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TenStep Supplemental Paper

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Seeing is Believing!

Organizations that value their customers and undertake mission-critical projects may run the risk of their training initiatives failing to deliver the desired results. Simulations can reduce this risk and increase training effectiveness.

Understanding the concept

Simulations have three attributes. They:

- Imitate something real,
- Are not real, and
- Can be altered by the user.

Simulation training is based on the assumption that human beings learn from their mistakes. It is natural for a child to stumble and fall when he is learning to take his first steps. When he finally walks, this feeling of failure is replaced with a sense of accomplishment. But as he grows, the risks and consequences of failure increase too. Client displeasure replaces the bruised knee - that's the price of a mistake!

Since the adage of learning from mistakes remains valid, it can be helpful for a learner to fail so that he/she may learn. Organizations now face a dilemma - how can employees be trained so that the mistakes they make while learning don't harm the organization? This theory suggests that if the possibility of making mistakes in the learning environment is high, then the possibility of making those mistakes in the business environment is low, and vice versa.

Simulations are a safe place to fail. When trainers simulate the risk of failure in a learning environment, it produces properly trained employees. Such employees add value to the organization. Some trainers equate simulations with dress rehearsals. Dress rehearsals are like live performances, but if the actor makes a mistake there is no cost - the scene can be repeated until it is perfected. The same is true for simulations.

Ah-ha!

Simulations force passive learners into more active learning by making the learner responsible for his or her learning. Instead of depending on the trainer's charisma to motivate him/her to learn new concepts, the learner is self- motivated to achieve simulation goals. Simulations can be better than experience because they compress time and remove extraneous details. Moreover, unlike real life experiences, they can be optimized for learning.

Simulating leadership

Poor leadership is the biggest risk organizations face. Leadership skills normally come with years of experience. Can simulation teach such skills? SimuLearn's "Virtual *Leader"* program creates a learning environment for such skills. The learner joins as the

leader of a group of five animated Artificial Intelligent (AI) characters with different personalities, points of view and agendas. The leader is assigned the task of making them work together towards a common business goal. The learner, as the leader of the pack, needs to apply his/her leadership skills to make sure that the group focuses on the assigned task. The learner's success or failure is reflected in how the characters respond and react.

Another truism

"As you teach so should you test" is a training truism. Apart from being powerful instructional tools, simulations provide valuable assessment information. This minimizes the risks of inadequate skills before they are put out in the real world. Multiple choices, matching, and sequence questions in traditional assessment tools may measure learner knowledge. However, these tools are insufficient to measure competencies in specific skills.

An individual can be placed in a simulated situation containing a set of problems, putting his new skills to the test. His performance in this situation is a strong indicator of his competency. The theory of "assessment fidelity to learner competence" states that if fidelity of assessments to real world tasks is high, then learner competency on real world tasks will be high, and vice versa. Organizations that use simulated assessments understand the importance of this relationship.

The future of simulations

Training programs are usually vulnerable to two types of errors. One is accepting a false hypothesis as true. The trainer wrongly assumes that the learner has the skills but the test states otherwise. The second is accepting a true hypothesis as false. For instance, the learner may not have the skills, but the test may say he does. Simulations minimize an organization's exposure to the risks and consequences of such errors.

Today's fast changing, high stakes business world needs people who can directly apply the skills they learn in training programs. In addition, the zeitgeist needs assurance that these employees actually possess the skills at the end of the training. Simulations offer the best training bargain without diluting the natural process of learning by mistakes!