Curricular Redesign Grant Proposal

2011-2012

Project Title:

Expanding the Potential of Virtual Worlds: Exploring the Impact of Intensive Faculty Development on Teaching and Learning

Principal Investigator
(Include campus & Department)

Tanya Joosten, University of Wisconsin-Milwaukee, Learning Technology Center

Co-Investigator(s)
(Include campus & Department)

Sharon Stoerger, University of Wisconsin-Milwaukee, Learning Technology Center
Patricia Fellows, UW-Colleges
Scott Reeser, UW Extension
Leif Nelson, UW-Green Bay

Date: March 7, 2011
## Curricular Redesign Grant Proposal Summary Sheet 2011-2012

<table>
<thead>
<tr>
<th>Project Title:</th>
<th>Expanding the Potential of Virtual Worlds: Exploring the Impact of Intensive Faculty Development on Teaching and Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project PI (include title/academic rank and departmental affiliation):</td>
<td>Tanya Joosten, Associate Director, Learning Technology Center, University of Wisconsin – Milwaukee (UWM)</td>
</tr>
</tbody>
</table>
| Co PI(s) (include title/academic rank and departmental affiliation): | Sharon Stoerger, Instructional Design Consultant, Learning Technology Center (UWM)  
Patricia Fellows, Instructional Technologist/Training Specialist, Central IT Department, University of Wisconsin Colleges  
Scott Reeser, Web Developer/Instructonal Designer/System Administrator, University of Wisconsin - Extension  
Leif Nelson, Instructional Designer/Technologist, University of Wisconsin – Green Bay |
| Campuses Involved: | UW-Milwaukee, Learning Technology Center, Tanya Joosten and Sharon Stoerger  
UW-Colleges, Patricia Fellows  
UW Extension, Scott Reeser  
UW-Green Bay, Leif Nelson |
| Amount Requested: | $15,000 |
| Student Impact (approx number): | At least 500 students. |
| Program or Course(s) Impact (approx number): | Initially 12 courses, but this may expand to at least 24 courses by the end of the grant period. |
| ABSTRACT: | This proposal is requesting support for an intensive faculty development program to support faculty implementation of virtual worlds. Although dozens of faculty across the state are using virtual worlds, these individuals were change agents and early adopters. Our next generation of faculty and instructors that would like to implement virtual worlds into their courses require more specialized attention in their course redesign. This faculty development program would include face-to-face and online opportunities for training and support. Faculty throughout the University of Wisconsin System would be selected based on a request for proposals that would be distributed. Specifically, the program will offer an intensive, one day, face-to-face workshop where experienced instructional improvement staff from three UW campuses - UW Milwaukee, UW Green Bay, and UW Colleges - would work with the instructors one-on-one and in small groups to assist them in the complete development of a pedagogical activity and the integration of this virtual world activity into their course. |

At the completion of the faculty development efforts, the selected faculty members would have a course design that included a virtual world learning activity to be completed either in the Fall 2011 or the Spring 2012 semester. Quantitative and qualitative research designs would be used to formally evaluate the faculty development program, the faculty experience, and the students' perceptions. The results of these studies would be used to share a faculty development program for virtual worlds throughout the system, demonstrate best practices of virtual worlds in teaching and learning, and support future virtual initiatives through anticipated positive student and faculty perceptions.
Project Title: Expanding the Potential of Virtual Worlds: Exploring the Impact of Intensive Faculty Development on Teaching and Learning

Abstract

This proposal is requesting support for an intensive faculty development program to support faculty implementation of virtual worlds. Although dozens of faculty across the state are using virtual worlds, these individuals were change agents and early adopters. Our next generation of faculty and instructors that would like to implement virtual worlds into their courses require more specialized attention in their course redesign. This faculty development program would include face-to-face and online opportunities for training and support. Faculty throughout the University of Wisconsin System would be selected based on a request for proposals that would be distributed. Specifically, the program will offer an intensive, one day, face-to-face workshop where experienced instructional improvement staff from three UW campuses - UW Milwaukee, UW Green Bay, and UW Colleges - would work with the instructors one-on-one and in small groups to assist them in the complete development of a pedagogical activity and the integration of this virtual world activity into their course.

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teaching and learning, and support future virtual initiatives through anticipated positive student and faculty perceptions.

**Project Narrative**

*Statement of Need/Problem*

Virtual worlds, when implemented with pedagogically sound practices, are proven to provide a means to enhance the student learning experience through increased potential to create presence, engagement, and community (Joosten, Stoerger, & Chen, in progress). Further, evidence confirms that virtual worlds can increase student learning, performance, and satisfaction in higher education courses (Joosten & Chen, in progress). Virtual worlds, like *Second Life* (SL), are 3-D, interactive environments that are user created and allow individuals to participate in interactions and network through their avatars, or digital representations of themselves. When virtual worlds are implemented into a course, they provide an instructor the ability to overcome challenges that cannot be met by other technological systems and increases the potential for experiential learning. In particular, students can meet with each other or other users and through using an array of communication tools, voice chat and text chat, they are able share and gather information, build networks, and perform higher order learning tasks.

Currently, there are an increasing number of virtual worlds to explore, yet SL continues to attract attention from media outlets, corporations, and educators, just to name a few. SL was released to the public by Linden Lab in 2003. It is touted as the largest three-dimensional virtual world (EDUCAUSE Learning Initiative, 2008), and the usage rates reinforce its popularity. In 2010, for example, there have been more than 480,000 repeat logins to this world (Linden, N., 2010). Further, the *Horizon Report* (2007), a publication developed by the New Media
Consortium and EDUCAUSE, reports that interest in virtual worlds, such as SL, is underway and growing.

Hundreds of educational institutions have a created a presence in SL (Jennings & Collins, 2008) and an even larger number have integrated this virtual world into their curriculum (Sussman, 2007). Harvard University, Northern Illinois University, Montclair State, Vassar College, and Massachusetts Institute of Technology are a few examples of institutions that are investigating the impact of Second Life on teaching and learning and exploring the possibilities of Second Life. In addition to the plethora of in-world educational activities, there are SL-related initiatives occurring out-of-world, as well. Educators are actively involved in journals, conferences, and discussion lists devoted to the topic of SL. For example, a SL discussion list for educators (SLED) has more than 5,000 members (Linden, P., 2009).

Based on the literature, students want a different type of learning experience. More specifically, some educators argue that students are struggling to find meaning in the educational process (Wesch, 2008). Employers also state that graduates are not acquiring skills needed for workplace success – skills that can be acquired through active, hands-on pedagogies (Cassner-Lotto & Wright Benner, 2006). As a recent Harvard University study suggests, the current one-size-fits-all educational model is failing to prepare millions of individuals for careers in today’s workplace (Pathways to Prosperity Project, 2011). In an attempt to make the learning process more attractive and to prepare students for work in the 21st century, educators are exploring the use of three-dimensional virtual worlds such as Second Life.

Faculty across the UW System face these challenges, as well as the difficulty of engaging their students in learning activities. Creating rich, interactive learning activities has been particularly difficult for faculty teaching in online and/or blended environments. Traditionally,
learning activities that take place online have been asynchronous using lean media, such as discussion boards. In contrast, SL is a textually and visually rich environment that has no backstory. Rather, the users create the content. Because it is a persistent environment that is available 24/7, SL allows instructors to extend the boundaries of the physical classroom.

While faculty are becoming more interested in the use of virtual worlds to support and expand their teaching methods, they need extensive guidance through this process. Although over 100 faculty in the University of Wisconsin System have received training on virtual worlds, only a small portion of those faculty have actually implemented virtual worlds into their courses. Those faculty are early adopters and change agents on campus. The next generation of instructors needs more assistance and support in their efforts to implement Second Life into their courses.

This project will enable UW faculty developers to better understand the needs of the next generation of faculty, beyond the early adopters, in implementing emerging technologies as rich as virtual worlds. The goal is to assist faculty in fulfilling their need to implement SL into their courses to enhance student learning in the classroom. From this project, we will learn and disseminate best practices of developing faculty and teaching with virtual worlds adding to the foundational work already begun in UW System.

Additionally, this project will allow us to address the issue of the lack of student engagement and experiential, higher order learning opportunities in courses. Instructors are challenged to find effective ways to provide students these opportunities, in particular, when courses are online due to the leanness of the learning management system.

This project will consist of individuals from different disciplines, including gateway and program level courses, throughout the UW System, who will integrate learning activities in
Second Life into their course design. The purpose is to train faculty on ways to effectively use SL for teaching and learning. "Best practices" and other resources for teaching with Second Life will be disseminated during the workshops for use by faculty throughout the UW System. In the end, this project will prepare faculty to use Second Life to increase student engagement, establish a presence, and build a learning community in their courses.

Our project, which consists of a one day (6 hour) workshop, will assist faculty in developing the skills needed to effectively use SL to increase engagement, establish presence, and build learning communities in their courses. More specifically, this project will help faculty learn how to perform basic SL functions (e.g., navigating, teleporting, searching, creating networks, gathering information) that they can use in their own courses. Faculty will also learn how to manage their inventory, appearance, and profile, as well as obtain information about building their virtual environment. Not only will pedagogical best practices for teaching and learning in SL will be shared among the participants, but the faculty will leave the workshop with having developed a learning activity and have implemented it into their course design (orientation activity, learning outcomes, assessment, rubric, and activity guidelines). Staff will assist them in organizing the activity in Desire2Learn and will guide them in their use of space in SL.

Overall, this project will prepare faculty for the future impact of virtual worlds as an alternative educational environment that will engage a new generation of learners. Because it is immersive and scalable, the faculty may use SL to improve student learning in the following ways:

- Encourage students to become active participants in their learning by creating and observing their surroundings;
• Expand students’ understanding of social and cultural experiences;
• Enable students to engage in discovery learning in ways that will deepen their cognitive, behavioral, and affective skills;
• Support student experimentation with new art forms;
• Provide a publicly accessible space for students to create, display, and share their course projects (e.g., writings, designs);
• Grant students the opportunity to learn through simulated problem-solving activities that can be set in designed virtual spaces; and
• Actively engage students through role playing activities that support real world, experiential learning tasks.

Activities & Work Plan

The project’s primary collaborative partners are:

1. UW-Milwaukee, Learning Technology Center, Tanya Joosten and Sharon Stoerger
2. UW-Colleges, Patricia Fellows
3. UW Extension, Scott Reeser
4. UW-Green Bay, Leif Nelson

Tanya Joosten is managing the virtual world project at the University of Wisconsin - Milwaukee for the third year. Tanya has studied virtual worlds for over 10 years, presented her research nationally on the effectiveness of virtual worlds and her virtual world faculty development model, and facilitated workshops on virtual worlds for several campuses and higher education
organizations. In the Department of Communication, she started teaching using virtual worlds in 2001 and implemented Second Life into her courses starting in 2008.

Sharon Stoerger is an instructional design consultant in the Learning Technology Center at the University of Wisconsin-Milwaukee (UWM). She received her Ph.D. from Indiana University—Bloomington, and her dissertation focused on pedagogical practices in virtual worlds. She has presented her work on educational uses of virtual worlds at a number of national education-related conferences. Sharon’s research on virtual worlds has also appeared in education, communication, and information science publications.

Patricia Fellows is an instructional technologist and training specialist in the Central IT Department at the University of Wisconsin Colleges. She has been investigating virtual worlds for the past three years. As the CO-PI with Scott Reeser on the UW System InWorld Wisconsin grant in 2009-2010 she helped establish the UW System Island, InWorld Wisconsin, introduced Second Life to Learning Technology Staff and faculty, and plan a year end, in-world conference for UW System faculty and staff. She is working with the UW System Second Life Working Group providing workshops for faculty during the 2010-2011 year. Patricia is also designing an online course on nutrition and weight management that will utilize Second Life in several modules.

Scott Reeser is an instructional technologist and applications developer within the University of Wisconsin - Extension's Division of Continuing Education, Outreach, and ELearning. After receiving his Masters degree in Training and Development from Illinois State University in
1997, he joined UW Extension in 1998, and has spent the last 12 years in the development and support of online educational solutions for both public and private organizations. He has been exploring the use of virtual worlds since 2007 where he was the PI on a cross-divisional grant within UW Extension experimenting with virtual worlds. Since transferring the ownership of the Second Life island from UW Extension to UW System in 2009, he has helped support the virtual teaching and learning space as a UW centralized opportunity for faculty and academic staff across UW System to explore the use of Second Life in a virtual world context.

Leif Nelson is an Instructional Designer/Technologist for the University of Wisconsin - Green Bay. He received a Master of Educational Technology from Boise State University with a Graduate Certificate in Online Teaching. Leif has 6 years of experience supporting, administering, and consulting about instructional technology, including interactive and virtual environments. Over the past 3 years, he has managed the design, development, and implementation of several lessons and projects that were conducted in the virtual world, Second Life, including a geriatric role-play, an ethics maze, and an elaborate poverty simulation. Also, Leif has co-facilitated UW-System workshops and virtual conference.

Prior to Start of Project

- Define expectations for faculty redesign projects
- Describe other requirements and responsibilities for faculty participants
- Identify and recruit faculty participants in UW System, including developing a RFP for faculty participants
Summer, 2011

- Design and deliver one day faculty development program
- Document and evaluate faculty development program
- Faculty will integrate virtual world learning activities into course design
- Continued support and consultation provided by instructional improvement staff

Fall and Spring, 2011

- Faculty will teach redesign courses using virtual worlds
- Develop of research design, including evaluation instruments
- Collect data on faculty and student use

Summer, 2012

- Debrief faculty on virtual world projects
- Analyze data collected from faculty and students
- Submit publications and proposals for presentations for review
- Develop web repository to share with UW System
- Submit progress report by August 1st, 2012, to UW System

Project Outcomes and Evaluation

The goal of this project is two-fold: 1) to prepare faculty to use Second Life in their own classes to foster active student learning; and 2) to make the learning process more attractive to students while preparing them for the 21st century workplace.

The first set of survey instruments will be used to obtain information about the faculty and measure the skill level of these participants. These data will enable us to establish a baseline from which we will determine the impact of the workshop activities.
Another set of surveys will assess the impact of the activities that take place during the workshop. These data will enable us to determine which workshop activities were effective and which ones were not. This will enable us to revise the content of the activities as needed for future workshops. To evaluate the impact of the workshop longitudinally, focus group sessions will be conducted with the faculty after they have integrated Second Life into their curricula.

Once the courses are delivered, we will distribute student and faculty surveys to evaluate the perceived impact on engagement, presence, and community (process variables) as well as student learning, performance, and satisfaction (outcome variables).

**Data collection plan**

- Survey 1 (demographic, skill assessment): Distributed and collected at the start of the workshop.
- Survey 2 (workshop evaluation): Distributed and collected at the end of the workshop.
- Focus Groups: Faculty will be invited to participate in at least one focus group sessions conducted following their use of Second Life in their course(s)
- Surveys 3 and 4 (after course): Distributed and collected at the end of the course.

The mixed modes approach to this research design will provide robust result and provide further insight into the diffusion of virtual worlds for teaching and learning.

**Dissemination**

1. We will present our research at the following UW System venues:
a. LTDC fall or spring f2f meeting
b. UW President’s Summit

2. We will submit a proposal to present our research at the following regional and national conferences:
   a. EDUCAUSE Midwest Regional Conference
   b. ELI Annual Conference
   c. EDUCAUSE Annual Conference
   d. Sloan-C Emerging Technology Conference
   e. Sloan-C International Conference for Online Learning
   f. American Educational Research Association
   g. International Virtual Worlds Conference

3. We will submit the data and findings to the Journal of Virtual Worlds (or similar journal) for publications.

4. We will develop a web repository to share with all System.

**Budget and Budget Narrative**

1. $7,500 for instructional improvement staff - stipends in the amount of $1500
2. $6,000 for faculty stipends for course redesign - stipends in the amount of $500 for faculty course redesign
3. $500 for workshop organization expenses and travel expenses
4. $1,000 for dissemination and conference expenses.
University of Wisconsin System
Curricular Redesign Grant
2011-12 BUDGET FORM

PROJECT TITLE: Expanding the Potential of Virtual Worlds: Exploring the Impact of Intensive Faculty Development on Teaching and Learning

Principal Investigator: Tanya Joosten

INSTITUTION: University of Wisconsin - Milwaukee

<table>
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<tr>
<th>PERSONNEL SALARY</th>
<th>Funds Requested</th>
<th>Cost to Institution</th>
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</thead>
<tbody>
<tr>
<td>1 Faculty and Academic Staff:</td>
<td>Stipends=$500 each</td>
<td>$6,000.00</td>
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<tr>
<td>2 Classified Staff:</td>
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<td>3 Limited Term Employee:</td>
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<tr>
<td>4 Research and Grad Assistants:</td>
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<tr>
<td>5 Student Workers:</td>
<td>Hours:</td>
<td>Hourly Rate:</td>
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<td>6 Other (i.e., Guest speakers, Consultants, etc):</td>
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<tr>
<td>7 Fringe Benefits (see note below):</td>
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Personnel Salary Sub Total: $13,500.00 $0.00

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<tr>
<th>SUPPLIES &amp; EXPENSES</th>
<th>Funds Requested</th>
<th>Cost to Institution</th>
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<tbody>
<tr>
<td>1 Travel: Workshop organization expenses and travel expenses</td>
<td>$500.00</td>
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<tr>
<td>2 Supplies:</td>
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</tr>
<tr>
<td>3 Other (describe): Dissemination and conference expenses</td>
<td>$1,000.00</td>
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Supplies & Expenses Sub Total: $1,500.00 $0.00

PROJECT FUNDING TOTALS: $15,000.00 $0.00

Note: In order to maximize grant funds, we prefer that fringe benefits be kept to a minimum. The PI must seek campus support and confirmation of all fringe benefits incurred. Any other matching support from the campus or external funding source is welcome.
References


