

Checkpoint 2

Research Question(s)

Does a 3-D user design interaction increase learning growth for a geography lesson over a 2-D user design interaction?

Does a 3-D user design interaction increase learning efficiency for a geography lesson over a 2-D user design interaction?

Iv and Dv & Hypotheses

Independent Variables: mouse and Leap Motion

Dependent Variables: Time to complete the task, Accuracy in completing the task, Pre-test and post-test grades on assessment showing growth and learning

Null Hypotheses: There is no difference in time or accuracy in completing a task between the mouse and the Leap Motion.

There is no difference in learning growth in a geography lesson from using a 2-D mouse or 3-D Leap Motion interaction.

Tasks

The user will be tasked with searching for specific places on the globe looking for the time that it takes to get to these locations and the accuracy of getting to these locations using a 2-D mouse and a 3-D LeapMotion.

Before and after the the task, the user will be asked to answer some questions about the places that he/she will be navigating to.

The questions on the assessment will be based on the 2-D and 3-D user interaction using the mouse and the LeapMotion controller to see if there is a difference in the user interaction to the devices and learning.

Progress on Project

Lukas' presentation last week on Unity helped A LOT!!

I have a better understanding of how I want to create the geography lesson in Unity.

Instead of using a UI Interface in Unity, I have decided to use the keyboard for increasing and decreasing speed.

I will continue to place game objects on the globe to create information boxes that will appear giving facts and information about each place.

Expectations for Checkpoint 3 and beyond

I expect to have the Unity project completed in the next week or so.

My research design is completed, so with Dr. Ortega's feedback, I will make necessary changes and begin the user study next week (Nov. 3rd)

I will also start to write up the parts of the report that I already know from the Lit Review that I completed - looking for holes in my research so that I can fill in those gaps.

I am on track to complete the project by the end of November and the first of December.

Presentation

I also have started the presentation for my Lit Review of the paper that I chose; however, I need to have the name of the paper changed on the assigned dates. I'm actually doing a different paper from what is listed.

Otherwise, I am on track to present on Nov. 5th as planned.