

TOPSS-VW

Transitional Online Post-deployment Soldier Support in Virtual Worlds
2007-present

TOPSS-VW also known as “Coming Home,” explores the domains of persistent, easily accessible virtual worlds for delivering 3D tele-health experiences. Using the Second Life platform, we have created a specialized online virtual world for the benefit of post-deployment soldiers who are reintegrating to civilian life. This is often a difficult time for many soldiers due to both physical and psychological challenges. “Coming Home” provides a dedicated space where soldiers can interact, find camaraderie, and connect to resources for healing and transition. Thus, this environment serves a function similar to the twentieth century VFW Halls.

The project builds on two of ICT’s research strengths: intelligent virtual humans and immersive virtual world expertise. ICT’s virtual humans “live” in this virtual world, where they serve as helpers, guides and storytellers, enhancing player experience and providing helpful information and way finding.

This work expands current virtual world capabilities by creating activities that provide physical – “real” – world benefits to participants. For example, inspired by breathing techniques of many relaxation therapies, a veteran can use controlled breathing in an ordinary headset microphone to cause their avatar to run on a virtual jogging path. Results from a study on this activity have shown a significant reduction in stress markers for participants.

“Coming Home” implements evidence-based Mindfulness-Based Stress Reduction (MBSR) within the virtual world. With experts from the University of San Diego Center for Mindfulness, two experimental eight-week sessions were held. Virtual world mindfulness classes will also be held through our partnerships with AMEDD at Ft. Sam Houston, and the National Intrepid Center of Excellence in TBI and Psychological Health (NICoE) in Bethesda MD.

In addition, veterans can experience a Warrior’s Journey that consists of interactive narratives about the life and ideals of classic warriors, designed to be relevant to today’s soldiers. The capstone of the Warrior’s Journey is an interactive authoring system where veterans can create their own stories.

Visit cominghomecenter.org to learn more about TOPSS-VW.

At the University of Southern California Institute for Creative Technologies leaders in artificial intelligence, graphics, virtual reality and narrative advance low-cost immersive techniques and technologies to solve problems facing service members, students and society.

