

Study shows video games highly effective training tools

October 19 2010

Long derided as mere entertainment, new research now shows that organizations using video games to train employees end up with smarter, more motivated workers who learn more and forget less.

A University of Colorado Denver Business School study found those trained on video games do their jobs better, have higher skills and retain information longer than workers learning in less interactive, more passive environments.

"Companies have been designing video games for employees for years but so far it has all been done on a hunch. They suspected the games helped but they could never actually prove it," said Traci Sitzmann, PhD, assistant professor of management at the Business School whose study will be published in the winter edition of *Personnel Psychology*. "We now know video games work, and we know why they work."

Sitzmann spent over a year examining 65 studies and data from 6,476 trainees and discovered those using video games had an 11 percent higher factual knowledge level, a 14 percent higher skill-based knowledge level and a 9 percent higher retention rate than trainees in comparison groups.

The research validates the time and the millions invested by businesses to develop video games for trainees.

Organizations have tried for years to devise entertaining, interactive and

engaging ways to provide employees with a solid grasp of how to do their jobs.

Cold Stone Creamery, after losing money on workers serving up too much ice cream, created an interactive [video game](#) that taught them how much should go into each scoop. Miller Brewing Company is developing a game called Tips on Tap that shows bartenders how to pour the perfect glass of beer. They lose points if the mug hits the tap where it could become contaminated.

The U.S. Department of Defense uses a wide variety of video games for soldiers, sailors and Marines and local emergency departments use them to simulate disaster scenarios.

But until now, no one really knew how well any of these games actually worked.

"This is the first time anyone has looked across all of the trends and crunched the numbers," Sitzmann said. "The study gives us an overall, comprehensive look at the effectiveness of video game training."

She said games work best when they engage the user, rather than instruct them passively. She found 16 percent of the games she studied were too passive and no more effective than other teaching methods.

Second, employees should have access to the games whenever they like.

"One of the advantages of games is that they are intrinsically motivating, resulting in employees choosing to repeatedly engage in game play and mastering the skills," Sitzmann said.

Finally, video games must be part of the instruction but not the only instruction. Employees must be taught before and after the games to

ensure they grasp the entire scope of the job.

"Remember the video game is a tool and not a substitute for training," said Sitzmann. "But if you can engage your employee with the video game, you will likely get a well-trained worker."

Provided by University of Colorado Denver

Citation: Study shows video games highly effective training tools (2010, October 19) retrieved 24 April 2024 from <https://phys.org/news/2010-10-video-games-highly-effective-tools.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.