

# Pedagogical Applications of Second Life

Since its launch in 2003, Second Life has garnered interest from educators as an instructional technology platform. Among the first to use Second Life in university courses were Anne Beamish from the University of Texas at Austin and Aaron Delwiche at Trinity University.<sup>1</sup> Learning activities can vary in Second Life from a quick exposure to the virtual world, such as a tour of library sites, to immersive experiences like role-playing. Students may be engaged in Second Life in a number of ways; they could be participating in a group discussion, building a model, performing as a character, creating digital stories, or participating in community engagement.

In this chapter, I will provide four examples of pedagogical applications of Second Life that I have either designed for others or used in the courses I teach. My goal is to present a landscape of pedagogical applications that will spark ideas and help others visualize how Second Life might be used in an academic, public, or school library. All of the activities share common elements: students are allowed to be creative, students are active participants, and reflection is a key component of the activity.

## Digital Storytelling

Digital storytelling is storytelling that incorporates digital images, video, music, and reflective narratives in order to share life experiences and personal insights. Stories usually last between two and four minutes and are autobiographical in nature. In Second Life, digital storytelling follows the same premise, but instead of creating a video, students create an experience or a space in which others can walk through their stories.

When I introduce digital storytelling to my students, I assign them a reading about Joseph Campbell's monomyth.<sup>2</sup> In the monomyth, Campbell explains that myths share a fundamental structure throughout different cultures of the world. In describing the Monomyth, Campbell explains a number of stages or steps along a Hero's Journey. For the digital storytelling project, I ask my students to use tools in Second Life to tell a story about a time when they were a hero and to use the Hero's Journey as their framework. My students tell a variety of stories, ranging from winning a sports championship to earning their admission to the University of Texas at Austin.

The digital storytelling exercise consists of three parts: composing a story, creating an experience, and telling the story to a group of people. To set up the digital storytelling exercise, I provide each student with a condo that measures 20 meters by 20 meters, and I stack the condos into buildings. Each building has four floors, allowing my class of twenty students to fit into five buildings. Using the buildings as a focal point, I then create an urban landscape that I use as my "classroom" for the first few weeks of the course. I give my students one week to create their digital stories in Second Life, and we use the second week to tell the stories. Figure 7 is an example of a student sharing their digital story with their classmates.

Digital storytelling serves as a unique way for students to learn about their classmates and as a first step towards building a community of learners. Students not only create a story, they also narrate the stories and experience the stories of their classmates.

I use the digital storytelling project to provide an opportunity or a purpose that encourages students to learn how to build in Second Life. The digital storytell-



**Figure 7**  
Students use the Hero's Myth to tell their digital story in their condo in Second Life

ing activity encourages students to build objects such as doors, picture frames, and furniture that they use to create a setting for their stories. One student commented:

Decorating my room in Second Life had a lot of benefits with it. I learned a lot more about the software and how to do certain things. I learned how to upload pictures onto my wall, move objects around, stretch objects, and many other useful skills.

During the activity, students learn how to find objects in Second Life by searching for items or by asking other users for assistance. Students usually want to upload pictures of their friends or of their hometowns, and by doing so they teach themselves how to upload and how to texture prims. They mix their photos with prims to create posters or framed pictures in Second Life. One student wrote about the experience in her blog:

The thing that I did enjoy doing while decorating my condo was putting pictures up in my condo. Actually, it didn't even take me that long to figure out how to put them up so that was pretty neat. Also, the pictures bring something real to the place. Seeing pictures of me and my friends made it really

nice. When I had finished decorating my condo I thought I did a pretty good job.

The final aspect of the digital storytelling activity in Second Life is sharing the stories with a group of people. In this part of the activity, students learn how present information to people via text chat. They learn how to pace their words and how to use their avatars to direct the attention of their audience to areas within their condo where the images align with their story. Students also learn about 3-D navigation since they need to design their space so that up to twenty avatars can move from the starting point to the ending point along with the narrator. After the activity, students begin to realize that items such as hallways and roofs are not needed in a virtual space where avatars can fly or use camera controls to extend their view to a full 360 degrees.

Students generally enjoy the activity, and they frequently report instances of peer-to-peer learning. Students are quick to pass along tips and tricks to one another as they learn how to construct objects in Second Life. One aspect of digital storytelling in Second Life that is different from digital storytelling with video is that students are able to see the progress of their projects from start to finish. When using video, students usually do not see one another's work until that video is complete. Being able to see a work in progress

creates a type of asynchronous social learning or modeling between students without direct person-to-person observation. Above all, digital storytelling becomes a type of play and self-expression rather than work.

## Role-Playing

The ability to create content in Second Life provides educators an exceptional platform for creating role-playing activities. My first experience using Second Life as a platform for an educational role-playing activity was in an undergraduate world literature course taught by Dr. Jerome Bump at the University of Texas at Austin. The goal of the activity was to facilitate reading and writing about leadership, compassion, and the sympathetic imagination. We wanted students to think beyond themselves and to understand issues by “walking in someone else’s shoes.” The assignment consisted of three activities: selecting, researching, and writing about a role model; creating an avatar in the likeness of the role model; and participating in small-group discussions as the role model. Figure 8 shows students dressed as their role models and having a discussion.

Students selected a diverse set of role models, such as Malcolm X, Mother Teresa, Theodore Roosevelt, Dave Matthews, and Oprah Winfrey. Students researched the

role models and reported on their historical significance. They later reflected on what specific traits they admired and why they aspired to be like these role models. To learn about their role models, students read books and magazine articles, and in some cases students were able to interview their role models. Each student wrote a paper about their role model, which was later used as the foundation for role-playing.

Once the students had an understanding about their role model, they were asked to create an avatar in Second Life resembling them. To assist the students in the process, I collected a variety of costumes and outfits in Second Life and made them available to the students. I gathered free clothing items and accessories such as canes, glasses, capes, and boots and placed them in area where students could easily download the items. I made sure to select items with “modify” settings. Objects in Second Life with a modify setting allow users to change colors, adjust sizes, and alter the general shape of an object. Providing these items to students saved time because students didn’t have to create their outfits from scratch. For example, one student was able to modify a rainbow-colored clown collar into an Elizabethan collar for his William Shakespeare avatar. Students reported that creating their avatars was not difficult and that the process was fun. One student described her experience creating her avatar:



**Figure 8**  
Students roleplay as William Shakespeare, Theodore Roosevelt, Mother Teresa, and others while engaged in a text chat.

I had a picture of my role model with me, it was fun. I came up to the computer lab and it was really easy. I added clothes and made a body shape, then the hair. It was my first time using Second Life but it was easy.

I created four discussion areas where students could role-play: a modern office conference table, a Greek amphitheater, a campfire, and an Indian rug. The class session lasted an hour and fifteen minutes, and we planned to have three 20-minute discussions, leaving time for students to log in and move around between the areas. Students were asked to discuss the relationship between leadership and compassion, leadership and diversity, or leadership and history while acting as the role model they selected. During one discussion, Malcolm X, Ellen DeGeneres, William Shakespeare, and Mother Teresa all participated in a discussion about leadership and compassion. I asked a student to describe how she played her role:

I tried to talk to other people in my role model's tone. I would think to myself, what would my role model say? To prepare for this, I would read her books, and I would use her sentences, I would get into her ideas, and get into her life. When I dress

like her, I talk like her, the distance between me and [my] role model gets closer.

Another student reported:

I remember the entire time I just wanted to add to the discussion. It was really engaging for me. I was so into it. Even when we were done I was still thinking how Malcolm X would have thought.

I had a chance to interview several students the day after the role-playing activity in Second Life. The students said that they felt immersed during the activity and that they were able to say things from their character's perspective that they would not have been able to say if they were not role-playing. A student explained:

You could say anything that your normal person would say and I thought that that was really interesting and that it kind of forced you to get out of yourself and forced you to consider a different perspective.

The quote above demonstrates a high level of critical thinking, particularly in the area of considering multiple perspectives, but the quote says little about the use



**Figure 9**  
In this image, the user interface can be seen with buttons on the bottom of the screen. Text chat scrolls on the bottom left of the screen.

of Second Life and more about role-playing in general. I was curious to know if the use of avatars in Second Life helped students to more fully actualize their role. I asked a question about their thoughts on having an in-class role-playing activity versus a virtual world role-playing activity. All of the students answered in a similar fashion:

I think it would be better to do this one in SL because if we were to dress up I'm sure people wouldn't take it as seriously and it would just kind of fall apart because some people are shy and wouldn't want to impersonate their role model so this is a good way for people that are kind of scared to express themselves in open to use SL to be someone else.

Another student added:

It was a totally new experience. Jeremy is not Jeremy anymore, he is Shakespeare. Austin is not Austin anymore, he is Benjamin Franklin, so it's kinda like a connection between now and the past, so you made a connection in the game, and maybe you can't make such a deep connection just in class.

Survey results for the role-playing activity were very encouraging. Eighty-four percent of students found the activity very engaging. One of the research goals of the role-playing activity was to measure the effect of Second Life and role-playing on the students' ability to achieve flow (a high level of intrinsic motivation). In the post-activity survey, 72 percent of students felt that time seemed to fly by during the activity, and 57 percent found that their attention was "entirely focused on the tasks to be completed." Some readers may wonder if the same role-playing activity conducted in a text-based chat room without avatars and the 3-D graphics available in Second Life would have achieved the same results. When asked about a text-based environment versus Second Life, 61 percent thought that "chatting with others while seeing my and others' avatars facilitated discussions better than text-based chats (without visuals)."

Role-playing is an engaging teaching strategy that can be aided by the use of Second Life. In this scenario, the use of Second Life was preceded by research, writing, and reflection *before* students were engaged in the virtual world. The role-playing would have had little value if students had not properly selected and conducted research on their role models.



**Figure 10**  
Students pose for a group picture after completing their role play activity.

## Community Engagement

One of the strengths of social virtual worlds like Second Life is in the ability they provide to users to connect to geospatially disparate people with common interests and goals. A significant number of nonprofit organizations are located within Second Life, many of which can be found clustered together in areas such as Commonwealth Island and the Nonprofit Commons. As in real life, nonprofit organizations in Second Life are very willing to work with students on class projects that benefit their targeted communities or the nonprofit itself. By encouraging these partnerships, Second Life can become a virtual-world platform for real-life community engagement.

Realizing the potential for community engagement in virtual worlds, the Jimmy and Rosalynn Carter Partnership Foundation awarded a Carter Academic Service Entrepreneur grant to the students enrolled in a class I teach called Working in Virtual Worlds. This competition will seek to find the most innovative way for students to serve the community online in the virtual world Second Life. As a prize, the winning group will receive a \$500 stipend and \$1,000 as seed money to launch their project after the class is over.

During the fall 2008 semester, my students were working with two national nonprofit organizations and two local organizations. One student team created an interactive 3-D experience that will demonstrate the effect that mosquito bed nets can have in malaria prevention in parts of Africa. The students worked with a nonprofit group called Nothing but Nets. Part of their project incorporated the selling of bed nets within Second Life for Linden Dollars, which will later be exchanged for U.S. dollars.

A second group is creating a video game in Second Life that will teach users about the conflict in Darfur. Players of the game will assume the role of a refugee who is seeking safe haven in a camp. As players navigate the game, they will encounter challenges like finding drinkable water or evading militia. The students will be partnering with a nonprofit group called Games for Change.

Two other teams in the course will be working with local nonprofit organizations in Austin, Texas. The two organizations are Austin SafePlace, an organization that addresses sexual and domestic violence issues, and Partnerships for Children, an organization that provides services directly to children under the care of Child Protective Services in the Austin area. Both teams are creating a space within Second Life for the organizations



**Figure 11**

This is a picture of a game created to teach about the conflict in Darfur. The man in the image is a non-player character or NPC that interacts with players and provides quests during the game.

so that they can reach beyond the central Texas region and offer their workshops and professional training services to interested parties throughout the country. The group working with Partnerships for Children will also be sponsoring a Holiday Gala in Second Life, where they will offer attendees an opportunity to purchase items from the holiday wish lists of children currently under protective custody.

The key aspect of incorporating a community engagement project is to ensure the goals of the project are aligned with goals of the class. In my course, one of the main goals is for students to be able to assess and evaluate virtual worlds as a collaborative work platform. To accomplish the goal, I take a learning-by-doing approach. I require my students to use Second Life a work tool by completing a community engagement project. Students work in teams to write a project proposal, construct a project management plan, build the project in Second Life, document the project by creating a movie, and finally assess the project by writing a virtual team analysis report. The use of Second Life allows the students to scale up their community engagement projects since they can use the virtual world to create rapid prototypes and quickly disseminate their ideas with their clients.

## Working with Teens

Linden Lab has created a teen version of Second Life that is referred to as the Teen Grid or TSL (Teen Second Life). The Teen Grid is restricted to users between 13 and 17 years of age and to adults who have been cleared by Linden Lab to run educational projects for teens. The Eye4You Alliance sponsored by the Public Library of Charlotte and Mecklenburg County is one of the main content providers to teens within the Teen Grid. In the summer of 2008, I participated in a Teen Grid project with Dr. Leslie Jarmon from the Educators Coop and Girlstart, a nonprofit organization created to empower girls to excel in math, science, and technology.

Fifty high school girls from the Austin area were asked to design and build a project in Teen Second Life to examine gender equity in gaming and computer science. The girls formed teams of four and were tasked with creating a project that addressed gender equity in games within three and a half days. None of girls had ever used Second Life before, but following a curriculum we created for them based on my college-level course, they were able to quickly develop building skills in order to complete their projects.



**Figure 12**  
The Girlstart Fashion show and runway built by teens in Second Life. The female avatar on stage represents the way girls want to be represented in video games i.e. a regular (non-sexualized) girl.

The girls created a wide variety of projects, using museums, fashion shows, coffee houses, and fitness clubs as their inspiration. One group created an avatar fashion show in order to demonstrate the stereotypes used to represent women in video games. The girls in the team identified the stereotypes used to portray females in games, then proceeded to create the stereotypes in the form of avatars in Second Life. The stereotypes they identified were the goody-goody girls as represented by the Princess from the Mario games, the fantasy girls that are curvaceous and overtly “sexy” as represented by Lara Croft from *Tomb Raider*, and the overly muscular or freakishly powerful girls as represented in games such as *Mortal Kombat*.

The girls built a white runway surrounded by pink chairs for their fashion show. During the fashion show, the emcee introduced the avatars dressed as stereotypes and then explained why the stereotypes were offensive. The girls would strut down the runway, pose, then quickly head backstage to change into their next stereotype. At the end of the show, the emcee introduced the new “ideal” avatars that the girls created as potential replacements for the stereotypes. The ideal avatars were simply named “the average girl” and “the athletic girl.” The average girl wore a T-shirt, capris, and sandals, while the athletic girl had a track suit, tennis shoes, and a ponytail.

The use of Second Life in this project pushed students to work as multimodal learners. The girls researched female stereotypes in games, wrote a script to explain why the stereotypes were offensive, created a visual representation of each stereotype, and finally developed their own ideal avatars. Each level of learning increased in sophistication, from oral brainstorming, through text-based writing, to pixel-based creation. The fashion show is only one of ten amazing projects created by the teenage girls. When asked about the experience, one girl wrote:

We had a great time! This was so much more fun and interactive than [I] thought it was going to be!!! [I'm] glad we got to have this experience and people learned and had a great time all at the same time so our goal was reached! This was an amazing event!

## Practices

I say with some confidence that the use of creativity, reflection, and active learning strategies translate well into Second Life. Though I have been teaching in Second Life for longer than most people and have taught multiple subjects and age groups, I will simply say that any of the methods I have just described are only *some practices* and not necessarily *best practices*. Social virtual worlds have not yet been utilized by enough educators for us to assume that we have already seen the best. I'm excited

by the prospect of placing tools such as Second Life in the hands of more librarians to see what kinds of unique programs emerge. I hope that young-adult librarians and information literacy instructors will consider the use of digital storytelling or role-playing through Second Life as an avenue to incorporate active learning and play with their students.

## References

Many of the projects described in this article are discussed more fully in the following articles:

- Mayrath, Michael, Joe Sanchez, Tomoko Traphagan, Joel Heikes, & Avani Trivedi. “Using Second Life in an English Course: Designing Class Activities to Address Learning Objectives.” In *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2007*, edited by Craig Montgomerie & Jane Seale, 4219–24. Chesapeake, VA: AACE, 2007.
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## Notes

1. Personal interview with Anne (8-29-06) and Delwiche, A. (2006). Massively multiplayer online games (MMOs) in the new media classroom. *Educational Technology & Society*, 9 (3), 160-172.
2. Rollings, A. and E. Adams (2003). *On Game Design*. Berkeley, California, New Riders. p 93 -110