

# A Best Practice Report

# Investigator:

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## Practice Title and Abstract

The PREVIEW – Psych Project is an engaging 3-D interactive virtual scenario environment simulator for the delivery of learning psychology.



## Subject Area and Population

Designed for and with the involvement of undergraduate psychology students, The PREVIEW – Psych Project scenarios were developed to promote individual, collaborative pair and/or group learning of the application of psychology.



## **Description of Best Practice**

Using the problem-based learning method, The PREVIEW – Psych Project is one of several ongoing virtual learning spaces being utilized within Second Life<sup>®</sup>. The content placed by instructors in the 3D learning environment 'world' remains there for students to access or use as part of live teaching lessons. Scenarios are information-driven or avatar-driven. Students work to solve the scenario's central task or query. Through the use of these virtual scenarios, students are actively engaged in witnessing realistic settings and people in which the study of psychology is being applied. The learning process is documented for progress. Mistakes made along the way are true learning experiences without real-life repercussions experienced by human subjects.



#### -- Second Life®

#### Background

Many fields of study rely on <u>problem-based learning</u> for instruction. In order to implement problem-based learning in the field of psychology, case studies had been limited to written reports. Written, one-dimensional case studies hinder the development of <u>clinical</u> <u>reasoning</u> because they are often unrealistic for emulation in real life. Additionally, this approach is unlikely to engage students in meaningful learning. To try to compensate and gain skill, undergraduate students often prematurely enter into work-based

learning environments such as internships or actual jobs. Mistakes made are at the detriment of the subjects (in this case, client patients).

As an innovative response made to address the difficulties of "distributed collaborative problem-based learning," <u>Coventry University</u> began what developed into the original <u>PREVIEW</u> <u>Project</u>. Using new technology available, new innovative opportunities for problembased learning were afforded by utilizing <u>MUVEs</u>. The United Kingdom's <u>University of Derby</u> and <u>Aston University</u> joined forces and in collaboration with the <u>Higher Education</u> <u>Academy Psychology Network</u> and the <u>Joint Information Systems</u> <u>Committee</u>, utilized many of the technologies developed in Coventry University's PREVIEW Project to develop the PREVIEW- Psych Project.



### **Conceptual Framework**

Virtual world scenarios, such as those implemented in the PREVIEW – Psych Project through Second Life<sup>®</sup>, create realistic immersive tutorials. These tutorials are based on user-focused and <u>collaborative approaches</u> to learning. This system of immersive collaborative tutorials provides an engaging way of applying <u>technology enhanced learning</u> through initiating a real-world problem. Practicing skills within virtual world simulations also offers advantages over learning through real-life practice. For instance, students have exposure to a much wider



range of scenarios than they are most likely to be exposed to in any other way. Additionally, the time and pace is made convenient to the learner. Students learn collaboratively through web-based materials including text, simulations, videos and demonstrations. Content and objectives incorporated into the scenarios are designed to encourage group discussion and <u>higher</u>

order thinking. Learning is active, integrated, cumulative, and connected.

The most predominant collaborative approaches to learning that the PREVIEW-Psych Project utilizes are problem-based and <u>case-based learning</u>. Students work in teams to manage or solve a problem. Guided by a tutor or instructor, students share their existing knowledge and understanding relevant to the scenario, agree on what they need to learn, and then determine how to utilize this new knowledge. Case based scenarios offer a platform for acquiring sound knowledge and developing decision making and problem-solving skills.

## Technology and Management Plan

In order to use the scenarios in the PREVIEW-Psych Project, one must set up a Second Life<sup>®</sup> avatar account and download Second Life<sup>®</sup> onto their computer. It is PC or Mac usable. After installing Second Life<sup>®</sup>, one can teleport to the PREVIEW-Psych Project location within Second Life<sup>®</sup>.

internet is Training needed for able to work within the virtual world. Second Life<sup>®</sup> can

learning. up by the students to that displays in situations the psychological students are to As



Therefore, the necessary. sessions may be students to be autonomously Second Life® Activities in the virtual scenarios be synchronous or asynchronous Modules are set instructor for work through real life various concepts learn. students

advance their way through modules, progress (good or bad) is recorded. Mistakes that are made by students through the module are used as real learning experiences for the students without the cost of harm to real study subjects. The instructor may assign a class time to have groups of students participate in an avatar-driven scenario where he assists students in the process. Students may also be instructed to complete assigned tasks on their own and submit reports within Second Life<sup>®</sup>.

# **Critical Assessment**

PREVIEW-Psych Project uses technology in a very applicable and innovative way for teaching psychology concepts to students. The Second Life<sup>®</sup> virtual world scenarios provide a safe and effective method of case study that are interactive and engaging for students. Use of Second Life<sup>®</sup> and integration into the PREVIEW-Psych Project are free and fairly simple to

navigate after some avatar maneuvering practice. Success of the PREVIEW-Psych Project has led recently to the University of Derby creating <u>PREVIEW-Sustain Project</u>, another virtual reality platform in which to promote 'green' issues.

While the pedagogical implementation employed in PREVIEW-Psych Project is unquestionably worthwhile, there are some limiting factors overall. For instance, it is unclear



how many modules or scenarios are available. Additionally, simple items, such as interacting with the PREVIEW-Psych Receptionist, require an upgraded premium Second Life® account. Therefore, it is also unclear if students enrolled in the psychology course utilizing these scenarios need the upgraded premium accounts to participate.

Information provided by the University of Derby and Aston University about this best practice itself is designed from the

standpoint of bragging about the teaching technique (problem-based learning) more so than the actual project itself. The institutes published much supporting the benefit of virtual world case study in problem-based learning.

# Definitions

- Asynchronous Learning learning where people are not online at the same time and interaction does not occur without a time delay, allowing people to participate on their schedules. Examples are email, discussion groups, and self-paced courses delivered via Internet or CD-ROM. [back]
- Avatar-Driven Scenarios scenarios that use a specific character to guide the learning scenario. [back]
- Case-Based Learning an instructional design model similar to problem-based learning that is more open ended. [back]
- Clinical Reasoning a cognitive process that nurses use when reviewing and analyzing patient data to plan care and make decisions for positive patient outcomes. [back]

Collaborative approach – teaching method of working together [back]

- Higher Order Thinking thinking skills including synthesizing, analyzing, reasoning, comprehending, applying, and evaluating. [back]
- Information-Driven Scenarios scenarios that present material containing specific information to be used in order to evaluate and solve the scenario's central task. [back]
- MUVEs 3-dimensional multi-user virtual environments [back]
- Problem Based Learning an instructional approach to learning built upon authentic learning activities that engage student interest and motivation designed to answer a question or solve a problem. [back]
- Second Life<sup>®</sup> an immersive, online-simulated environment, with 3-D graphics that allows users to interact in a manner mimicking real-life interactions developed by Linden Lab. [back]
- Synchronous Learning Learning where people are online at the same time and interaction occurs without a time delay (real-time) and which requires them to attend at specific times. [back]
- Technology Enhanced Learning learning that is enhanced through the use of technology such as video, internet, or software. [back]

## Links –

# Thematically – Related

I American Psychological Association





**Conceptually – Related** 

Learning From Online Worlds



Problem-Based Learning Faculty Institute

#### References -

- Bignell, Simon and Parson, Vanessa. (2010). *Best Practices in Virtual Worlds Teaching. No Publisher. PDF. Accessed* <u>http://previewpsych.org/BPD2.0.pdf</u> June 2, 2011.
- PREVIEW-Psych. "PREVIEW-Psych Virtual Psychology." (n.d.) <u>http://previewpsych.org/</u> Accessed June 1, 2011.
- Savin-Baden, Maggi. "Project Acronym: PREVIEW JISC Final Report." Pdf. (n.d.) <u>http://www.elu.sgul.ac.uk/preview/blog</u> June 19 blog post. Accessed June 1, 2011.
- Schneider, Daniel K. (13 May 2006). "Case-based learning." EDUTECH Wiki. <u>http://edutechwiki.unige.ch/en/Case-based learning</u>. Accessed June 2, 2011.
- St. George's University of London. (n.d.) "Virtual Worlds." <u>http://www.elu.sgul.ac.uk/virtualworlds/index.htm</u>. Accessed June 2, 2011.
- St. George's University of London. (n.d.) PREVIEW. <u>http://www.elu.sgul.ac.uk/preview/blog/</u>. Accessed June 1, 2011.
- "What is Problem-Based Learning?" (n.d.) <u>http://pbl-online.org/About/whatisPBL.htm</u> Accessed June 3, 2011.
- World Wide Learn. "E-Learning Glossary." <u>http://www.worldwidelearn.com/elearning-</u> <u>essentials/elearning-glossary.htm</u> Accessed June 3, 2011.