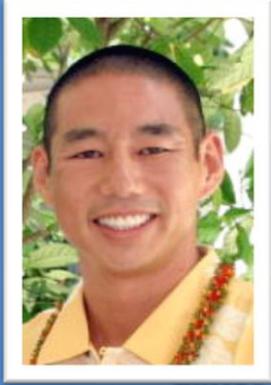


Concussion Education
in Second Life

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Concussion Education *in Second Life*

To design an instructional unit in Second Life that will **dynamically engage** participants in various “virtual” activities with the purpose of identifying and learning about concussions.

The instructional module is intended to be an **immersive experience** set within a virtual medical clinic as a means of bridging the subject content with a virtualized “real-world” setting.

As participants progress through the module, they will learn how to **recognize** a concussion, how to **respond** when their child sustains a concussion, and the importance of **rest** during the recovery process.

Concussion Education in Second Life



Receptionist Center

The interactive instructional unit starts with a **virtual receptionist** who welcomes the guest and gives instructions to the visitor as they make their way through each area of the medical clinic.

Information Kiosk (Pre-Test)

Participants are asked to take an **assessment test** that gauges their current knowledge and understanding of the subject matter prior to beginning the virtual instructional unit.



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Reception Area Television

At the beginning of the virtual instructional unit, participants are asked to watch a brief video overview that is in the form of a lectured course where the topic is illustrated on whiteboard.



Patient Room Television

Within each patient room, participants are presented with a television monitor that displays **information specific** to each instructional learning module (Recognize, Respond, and Rest).

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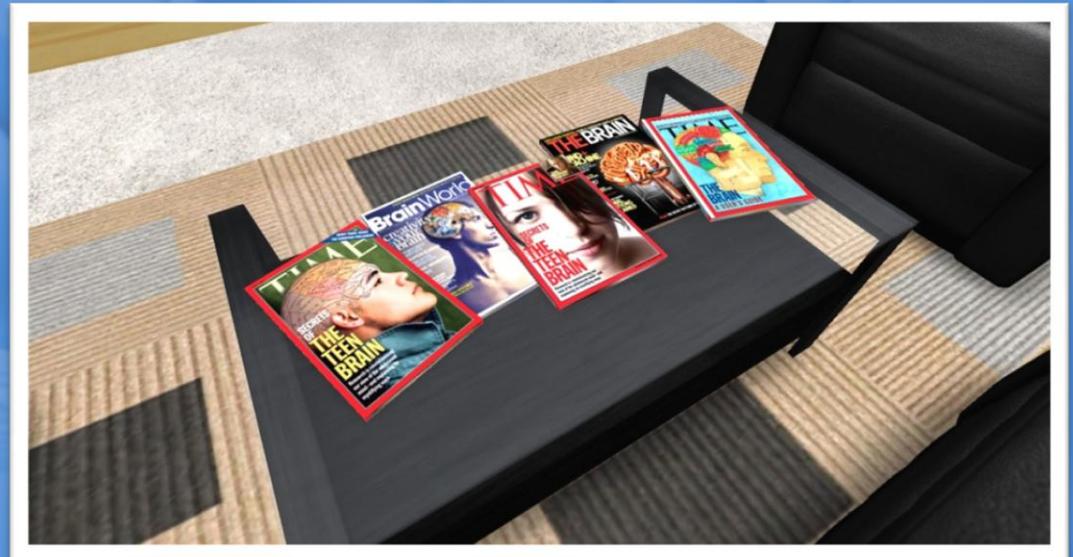


Patient Waiting Lounge

The patient waiting lounge adds an element of **calm and relaxation** for the visitor that is driven home by the warm décor and furnishings. In the background, there is a virtual aquarium with audio and visuals.

Lounge Coffee Table

Participants are presented with interactive magazines that provide **supplementary information** on concussions in the form of online periodicals, editorials, and peer-reviewed articles.



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This instructional unit is designed to be an interactive, intuitive, self-paced walkthrough. The participants in this online virtual instructional unit are **adult learners over the age of 18 who have children involved in active youth sports.**

The participants of this instructional unit should have basic computing skills. Proficiencies needed for this course will be the **ability to utilize the operating system on their computer system** (*i.e. Windows 7, XP, Vista, MacOS X*).

This instructional unit requires that participants have already **downloaded and installed the Second Life software** on their respective systems. In addition, it is assumed that participants have already selected a Second Life avatar and have a basic understanding how to navigate and communicate within the Second Life environment.

Target Audience

Target Audience

Concussion Education in Second Life

This instructional module utilized a number of SL tools and techniques to facilitate learning. In addition to the standard Second Life 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**.

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Interactive Brain Kiosk

Visitors are presented with a rotating model of the human brain. Pressing the color-coded spheres plays audio giving a brief description of the functions for that part of the brain.

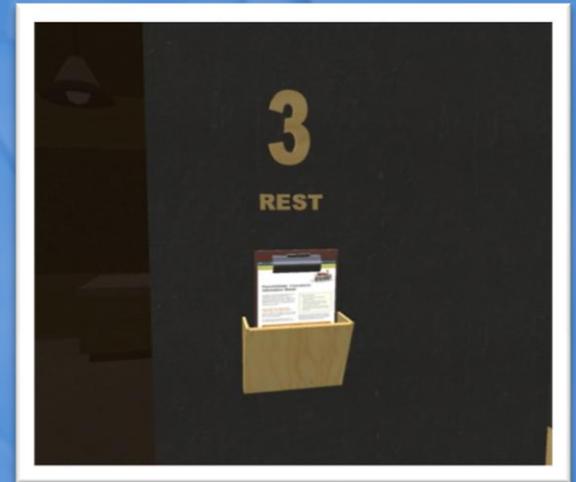


Interactive Concussion

Visitors are given an opportunity to make their Second Life avatar slip and fall on the puddle of water that is coming from the aquarium next to the yellow “caution slippery surface” sign.

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Information Articles



Visitors are presented with **information articles** attached to virtual clipboards hanging in front of each patient room. The rooms are **broken into three topic categories** that cover specific information about concussion education.

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Information Pamphlets

In addition to watching videos in the patient rooms, visitors are also presented with virtual magazines and information pamphlets that show how to recognize and respond to head concussions.

Information Posters / Pictures

To add a sense of realism to the virtual environment, posters and pictures specific to concussion education are hung on the walls throughout the office clinic.



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Virtual Parting Gift

Visitors are offered a parting gift in the form of a free white t-shirt with the “Brain Institute” logo. Visitors can put the shirt on their avatar, showing completion of the virtual instructional unit.



Suggestion Box

At the front of the clinic, there is a suggestion box that provides visitors with an opportunity to **give objective comments and/or suggestions** for the betterment of the virtual instructional unit.

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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.

Google Docs were used to **disseminate information** instead of Second Life's note cards. The rationale is that the note card approach lacks visual impact and is only accessible within second life. Via Google Docs, visitors can download the information directly to their PC desktop for future reference.

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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.

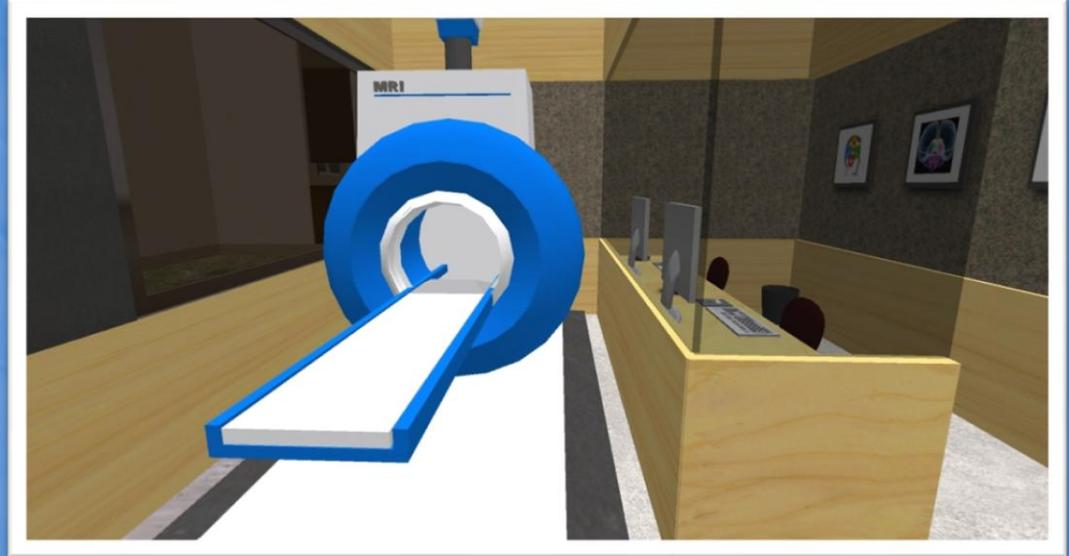
Participants will demonstrate their understanding of **how to respond** if their child suffers a concussion by correctly answering the post-test questions at the end of the module.

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.

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Environmental Details

While the MRI machine serves no interactive purpose, the use of this visual prop helps to bring added **weight and realism** to the observation room to the right.



Observation Room (Post-Test)

This MRI observation room is where participants are able to test their **acquired knowledge and understanding** of the subject topic (sports related concussions) by way of an interactive poll system.