Play for Performance® - Realize Results

...Overcoming Common Myths about Learning

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Introduction

Many of us played games as children and still play them with our families and friends. We have come to think of games as entertainment, but not as learning tools. This may explain common reactions in the world of business to designing and using games for education and training.

"If I call it a game, we won't get approval to use it"
"We take our business seriously, it's not a game"

These types of reactions are typical before experiencing the power of a well-designed business-focused game or seeing research that shows such games are far more serious than play. In some cases they achieve better results than any other teaching tools and are ideal vehicles for true learning. However, even *how* we learn best is often misunderstood.

Learning Myths

Much of what we know about learning was discovered forty or more years ago, yet it is still widely ignored or unknown. Common myths include:

- *We learn by listening to experts*

  Our assumption is that if an expert talks and we don't learn – that we aren't listening. Research at Harvard and elsewhere proves that we filter information and that we hear what we want to hear, not necessarily what is said. Many tests show that people are generally unable to apply information to which they simply listen. Hence, we come to the common assumption that adults learn best from experience.

- *Experience leads to learning*

  Social science research has proven that eyewitness identification is frequently unreliable and, using DNA testing, The Innocence Project has overturned nearly 75% of convictions due to eyewitness misidentification. As human beings we don't remember events exactly as we saw them.

  How many pennies have you seen, spent, or lost in your lifetime? By the age of thirty, most of us have had "experience" with about 20,000 pennies. When we have asked hundreds of individuals to draw both faces of a penny, few can do it accurately. Yet, all have had lots of "experience."Eyewitness misidentification is the single greatest cause of wrongful convictions nationwide, playing a role in nearly 75% of convictions overturned through DNA testing.

If you attach a small mirror to a wall, would you move closer or further away to see more of yourself? Most of us look into a mirror at least daily and most people say we should move further away. Yet mirror *size*, not distance, impacts what we can see. Again, experience does not lead to learning. Well, perhaps such experience is too passive; so the next common myth is that:

- *Hands-on learning works best*

  One would expect Harvard and MIT graduates could light a bulb with a wire and a battery. All predicted they could. Yet, no one was actually successful. After high school science students used a socket, battery, and wire to light a bulb, they were unable to use the battery and wire alone to light the bulb.

  Researchers concluded that none of these individuals had learned or understood the principle of electricity, in spite of hands-on experience.

Conclusions

So, if these are all myths, what do we need to learn? We need both heads and hands on experience – either alone is not sufficient.

Much learning in school consists of memorizing to pass a test. That skill may be useful to improve a grade point average, but it doesn't teach us to think. However, work in small groups, with opportunities to discuss and think in a non-threatening environment, helps us to test ideas and does lead to learning. Even in lecture situations, if there are about four breaks per hour for listeners to apply or discuss the content, learning and retention improve significantly.

Games designed around business content and processes have proven to be ideal learning tools. Research at a major university in the northeast showed that students performed better (based on pre and post testing) when using The PHARM Game as a learning tool, They also rated it the most highly of the teaching tools used. Even in situations with completely new information, participants have remarkable success in correctly answering questions, after having an opportunity to discuss and explore the question with teammates.

Not only do well-designed games create an engaging atmosphere, they also provide a non-threatening, playful, competitive environment in which to focus on content and reinforce and apply learning. Learning comes from the game content itself, or associated activities, such as other exercises or lectures. Effective games help to:

- Organize information in a conceptual framework
- Provide an analogy or metaphor to link new information
- Verify understanding
- Make the abstract concrete
- Accommodate different learning styles

Games are the ideal tool to reinforce learning. As research proves is critical, they provide heads-learning and a simulated hands-on environment. **Well-designed games are serious business!**