

## Paul McLeary

Anyone who has been on a U.S. military base or combat outpost in Iraq or Afghanistan in the past several years won't be surprised to hear that American forces love video games. And considering that sales for the American video gaming industry shot up a jaw-dropping 43% in 2007 over the previous year, to \$17.9 billion, it would seem that the American public shares the grunts' enthusiasm.

The Defense Dept. is taking notice. In fact, it has set up its own training program using a mixture of commercial games and in-house video simulation tools to train troops in leadership, reaction and warfighting scenarios, under the auspices of the Advanced Distributed Learning program (ADL). Robert A. Wisher is the director of the ADL Initiative for the Office of the Secretary of Defense. In a recent conference call with reporters, he laid out some of the latest things that the Defense Dept. is doing with the games.



Marines on patrol in Iraq. Realistic gaming scenarios are increasingly used by the Pentagon to train troops in operational scenarios.Credit: U.S. MARINE CORPS

So far, commercial games like Cassandra, Doom, Corrosion, Peacemaker and World of Warcraft are being used in training exercises at several war colleges, alongside games service branches have developed themselves. According to Wisher, the games are "mainly immersive environments, team-based first-person shooter-type games, where multiple players are involved" (see related story, DTI September 2007, p. 12).

The focus is on multiplayer games so service members can react to the real-time actions of other players, giving the games an unpredictability that in some ways mirrors the real world.

Back in March 2005, the Office of the Undersecretary of Defense for Personnel and Readiness released a report entitled, "Massive Multiplayer Online Gaming: A Research Framework for Military Training and Education," by Curtis J. Bonk of Indiana University and Vanessa P. Dennen of Florida State University. "With greater use of the Internet to support group functioning, there is a need to replicate some of these studies in more dynamic and decentralized online environments," they wrote. "Instead of being located in a computer lab, individuals and groups can be located across different departments, organizations, countries and continents. MMOGs (Massive, Multiplayer Online Games) offer one such environment to explore the quality, confidence and speed of online decision-making."

The study also found that using video games allows trainers greater flexibility in finding the strengths and weaknesses of players, since "different types of games may address preferences for different learning styles or target different ways of knowing the material."

Wisher echoes the findings, saying that "if you've been playing a game, maybe it has to do with some tactical decision-making, and the game could notice you were strong on this and perhaps weak on that, and that can be fed back to the structured learning environment. . . and then you can get additional training in those areas you are weak in."

While many, if not most, of the games are structured around first-person shooter scenarios, there is a push for more games that simulate what soldiers might find on today's complicated battlefield, where they have to deal with nongovernmental organizations, interagency concerns, humanitarian operations and local conflict-resolution scenarios, as well as the enemy. In other words, the fight is just as "nonkinetic" as it is "kinetic." Still, most games at this point focus on the warfighting aspect the service member is likely to face.

One game Wisher mentioned is Ambush, which is a convoy trainer that features actual terrain in Iraq, including "cultural features," and teaches drivers what to look for on the roads they will soon be traveling (see related story, DTI December 2007, p. 20).

"We have had some experiences after people come back from Iraq," Wisher says, "of now having them sit through the ambush-training device and saying, 'boy, I wish I had this before I went over there.' And then they give us feedback [so we can improve programs] we might further design."