

# Video games: A learning tool for modern warfare?

By Michael Peck

Armies fight as they train. From Caesar's legionnaires to Patton's GIs, soldiers have learned their trade by sweating and straining on muddy drill fields.

But the Nintendo Generation will learn to fight by playing the Pentagon's equivalent of *Halo 3*. The future of military training became clear recently in Orlando at I/TSEC, the annual trade show for what the National Training and Simulation Association estimates is a \$35 billion industry. The highlight of this year's show was "Serious Games," the growing movement to harness games for military training and education.

The video games resembled the ones teenagers found under their Christmas trees this year. There were games where soldiers learned to patrol Baghdad neighborhoods or perform first aid on digital casualties. Amid the big, expensive flight simulators and urban combat mock-ups on the convention floor, simple laptops flickered with digital Iraqis teaching soldiers how to speak Arabic.

## The new rage

Across the USA and Europe, military researchers are busily exploring the potential of video games. Not because the joint Chiefs of Staff are *Grand Theft Auto* addicts, but because there are other values the military can find with video games.

For one, live training wears out equipment and stretches training resources. The Army National Guard is resorting to portable live training centers because there isn't enough space at the training ranges for all its brigades. Then there is simple economics. When a ride in an F-15 costs more than \$14,000 per flying hour, simulations look cheap. But the multimillion dollar price tags of traditional flight simulators and other elaborate training systems make them too expensive for general use.

So what's left? Serious Games. Simulations with lifelike, immersive 3-D graphics that can be played on a \$700 Dell laptop with a \$90 video card. They cannot completely replace live training, but they can teach tasks from disarming an IED to fixing an Abrams tank.

Soldiers can use them in barracks. It's no coincidence the budget-challenged Marine Corps has been the most aggressive and innovative in taking advantage of video games. Their highly regarded *Virtual Battlespace II* tactical simulation is derived from a similar video game that retails for \$37.99. Nor is it coincidence that the Army recently launched a project office for games that will transplant cutting-edge graphics to Army training systems.

## Are they effective?

Yet behind the beautifully animated 3-D soldiers lurks a fundamental question: Do these games create better-trained soldiers or are they just hype? For all the buzz about games, there is little proof that they work better than old-fashioned classroom training by human instructors or training in the field.

Before we buy a hybrid car, we ask whether it gets better gas mileage than the old guzzler. Yet the effectiveness of militarized games is more faith than fact, although there is some evidence that some games are useful for education. A group of researchers found that diabetic children who used a video game with diabetes-control themes had a 77% decrease in emergency room visits. Researchers at the University of Southern California's Institute for Creative Technologies also report that *X-Box*-style virtual reality simulations have helped Iraq war veterans with post-traumatic stress disorder. Whether this translates into better combat skills for battling al-Qaeda is another matter.

Games could be the most cost-effective solution for a high-tech military. But intensive research is needed to learn how effective they are. The problem is not that games aren't a useful supplement to live training. The danger is that as defense budgets shrink and video games become ever-more sophisticated, there will be a temptation to replace live training with simulations. For all the virtues of virtual reality, it cannot recreate the tension, terror and bloodshed of war.

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"Call of Duty 4": Modern Warfare by Activision, Inc.