DICE-T
Dismounted Interactive Counter-IED Environment for Training
2011-present

The Dismounted Interactive Counter-IED Environment for Training (DICE-T) effort is focused on developing prototype training applications designed to introduce, reinforce and assess dismounted training concepts and principles in an engaging and immersive environment before live training and deployment. The DICE-T experience uses a combination of narrative video and immersive gameplay to deliver over-arching “first principles” related to threat assessment, especially as they relate to IEDs.

The DICE-T effort provides two prototype deliverables: a tablet touchscreen single player version (Android or iPad) and a multiplayer Red versus Blue environment (PC-based). The tablet version can be used as a standalone or can train a squad at one time in a kiosk setup. The multiplayer version accommodates a squad.

The system sends trainees on various interactive missions that emphasize critical components of dismounted patrol: planning a route, executing a patrol and countering threats, and mission debrief/AAR. The game scenarios represent real-world dismounted patrol situations, and trainees receive a video mission brief describing the current threats in the area. As training progresses, difficulty and complexity of the missions escalate as more information is provided in the brief. Each mission begins with a video that introduces threat-assessment concepts and highlights specific lessons for each phase. This material is based on established learning objectives and represents the “crawl” phase of a crawl-walk-run training continuum.

One of the goals for DICE-T is to help novices think like experts before they are deployed. Trainees use what they have learned in the classroom, think about what they would do during live training, and get a deeper understanding of the underlying principles of dismounted counter-IED behavior. Using evidence-based practices and assessment techniques for adult instruction, DICE-T provides an engaging element to traditional classroom instruction, and better prepares trainees for live exercises.

An initial prototype was delivered December 2011. A more advanced version with DSTS content integration was fielded for the Bold Quest multinational training exercise at Ft. Benning in September 2012, with the Red versus Blue multiplayer prototype targeted for December 2013. This project is funded by the Joint Improvised Explosive Device Defeat Organization.

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.