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Gorman Serious About Gaming

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Gorman Serious About Gaming

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Long viewed as a diversion for nerdy teen boys awaiting the next Star Trek convention, the reality is video games have gained stature as one of the most effective educational mediums available.

Chad Gorman, a 2012 graduate of the Naval Postgraduate School Center for Homeland Defense and Security, sees gaming as a new preparedness educational tool that may not only inform, but motivate the under-40 set to prepare for a nuclear disaster.

For the next six months, Gorman and a working group will explore developing a video game platform with the aim of creating a system that motivates preparedness. The working group comprises representatives from the Federal Emergency Management Agency, DHS Office of Science and Technology, DHS Domestic Nuclear Detection Office, the video game development community as well as Oak Ridge National Laboratory and the Massachusetts Institute of Technology.

Television messaging? You have to be kidding. Web pages? So 20th Century.

Forget the Cold War era public service announcements that were "only a test." Today's younger learners are more likely to usefully absorb information when they are actively engaged.

"You have a whole population out there – the gaming generation," said Gorman, chief of FEMA's Chemical, Biological, Radiological, Nuclear and Explosives (CBRNE) Branch. "Those adolescents and people under 40 who have grown up with this technology don't want to learn through the older mechanisms of watching videos or reading. They want to be engaged. They are used to immediate feedback on the actions they are taking."

The seeds of Gorman's curiosity were subtly planted during a brief conversation with Dr. Tara O'Toole, Under Secretary for Science and Technology, who inquired about using gaming during a briefing. Subsequently, he wrote a Technology for Homeland Security course paper on the topic and expanded the concept in his thesis, "Getting Serious About Games: Using Video Game-based Learning to Enhance Nuclear Terrorism Preparedness."

Disregard the gaming stereotypes – Gorman's research shows women are just as likely to play as men and that the average age of gamers is a ripe 32-years-old. Gorman cites research by Patricia Marks Greenfield, professor of psychology at the University of California—Los Angeles, showing video gaming cultivates "specialized skills such as inductive learning through observation, trial and error, and testing hypotheses; comprehending multi-dimensional imagery; and comprehension of scientific simulations."

There is a balancing act, Gorman notes, in that the game needs to be challenging enough for engagement, but not so onerous that playing leads to frustration. As a player advances in the game, the idea is to steadily increase the difficulty. At the same time, there is the benefit of an audience that desires to play, rather than, say, a captive group



forced to engage in workplace training.

To spread key preparedness information – the goal is to increase nuclear preparedness – Gorman envisions utilizing a genre known as "serious games." In this genre, players forego blowing stuff up or killing zombies for a game aimed at addressing social and cultural issues. For example, a game called "Darfur is Dying" enables players to experience a life is like in the war-torn Sudan as the player assumes the role of one refugee.

"You put somebody in a scenario where they have to make key decisions to advance in the game," Gorman said. "Serious games and preparedness go together. You can harvest the willingness to learn and get it done."

Most importantly, the game will seek to address a preparedness gap for young people when it comes to nuclear preparedness. A generation that has aged in the post-Cold War era is less informed about what actions to take following an attack.

Just what the final product may look like is a work in progress ("I'll tell you what it looks like in six months," quips Gorman). As well as convening a working group, Gorman noted there are several agencies pursuing gaming as an informational tool.

Initially, the scope of the pilot program is limited with the aim of producing and evaluating a prototype and possibly publishing an academic paper. As the process evolves FEMA will look to lessons learned at other agencies and, the approach could eventually be expanded to address all-hazards preparedness.

Gorman credits his CHDS experience for exposing him to the topic and the support in research and making contacts in the gaming industry that shaped the final proposal.

"Where else would I have been able to pitch this topic?" he said. "I don't know of another environment where I would have received the support to study this. The people at CHDS took it seriously."

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