Design Components

Briefly discuss the components:

Goals

- This virtual instructional module will be an immersive experience set in a medical clinic within Second Life.
- To engage participants in various activities that will help participants identify and learn about concussions.
- Participants will learn how to recognize a concussion, how to respond when their child sustains a concussion, and the importance of rest in the recovery process.

Performance Objectives

- Participants will demonstrate their understanding of what are the signs and symptoms of a concussion by correctly answering the post-test questions at the end of the module.
- Participants will demonstrate their understanding of what to do if their child suffers a concussion by correctly answering the post-test questions at the end of the module.
- Participants will demonstrated their understanding of physical and mental rest in the recovering from a concussion by correctly answering the post-test questions at the end of the module.

Target Audience

- This virtual instructional unit is designed to a be self-paced walkthrough for adult learners over the age of 18 who have children involved in youth sports.
- This instructional unit assumes participants already have an SL avatar and understand how to navigate and communicate in SL.

Strategy

- This instructional unit strives to create an immersive learning environment by embedding aids within the module.
- Throughout the module, participants are presented with opportunities to interact with learning objects placed within the unit.

- The receptionist (participant greeter) provides an interactive social presence as participants enter the module. The medical clinic offers an immersive virtual world environment that offers participants a sense of space, texture, and sound.
- To add immersion and increase learning, the authors purposely avoided using notecards in Second Life for instructional materials. Instead, they relied on Google Docs and videos to convey information to the participants.
- The rationale being that notecards are only accessible within Second Life. Google Docs allows participants the ability to open up visual information, with images and color (not just bland text). They can then download the information directly to their PC desktop for future reference.
- To measure learning, the authors decided to incorporate a pre-test and post-test in the module. At the end of the module, participants will also be able to reflect on their learning experience and evaluate their learning experience (See Appendices A and B).

Timeline of Events

We've approximated 60 minutes as a reasonable time alotted to complete the lesson.

Virtual Worlds Instructional Tools/Technque

This instructional module utilized a number of SL tools and techniques to facilitate learning. In addition to the standard SL tools of notecards and builds, several tools were designed specifically for this module.

- **Prims**: This is the foundation of our instructional module. The prims allowed the authors to create an immersive learning environment. In addition to the learning environment (medical clinic), prims served as the basis for including such tools as virtual posters, URL loaders, Google Doc dispensers, and decoration within the module.
- Scripts: In designing the builds, the authors, used various scripts to allow for interaction. They incorporated hover text, URL loader, dispenser and collector, voice over, and animation scripts to create an immersive learning environment and allow participants to receive materials / knowledge more effectively.

Virtual World Instructional Unit

Demonstrate your virtual world instructional unit and discuss the best design features.

Does your virtual world instructional unit address the following:

- 1. *What is the purpose of the site or sim (how does the visitor know)?* Based on immersive environmental elements within the SIM and interactive prompts provided by LSL scripting, the visitor is kept informed of the different things he or she must do to complete the instructional unit.
- 2. *What is the mood of the space (what design elements create this mood)?* With exception to an intended dose of "realism" at the beginning of the virtual instructional unit, the mood is geared around a

How does the mood support the intended goals of the design?

- 3. What are the different types of instructional activities or learning experiences how do these activities support the intended goals of the design? The different interactive instructional activities are key components that aid in delivering an immersive virtual environment where the visitor feels "connected" with the subject topic. Being able to watch videos, read content, or interact with virtual items by clicking on three-dimensional objects helps to deliver stimulating instructional experiences for remote students.
- 4. *Is there a way for visitors to leave feedback, questions, or suggestions?* Yes, a survey questionnaire is provided for the visitor prior to leaving.

Formative Evaluation

Do you describe your target audience?

Is there a description of how data for the formative evaluation will be collected?

• For our formative evaluation, we will ask two adult participants (a subject matter expert and a non subject matter expert) to pilot the module.

- The participants will be asked to walk through the module and answer a short survey at the end of the module.
- The survey will be dispensed via a link to a survey on Google Docs. Their responses will be collected and compiled within the Google Doc survey.

Are some of the following types of data collected and reported: oral or write-in comments, demographic data, pre-test, post-test, attitude survey, and time of lessons? Is there a summary of the formative evaluation that includes a reflection of:

• What worked?

- ✓ Google Docs proved to be a huge asset in our approach. It provided us a means of delivering content to the visitor without restricting him or her to the virtual environment (i.e. notecards).
- ✓ Use of a video tip "watch_popop" did away with the need to display information in a browser interface. This made the viewing of videos more like watching television than watching a YouTube video.

• What didn't work?

- \checkmark Unable to change the volume for the multimedia streaming (music).
- ✓ Animation scripting isn't perfect. Audio playback is inconsistent.
- What went wrong?
 - ✓ Accidentally deleted entire sections of the designed environment, which required numerous hours of rebuilding.
 - \checkmark Interactive prompts overlapped when it set for repeated prompts.

• What went well?

- ✓ When the "Brain Institute" concept was established and agreed upon, the design elements fell into place, allowing us an opportunity to look at the way we wanted the visitors to "interact" throughout the interactive unit.
- What you would do next time?
 - Create visual instructional objects (prims) for visitor to replay audio in case he or she missed the initial audio instructions.

- ✓ Organize data folders much better.
- What you would always do?

 \checkmark

- \checkmark Would still use voice prompts over hovering text.
- ✓ Would strive to create an immersive environment that is consistent with real world elements condusive with the subject topic.
- What you would do if you had lots of time and money to do it right?
 - ✓ Would hire a professional LSL programmer to create the correct scripts that meet the exact needs of the instructional unit.
 - Create a supplemental website containing all of the information presented within the virtual environment.