

Online Training's Got Game

When constructed and used properly, gaming activities are highly effective tools for educating employees about virtually any topic.

We all probably can remember having fun with family or friends playing board games, card games or something else on a rainy day or late at night. For me, I got caught up in the Trivial Pursuit craze of the mid and late 1980s. In fact, I can still remember several of the questions that I answered incorrectly en route to losing – and that was over 25 years ago.

That is the power of games – they are engaging, entertaining, extremely memorable and all the while educate the players. Take these principles and apply them to some aspect of the working world, say health and safety, and you have a formula for creating knowledge with staying power.

The potential power of gaming activities for learning purposes, or game-based learning (GBL), was realized about 10 years ago. Since that time, many white papers have been written touting increased retention rates of training material where gaming activities are used. Whether high-tech or low-tech, games work due to the experience that results.

In the case of custom-developed interactive video games for workplace training, the term “serious games” has been coined. Video game simulation training now is being utilized on everything from retail sales to flying drone airplanes on a battlefield. Virtual environments enable employees to interact and engage in situations in advance of “going live.” This allows an employee to learn about himself, his ability to make decisions under pressure and to be confronted (by other characters). A simulated workplace emersion challenges employees’ knowledge in a very engaging way, all while learning from a variety of virtual interactions.

WHAT MAKES A GOOD TRAINING GAME?

Author Sivasailam Thiagarajan has identified what he considers to be two critical laws that support the use of gaming activities for effective learning:

- The law of emotional learning states that events that elicit emotions result in long-lasting learning. This law suggests that people learn best when they are happy, sad or angry and they do not learn well when they are bored or apathetic. The playful elements of gaming activities add powerful emotional elements.

- The law of practice and feedback states that learners cannot master concepts and skills without repeated practice and relevant feedback. This law emphasizes that passive understanding of content does not guarantee



Match question difficulty to your workers’ knowledge base.



Playing in teams fosters collaboration among workers and can encourage participation.



recall and application.

Based on the laws stated above, the desired recipe for a successful game should result in something that evokes emotion (preferably fun) and can be completed with some repetition (without getting old) to reinforce learning objectives. In the realm of video gaming, the game is working if certain physiological changes are taking place – heart rate increases, breathing increases, sweating, etc.

Unlike game shows on television, where information seems very trivial, games used to support training offer the ability to bend the rules and encourage discussion. Whether your application or need is a team-based, classroom-style game or a one-on-one activity, there are several elements to be mindful of when choosing and building a game to get the most out of it. These include:

Teams or every participant for themselves – Team participation offers the opportunity for a collaboration of knowledge and the gathering

of skill sets to solve a problem. This fosters teamwork and does not alienate or single out participants for a lack of knowledge. Teams also limit a participant's ability to hide out in the back of the room. The advantage of a one-on-one game quiz review, administered through the use of a classroom handheld clicker or online via a learning management system (LMS), is that it allows for individual performance to be tracked and recorded.

Easy, hard or impossible – The quality and level of difficulty of the content must be selected carefully. If the questions are too easy or too difficult, participants check out. It is a good practice to make sure you know a bit about those attending a training session and prepare the game accordingly. Are the participants novices in their knowledge or veterans in their vocation?

A game that allows a progression of content from simple to difficult usually works well and offers a little something for everyone. Developed content

should be reflective of and support the training material covered and learning objectives. Having the flexibility to customize game content and other aspects of game-play is beneficial. Computer game programs offer such flexibility and add a bit of the real look and feel of game show-style games.

Game-play dynamics and you, the host – The host is responsible for preparing and managing game-play activities. This aspect often is overlooked and can make or break the experience. A host lacking in energy and not willing to foster participation will result in a less-than entertaining time. The host is responsible for the pace of game play, being the judge in the event of a dispute and for ensuring that learning principles are reinforced. Be sure to divide the group into fairly matched teams; you don't want lopsided victories.

Game appeal – Chose a game that will meet the needs of – and appeal to – a variety of learning styles and requires the use of as many senses as

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possible. A one-size-fits-all approach is not a good idea. A game that demands physical activity (writing, raising a hand, ringing a bell, etc.) is a must. Offer prizes to the winners and losers. These could be vendor-supplied safety trinkets, candy bars labeled "Think Safety" or something funny from a dollar store.

LOW-TECH ALTERNATIVES

Although computer-based game programs add extra visual and entertainment sizzle, not all games need to be high-tech. Low-tech alternatives exist and can be just as effective as a computer aid.

Legos, for instance, offer great use of multi-colored and multi-shaped blocks to teach the art of communication between two people. With a common barrier between two participants, one describes a structure being built to the other who cannot see it. The objective is to create a mirror image of the original structure that is identical in shape, color and space. Not so easy to do, unless you are listening and communicating properly.

Want to sharpen your eye at hazard recognition? How about the age-old hazard hunt? A photo is prepared (real or doctored) in which multiple hazards exist. The objective is to identify all hazards. Twists on this activity include a team competition, timed for speed and extra points for those participants who can cite the regulatory standard that is violated. With a little innovation, you easily can adapt just about any familiar game to test a person's health and safety knowledge.

SHARING INFORMATION

Health and safety training is nothing more than passing on information with the hope of imparting desirable behaviors, so why not have fun doing it? It appears that games, especially those that have a quick pace and are stimulating visually, speak well to the learning tendencies and needs of those younger persons entering the workforce today.

Today's younger workers have been groomed by Xbox, iPods, the Internet,

text messaging and Wii. Whether your game-training need is for HAZWOPER, environmental review or OSHA 10/30 hour outreach, a game either already exists or easily can be developed. A properly selected, constructed and implemented game activity is an effective learning tool that results in increased retention of training content.

EHS professionals should embrace the fact that gaming activities add fun and entertainment to the training experience, something that everyone from all generations appreciates. After all, Plato said, "You can learn more about a man in an hour of play than in a year of conversation."

EHS

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