

Video games and the military: Engaging the “tech generation”

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For good or ill, the military is often indistinguishable from a large corporation. While “employees” must conform to the company’s modus operandi, the company must engage its employees on *their* terms. In this day and age, that means technology. For a generation raised on cell phones, computers, and X-Box, technology is intrinsic to their being. Thus, the military increasingly relies on video games and computers to recruit and train its “employees.”

In 2007, Career Innovation authored a case study called “[Playing the Recruiting Game: How the U.S. Army has pioneered the use of game technology to recruit the Digital Generation](#) [1].” Using the game, “[America’s Army](#) [2],” as a template, the study made the following conclusions:

- 1) The recruiting story to the Digital Generation must be engaging, authentic and transparent.
- 2) Many in the Digital Generation will expect to be able to virtually explore and even “test-drive” jobs and organizations.
- 3) Games and simulations can play a role in preparing new hires for the job.
- 4) The business case for games and simulations should take into account recruiting, learning and development and performance management.

In this vein, “America’s Army” has been a runaway success. With over 30 million downloads, and nearly 9 million registered users, “America’s Army” has become a cultural phenomenon, going far beyond its original mandate as a recruiting device (though it does that, too). Since the game launched in 2002, the Active Army has only missed its [recruiting](#) [3] [target](#) [4] once (in 2005).

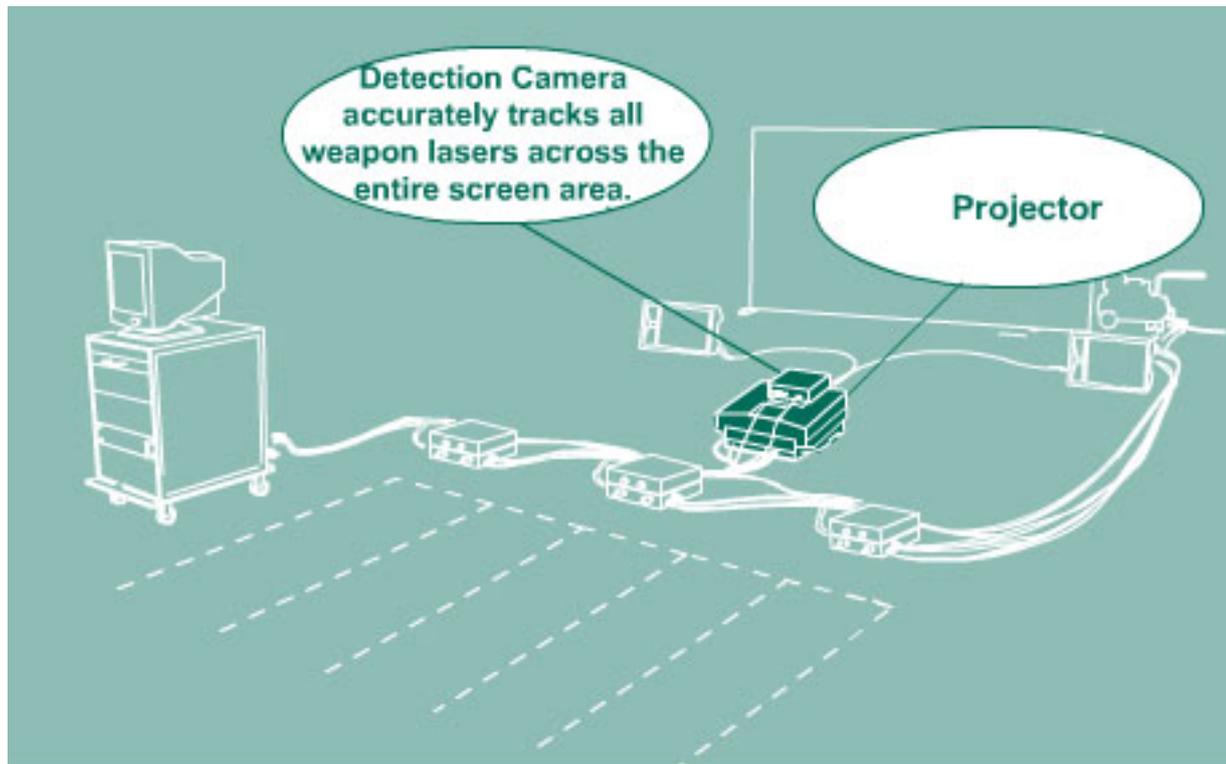
Granted, the link between “America’s Army” and recruiting statistics is circumstantial. But overwhelming intangible evidence points to the game’s impact: a 2008 MIT study [concluded](#) [5] that “30 percent of all Americans age 16 to 24 had a more positive impression of the Army because of the game.” An Army study found that, over a six-month period, 29% of all Americans ages 16 to 24 had had some contact with the game. Furthermore, those who regularly play AA are 40% more likely to be interested in the Army as a career goal. Despite AA’s multi-million dollar budget, the Army considers it a “cost-effective recruitment tool.” Indeed, the millions spent on AA is a small fraction of the Army’s billion-dollar recruiting budget ([\\$5 billion](#) [6] in FY ‘09).

Once a recruit joins, he’s exposed to ever-more sophisticated and realistic computer training tools. The [Engagement Skills Trainer 2000](#) [7] (EST 2000) is a small arms training tool, purportedly the only such device certified by the US Army for ballistic accuracy. Situated in up to five lanes, soldiers use specially-modified weapons to

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shoot targets on-screen. The weapons emit invisible lasers that are picked up by the Detection Camera (see diagram below), as the lasers reflect off the screen. Sensors track each weapon’s performance, and compressed air simulates the recoil.



A diagram showing the EST 2000’s various components. Equipped with specially-modified weapons, soldiers line up in the firing lanes. The floor boxes provide the connection point for the weapons, which fire invisible lasers. The Detection Camera senses the weapons’ invisible lasers reflecting off the screen.

The EST 2000 trains in three modes: Marksmanship, Collective (squad level), and Shoot/Don’t Shoot (judgmental). At Boot Camp, all recruits must train and certify with the EST 2000 before firing a live round. According to the manufacturer, Cubic, this results in a higher first time qualification rate on the live range (better than 90%), and saves the Army hundreds of millions of dollars in ammunition.



A Soldier trains on the EST 2000.

As part of his military duties, this editor experienced the Collective (squad-level) training. The scenario we experienced was fairly simple (kill attacking bad guys), but it’s a terrific way to practice collective marksmanship, as well as squad-level communication and tactics (from a fixed position, anyway). I noticed that the weapons had a tendency to malfunction, but according to Cubic, this is intentional—the software and weapons are designed to simulate real misfires.

A similar program is the [Close Combat Tactical Trainer- Reconfigurable Vehicle Simulator](#) [8] (CCTT-RVS) from Lockheed Martin. The company describes it as “a realistic reconnaissance/convoy environment featuring a three-dimensional view and accurate weapons systems.” Soldiers train in a variety of vehicles, including multiple variants of the High-Mobility Multipurpose Wheeled Vehicle (HMMWV). A 360-degree screen simulates a battlefield environment, and soldiers can fire their weapons either inside or out of the vehicle. Your humble editor experienced the CCTT-RVS, and though the graphics aren’t X-Box quality, and the enemies behave erratically, it’s a good way to simulate convoy operations (i.e. multiple vehicles).

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Soldiers experience the Close Combat Tactical Trainer- Reconfigurable Vehicle Simulator. Note the 360-degree projected environment.

All of these computer training tools are aimed at reducing costs and improving efficiency. But they’re also a good way to engage the “tech generation.” When learning, we respond better to that which we’re familiar with. And the younger generation is inseparable from technology.

Source URL (retrieved on 12/27/2014 - 6:09pm):

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Links:

[1] <http://www.careerinnovation.com/upload/assets/CiDigitalGeneration-USArmyCaseStudy.pdf>

[2] <http://www.americasarmy.com/>

[3] <http://www.usarec.army.mil/hq/apa/download/Missions1974-2009.doc>

[4] <http://www.usarec.army.mil/hq/apa/goals.htm>

[5] http://www.brookings.edu/opinions/2009/1117_video_games_singer.aspx

[6]

http://www.armytimes.com/news/2009/10/military_recruiting_retention_101309w/

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[7] <http://cubic.com/ecc/est/index.html>

[8] <http://www.lockheedmartin.com/products/CloseCombatTacticalTrainerReconfigu/index.html>