to the SL Library project? Lori, why do you think the director should allocate resources to the SL Library project?

5. Why is the SL Library project not advertised on the OPL website?

6. On your website, your MySpace, Facebook, and twitter pages are all dedicated to teens. Has there ever been any discussion about using these tools to branch out to adults (for example, to promote your SL Library)?

7. Has OPL ever tried to have library programs to teach patrons about SL?

8. Almost everyone recognizes that there is a huge learning curve with SL. How do you address this from a usability perspective?

9. We understand that it is normal for RL librarians to do a great deal of SL Library work on their own time and Olathe is no different. How do you feel about this?

10. Have you ever considered using volunteers to lighten the workload?

11. Interest of staff and patrons (1-10, 1 being the lowest and 10 being the highest).
   Emily, as the director, how would you rate your interest in the SL Library project?
      Lori, as the head of the project, how would you rate your interest in the SL Library project?
   How would you rate the interest of others involved in the SL Library project?
      How would you rate interest among SL team members (non-supervisors)?
      How would you rate interest among the supervisors of SL team members?
   How would you rate the interest of those OPL employees not involved with the project?
   How would you rate the interest among RL patrons?
   How would you rate the interest among SL patrons?

12. Of those that you rated as having the lowest interest, how do you feel about that? How is this being addressed?

13. Do you have anything else you would like to add?

Olathe Real Life Patron Survey

How often do you use the Olathe Public Library?
() At least once a week
() A couple times a month
() Once a month
() Once every six months

() Once a year
() Never

What are your main reasons for using the Olathe Public Library?
() Borrow books
() Borrow videos
() Obtain information
() Attend a library program
() For a quiet place
() Use the internet
() Other—please explain [comment box]

How often do you use the following Olathe Online Resources?

	Very Often	Occasionally	Rarely	Never heard of it
Electronic Databases				
Subject Guides				
Cool Sites for Kids				
Downloadable Books and Music				
New at the Library				

Are there any other online resources that you would be interested to see Olathe offer?
        Please explain: [comment box]

How old are you? Pick the range in years in which your age falls.
() Under 18 years old
() 18-24 years
() 25-30 years
() 31-40 years
() 41-50 years
() 51-60 years
() 61+ years

How often do you use the internet in a typical week?
() less that 1 hour per week
() 1-5 hours

() 6-10 hours
() 11-20 hours
() 21+ hours

In the last month, what percentages of your time on the Internet were you using it from the following locations?
> At school/work?
> At home?
> At public access locations (libraries, cafes, etc.?)

Which of the following Internet tools do you consider yourself a regular user of?
() Email.
() Instant messaging.
() Social networking sites.
() Internet chat rooms.
() Blogs.
() Online games.

How interested would you be in a 3-D virtual world extension of your public library?
() Very interested   () Might be interested   () Not interested   () Not sure

Whether you answered "yes" or "no," how interested would you be in a library program to teach you about a 3-D virtual world (living, playing, learning—more than just with the library)?
() Very interested   () Might be interested   () Not interested   () Not sure

If you are a teen (13-17), how interested would you be in a 3-D virtual extension of your public library in a teen-only virtual world?

() Very interested   () Might be interested   () Not interested   () Not sure   () Not a teen

What services would you look for in a 3-D virtual library?
> Please explain: [comment box]

Did you know that the Olathe Public Library is involved in the 3-D virtual world Second Life?
() Yes   () No   () Not sure

Do you have any other suggestions for the Olathe Public Library?
> Please explain: [comment box]

Olathe Staff Survey

Could you give a brief description of what you do for the OPL SL Library project?

How did you become involved?

How long have you worked for Olathe?
  a. Less than a month.
  b. More than a month but less than three months.
  c. More than three months but less than six months.
  d. More than six months but less than a year.
  e. More than a year but less than two years.
  f. More than two years.

For how many years have you worked for this library? [number box]

How long have you used Second Life?
  a. Less than a month.
  b. More than a month but less than three months.
  c. More than three months but less than six months.
  d. More than six months but less than a year.
  e. More than a year but less than two years.
  f. More than two years.

For how many years have you used Second Life? [number box].

How long have you worked with Olathe's Second Life Library?
  a. Less than a month.
  b. More than a month but less than three months.
  c. More than three months but less than six months.
  d. More than six months but less than a year.
  e. More than a year but less than two years.
  f. More than two years.

For how many years have you worked in the Second Life branch? [number box]

In the last month, how many hours have you spent in Second Life? [number box]

In the last month, how many hours have you spent in Second Life not working for the OPL SL Library? [number box]

In the last month, how many on-the-job hours have you spent working for the OPL SL Library, both in-world and behind the scenes? [number box]

In the last month, how many of your hours have you spent working for the OPL SL Library, both in-world and behind the scenes? [number box]

What do you see as the primary goals and purpose of the OPL SL Library project?

To what extent does this align with your personal and/or professional goals?

Rate the interest of staff and patrons (1-10, 1 being the lowest and 10 being the highest).
    How would you rate your interest in the OPL SL Library project?
    How would you rate the interest of the director in the OPL SL Library project?
    How would you rate interest among Second Life team members (non-supervisors)?
    How would you rate interest among the supervisors of Second Life team members?
    How would you rate the interest of those Olathe employees not involved with the project?
    How would you rate the interest among real life patrons?
  How would you rate the interest among Second Life patrons?

How satisfied are you with the SL Library project? Rate your satisfaction (1-10, 1 being the lowest and 10 being the highest). [number box]

Almost everyone recognizes that there is a huge learning curve with Second Life. How would you rate Second Life on its ease-of-use? (1-10, 1 being the lowest and 10 being the highest).

We understand that it is normal for RL librarians to do a great deal of SL Library work on their own time and Olathe is no different. How do you feel about this?

How do you feel about having library programs to teach patrons about SL?

What do you see as the future of the OPL SL Library project? Where do you think this is going?

Do you have anything else you would like to add?

Olathe Real Life Focus Group Questions

How often do you use the Olathe Public Library?

What are your main reasons for using the Olathe Public Library?

How often do you use the following Olathe Online Resources?

Are there any other online resources that you would be interested to see Olathe offer?

How interested would you be in a 3-D virtual world extension of your public library?

Whether you answered "yes" or "no," how interested would you be in a library program to teach you about a 3-D virtual world (living, playing, learning—more than just with the library)?

What services would you look for in a 3-D virtual library?

Do you have any other suggestions for the Olathe Public Library?

A demonstration of Second Life will be provided in the conference room.

What is your first impression of Second Life after seeing our demonstration of the Olathe Second Life Library project?

Did this demonstration help change your perception in any way?

After the focus group, how interested are you in a 3-D virtual world extension of your public library?

What services that we showed you are you most interested in using in a 3-D virtual library? Or, are there any other services that we did not show you that you would be interested in using in a 3-D virtual library?

Do you see Second Life as something that you would continue to use in the future?

Do you have any other suggestions for the Olathe Second Life Library project?

Appendix B: SECOND LIFE SURVEY QUESTIONS

User Survey for SL Libraries

How did you find out about this library?
 () By exploring Second Life.
() From another person I knew first in Second Life.
() From another person I knew first in the real world.
() From something else in Second Life, such as another library.
() I found out about it another way, which was: [comment box]

Is this your first visit to this library in Second Life? Do you use it regularly? If so, how often do you visit it?
() This is my first visit.
() I don't regularly use this library.
        I use it regularly:
                () At least once a week
                () A couple times a month
                () Once a month

() Once every six months
() Once a year

Have you ever talked with one of the librarians here?
() Yes
() No

Do you regularly use another library in Second Life?
() Yes, that library is: [comment box]
() No.

Do you work or volunteer at a library in real life?
() Yes
() No

Do you work or volunteer at a library in Second Life?
() Yes
() No

Did you come to this library for some specific reason?
() I wasn't looking for anything in particular.
() I had something specific in mind, which was: [comment box]
Please describe any services or resources you used or plan to use during this visit to this particular. Would say that you use each such service or resource very often, occasionally, or rarely? If you haven't used anything, it's okay to leave this question blank. [comment box]

Would you come back to this library? If yes, why?
() Yes, I would come back because: [comment box]
() No

What services or resources could this library offer that would make you want to come back?
Can you think of any services that a real life or another Second-Life library offers that you would like to see here?

What kinds of activities do you enjoy doing in Second Life?
() Wandering around
() Chatting with people
() Attending classes/presentations/talks
() Building
() Shopping
() Attending music/art performances
() Dancing
() Teaching
() Other (please elaborate): [comment box]

Other than Second Life, have you participated in other virtual environments? If so, could you name them
() Yes, I've used: [comment box]
() No

How old are you? Pick the range in years in which your age falls.
() Under 18 years old?
() 18-24 years
() 25-30 years
() 31-40 years
() 41-50 years
() 51-60 years
() 61+ years

How often do you use the Internet in a typical week?
() less than 1 hour per week
() 1-5 hours
() 6-10 hours
() 11-20 hours
() 21+ hours

In the last month, what percentages of your time on the Internet were you using it from the following locations?
        At school/work?
        At home?
        At public access locations (libraries, cafes, etc.?)

Which of the following Internet tools do you consider yourself a regular user of?
() Email.
() Instant messaging.
() Social networking sites.
() Internet chat rooms
() Blogs.
() Online games.

How long have you used Second Life?
  a. Less than a month.
  b. More than a month but less than three months.
  c. More than three months but less than six months.
  d. More than six months but less than a year.
  e. More than a year but less than two years.
  f. More than two years.

How often have you logged onto Second Life in the last month?
() More than once a day.

() Once a day.
() Several times a week.
() Once a week.
() Less than once a week.

When is the most common time you visit Second Life? Please give
a range in hours and your time zone. (Example: 4-7 PM, Eastern Time.)
 [time zone range]

In the last month, what percentages of your time in Second Life did you spend logged in from the following locations?
> At school/work?
> At home?
> At public access locations (libraries, cafes, etc.?)

Do you have any other questions or comments about this library?

Second Life Staff Interview Questions

1. What are the primary goals and purpose of this SL library?
   a. To what extent is the project aligned to district and library (RL) goals? How does the SL Library project do this?)

2. How much progress have you made on your goals? How much do you still have to do? What do you see as the future prospects of your library?

   a.   What type of planning and research went into the SL Library project? How did you determine that SL would be a positive extension of your RL library?)

3. What resources did you use to build this library? How do you pay for the land/materials/etc? Does it receive any kind of funding (RL or SL) or donated land/resources? If so, where do these resources come from and how did you find them?

4. What programs and services do you offer in your libraries?

5. What do SL libraries offer in general? What needs do you think they fill? What do you feel are the advantages of SL libraries over RL libraries? What can an SL library offer that an RL library can't? How would you make the case for institutional support for your SL library?

6. What groups/associations are you a part of in SL? How do these groups provide support and resources for your library?

7. How do you promote your library in SL? Do you advertise outside SL itself?

   a. Has Topeka ever tried to have library programs to teach patrons about SL?)

8. Almost everyone recognizes that there is a huge learning curve with SL. How do you address this from a usability perspective?

9. What is your general impression of SL's usability?

10. Many people try SL, but don't continue to use it. Why do you think this is?

11. What do you see SL becoming in the future? What do you think its role in the broader world of Internet services will become?

12. Much work in SL libraries is done on a voluntary basis. How do you feel about this?

   a. Have you ever considered using volunteers to lighten the workload?)

13. Do you have anything else you would like to add?

General Second Life User Survey

1. What is the primary reason you use Second Life?
    ()I use it for fun.
    ()I use it for work.

2. In your Second Life experience, have you at any time had questions or needed assistance (for example, help with moving around, finding locations, etc.?)
    ()No.
    ()Yes. What sort of help or information were you looking for? [comment box]

3. If there were avatars available to help you, would you ask for the help or just try and figure it out on your own?
    ()I would ask for help.
    ()I would try to figure things out on my own.

4. Are you aware that there are libraries in Second Life?
    ()Yes.

()No.

5. Have you ever used a library in Second Life?
    ()No.
    ()Yes. What services or features did you use? [comment box]

6. Do you have any thoughts or ideas on how libraries could assist Second Life users?
    [comment box]

Appendix C: IRB Consent to Participate Form

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

CONSENT TO ACT AS A HUMAN PARTICIPANT

Project Title: *When Real and Virtual Worlds Collide: A Second Life Library*

Project Director: <u>Dr. Anthony Chow</u>

What is the study about?
The purpose of our study is to empirically and holistically examine the Olathe Second Life Library (located in the virtual world Second Life). Our six primary research questions are:
1. What are the mission and goals of the Olathe Second Life library?
2. What patrons is it designed to serve and how is this aligned with the real Olathe library located in Olathe, KS?
3. What resources are allocated to oversee the Olathe Second Life library?
4. What patrons are interested in using the Olathe Second Life library?
5. How are other Second Life libraries organized and managed?
6. What are the general patron needs of Second Life users?

A secondary question is looking at how other real life and Second Life libraries are similar or different than the Olathe project.

Why are you asking me?
You are being asked to participate in this study because you are either a library service provider and/or a patron of library services. If you have been asked to participate in a focus group you were selected by a library as a patron who would be willing to speak about your expectations of services provided by the library.

What will you ask me to do if I agree to be in the study?
The study will use three types of data collection: interviews, surveys, and focus groups. You are being asked to participate in one or more of these methods. Interviews will involve answering some specific questions about your library's mission and goals and how having a Second Life library aligns with attaining these goals (should take approximately 30 minutes to one hour). On-line surveys (15-30 minutes) will seek your opinion about patron needs and to what extent online

resources can meet these needs. For the focus group (30-60 minutes), you will be asked how the library meets your needs and what role, if any, online resources have in meeting those needs.

Are there any audio/video recording?

Focus groups will be the only method of data collection that will be videotaped. This will be only for transcription purposes.

What are the dangers to me?

The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants.

If you have any concerns about your rights, how you are being treated or if you have questions, want more information or have suggestions, please contact Eric Allen in the Office of Research Compliance at UNCG at (336) 256-1482 Questions, concerns or complaints about this project or benefits or risks associated with being in this study can be answered by Anthony Chow who may be contacted at (336) 334-3411 or aschow@uncg.edu .

Are there any benefits to me for taking part in this research study?

The potential benefits to you will be to help increase alignment between library resources, services, and patron needs.

Are there any benefits to society as a result of me taking part in this research?

The potential benefits to society reside in the ability for libraries to better understand what role, if any, online resources serve in meeting the needs of patrons.

Will I get paid for being in the study? Will it cost me anything?

There are no costs to you or payments made for participating in this study. If you are a Second Life participant, however, you may be offered SL dollars (Lindens) for your participation.

How will you keep my information confidential?

All information obtained in this study is strictly confidential unless disclosure is required by law. We will do the following to maintain confidentiality of your records to the extent allowed by law: The results of this research study may be published but your name or identity will not be revealed. All participant data will be destroyed within one year of the initial data collection. All data, written and electronic data on CD, will be stored in a locked filing cabinet at all times in the office of the principal investigator located at 305 Curry Building and destroyed by paper shredder by no later than October, 2010 with the exception of the signed consent forms, which must be held for a three year period after completion of the study in accordance with federal regulations.

Absolute confidentiality of data provided through the Internet cannot be guaranteed due to the limited protections of Internet access. Please be sure to close your browser when finished so no one will be able to see what you have been doing.

What if I want to leave the study?

You have the right to refuse to participate or to withdraw at any time, without penalty. If you do withdraw, it will not affect you in any way. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identifiable state.

What about new information/changes in the study?

If significant new information relating to the study becomes available which may relate to your willingness to continue to participate, this information will be provided to you.

Voluntary Consent by Participant:

By pressing the agree button below this consent form you are agreeing that you have read it, or that it has been read to you and you fully understand the contents of this document and are

openly willing to consent to take part in this study. All of your questions concerning this study have been answered. By indicating you agree, you are agreeing that you are 18 years of age or older and are agreeing to participate, or have the individual specified above as a participant participate, in this study described to you by Dr. Anthony Chow.