

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Informed Consent for Participants in Research Projects Involving Human Subjects

Education using spatial representation in Second Life

Investigator(s)

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I. Purpose of this Research/Project

This proposal discusses our experiment to examine the effect of varying spatial representations on a user's ability to learn information in a virtual environment (VE). Using spatial and non-spatial concepts we will evaluate how spatial representation in a VE contributes to learning. Our hypothesis is that increased levels of spatial representation will contribute to lesson retention, but more so for inherently spatial concepts. Evaluation will be done using metrics like time to complete lesson plans and scores on quizzes about the concepts. The anticipated findings are that inherently spatial topics will be learned more easily in a spatial virtual environment when compared with traditional text and presentation slides.

II. Procedures

The experiment session will consist of three parts that occur during a 90 minute period. The first part is a pre-test on the subject matter to measure your initial knowledge of the subject; 25 minutes will be allotted for this. The second part is completing a lesson plan in our private virtual world under our research group's supervision. The lesson portion

of the experiment will take 40 minutes to complete. After the lesson is complete you will take a follow-up test that is different from the pre-test to measure how much you learned about the subject. The experiment is complete after the post-test and you will be free to leave. The experiment will take place in McBryde 106A. Once all the tests have been completed our group will be able to analyze the data and see which lessons helped students learn the subject material more effectively.

III. Benefits

The benefit to our experiment is it will give researchers a better understanding of how much effort is beneficial when designing educational lessons in a virtual environment. Effort in this sense means the difference between a full three dimensional exhibit in a virtual environment or virtual posters and slideshows.

IV. Extent of Anonymity and Confidentiality

Anonymity is promised for the results collected during the experiment. Our team is only concerned with how each lesson improves users test scores and not the users who take the tests. Your name will not be attached to the data we collect during the experiment.

V. Freedom to Withdraw

If at any time during the experiment you are uncomfortable you have the freedom to withdraw with no penalty in any form.

VI. Subject's Responsibilities

I voluntarily agree to participate in this study. I have the following responsibilities:

To complete a pre-experiment test to measure my initial knowledge of a subject in the designated time.

To complete a lesson on that subject in the Virtual Environment of HokieGrid.

To complete a post-experiment test to measure the amount I learned on the subject from the lesson.

I have read the Consent Form and conditions of this project. I have had all of my questions answered. I hereby acknowledge the above and give my voluntary consent:

_____ Date _____

Subject signature

Should I have any pertinent questions about this research or its conduct, and research subjects' rights, and whom to contact in the event of a research-related injury to the subject, I may contact:

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