



Engineering Psychology Leader Series:
VECTOR
**Virtual Environment
Cultural Training for
Operational Readiness**

In the current military climate, conventional forces are frequently deployed with limited forewarning and without the option to participate in time-intensive cultural training. Yet the skill with which the members of our military forces interact with members of other cultures is often critical for their survival and mission success.



For more information, contact:

Department of Behavioral Sciences
and Leadership
Thayer Hall
West Point, NY 10997
(845) 938-2515

On the Web:
[http://www.dean.usma.edu/
departments/bsl](http://www.dean.usma.edu/departments/bsl)



**Providing new
technology for
cultural
familiarization
training!**

**Engineering Psychology
Program**
Studied By:
Cadet Nicholas Rinaldi
Cadet Juan Rivera



The focus of the VECTOR project is to provide a new technology for training in cultural familiarization through the application of highly experiential, scenario-based training in virtual environments that can be used to develop specific skills for interacting with members of a culture of interest. The focus of our project is to determine whether VECTOR could offer an effective learning environment. We decided to conduct a pilot study in which we would compare the amount of information retained from two conditions. **Our hypothesis is soldiers given VECTOR training will retain significantly more cultural information than a soldier receiving cultural information through literature issued to them.**

Method and Results

We designed our study as a between subject study. Our goal was to test the retention of information of each group (VECTOR and Literature) through a written evaluation.

We measured the results in terms of test scores and confidence levels. The test consisted of a mix of multiple choice and true false questions. After each question, the subjects were asked to indicate the confidence in their answer by circling a number between one and ten, ten being the most confident. The following graphs show the results.

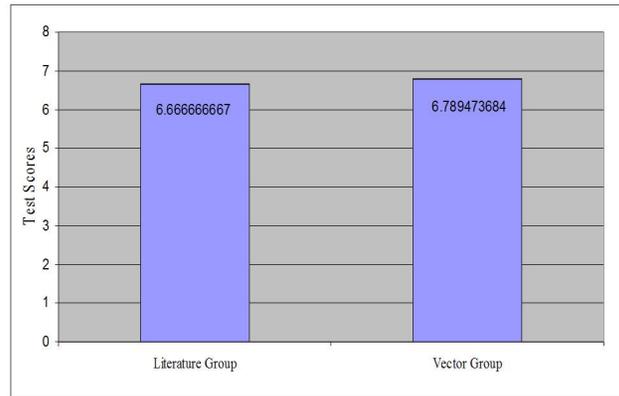


Figure 1. Average Test Scores for each group

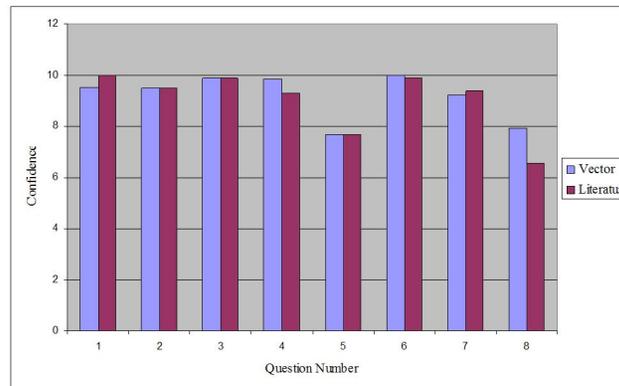


Figure 2. Average Confidence Level for each question by group

Discussion

The hypothesis that soldiers using VECTOR training scenarios would retain more cultural information than soldiers receiving cultural information through literature issued to them is not supported by the results. However, the results of this pilot study do support VECTOR's ability to train soldiers in cultural awareness. This pilot study is meant to lead into future integration between VECTOR simulation and the Behavioral Sciences and Leadership Department (BS&L) core Leadership course. The leadership scenarios developed in written documents would transition into scenarios in VECTOR, facilitating interesting and engaging learning on an individual basis for each cadet in every Leadership class. There is great potential in teaching cultural awareness as well as negotiation skills for that culture using VECTOR coupled with the BS&L learning objectives. We plan on furthering these ideas and goals next semester.

Feedback from the subjects:

“I learned a lot about the Arab culture and was into it because it was a game”

“I feel like I have learned from this experience”

“It was easy to learn because there was an immediate response from each action”