

## Cubic and Army team unveil prototype game for checkpoint stops

Cubic has unveiled a prototype game-based simulation designed to train soldiers in checkpoint operations, similar to the deliberate checkpoints used at entrances of Forward Operating Bases in Iraq. The game, which runs on laptop computers, was developed by Cubic Applications, Inc. employees based at the National Simulation Center (NSC) in collaboration with their government counterparts.

During a recent demonstration at a U.S. Army conference, the Cubic-NSC team showcased a scenario involving an insurgent driving a vehicle-borne Improvised Explosive Device (IED) toward a checkpoint. In this scenario, soldiers were challenged to counter the insurgent attack while exercising their unit Tactics, Techniques and Procedures (TTP) and Rules of Engagement.

The Cubic-NSC team developed this game as part of a broader effort by U.S. Army officials at Fort Riley, Kansas, to provide prototype simulation-based applications to help train the trainers of Iraqi and Afghan Army forces.

The Checkpoint Operations mission was chosen because it is a common mission on today's battlefield, and is ideally suited for training using a game-based tool.

The prototype represents an example of rapid, efficient and cost-effective training support created from commercial-off-the-shelf products to solve a complex training issue.

Games also provide a fun and exciting environment

## Cubic develops prototype Distance Learning System for Army

In support of the School of Advanced Distance Learning at the U.S. Army Command and General Staff College, Cubic has developed a prototype system to enable virtual collaborative learning throughout the Army Force Generation cycle.

The Learning Collaboration System (LCS) combines low-cost commercial off-the-shelf (COTS) technology and software to enable commanders to meet their training and readiness requirements at home station and when deployed.

LCS is a multi-tiered architecture designed for Internet applications. The system creates a fully enabled



with the capability to stimulate soldier involvement and improve understanding in a safe environment prior to combat.

While simulations alone will never replace live, hands-on training with actual equipment, they can provide a valuable enhancement to the Army's "crawl-walk-run" method of training.

By using a video playback capability, the training not only immerses soldiers in an operational situation, but can also be used to show them what they did wrong and what "right" looks like. This capability provides the opportunity for soldiers to repetitively practice and perfect key tasks

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collaborative learning environment allowing for simplified instructor facilitation, subject matter expert and student interaction.

It delivers both synchronous and asynchronous content to student PC workstations via the Internet and the World Wide Web. The students have full access through a selected web-browser to view presentations, lesson content, video, voice and graphic interactions in real time with remote located instructors and subject matter experts. LCS can integrate easily into an existing information technology (IT) infrastructure using Object Oriented technology.

## Checkpoint

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for enhanced performance in combat.

In addition to providing realistic experiential training, this game-based training capability also provides the opportunity for leaders to conduct repetitive training on varied and complex tasks in a short period of time using low-cost, low-overhead computers.

During the demonstration, the commander of the Tank-automotive and Armaments Life Cycle Management Command, asked a combat veteran, a Sergeant First Class in the 1st Infantry Division, "Does this simulation have real value?"

The sergeant responded, "I wish our unit had this before we deployed to Iraq to better prepare us for combat."

An onlooker asked another soldier, "What would you do with this capability?" Based on his recent experience in Iraq, the soldier replied, "This capability would provide our unit the opportunity to practice new TTP and train our unit Standing Operating Procedures while conducting battle drills."

The game also received praise from the Combined Arms Center senior noncommissioned officer. After viewing the demo, he remarked, "This is the training of



the future."

Based on this project's success, the Cubic-NSC team received a request to prototype a similar training capability for Snap (Hasty) Checkpoint Operations in support of the U.S. Army Infantry School.

The NSC, with Cubic's assistance, continues to prototype vignettes in support of Fort Riley training for Warrior Skills, Battle Drills and Personnel Recovery.

While gaming technology has historically been used for entertainment purposes, its transition to a learning enabler is rapidly evolving into powerful off-the-shelf tools for training.

## Cubic evaluates 'GOLE' to access game-based tools

Cubic's Leavenworth-based Training and Education Division recently introduced the concept of an automated Instructional Design System to enable quick assessment, and near-real time retrieval and use, of PC-based games for game-based learning applications.

This concept, dubbed the Games on Learning Engine (GOLE), is currently being tested at Fort Leavenworth and elsewhere.

GOLE presents the instructional designer with a list of PC game evaluation criteria to select the right game to "fit the bill" for their learning application.

The ultimate goal of GOLE is to improve how learners explore, apply actions and reflect upon their performance.

"There is a need for instructional designers to have a gaming assessment tool and archived gaming database system that would enable quick and effective assessments and use of a selected PC game for a specific learning application," said John Lewis, director of Educational Programs for the division.

"GOLE provides such a tool for an Instructional Designer to look at existing PC games and their application under the lens of an educational perspective," Lewis continued. "GOLE brings to the Instructional Design process a method for evaluating the potential PC game in terms of performance tasks, delivery modalities, and learning strategies for their effective integration as part of a course or lesson design."