Realistic Learning Yields Real Results

Interview with Steve Semler,
simulations design expert and creator of the *Reproducible Simulations Library*

Research shows that simulations have proven to be an excellent way to accelerate learning and improve knowledge transfer. We recently interviewed Steve Semler, simulation design expert and creator of the *Reproducible Simulations Library* about simulations and why they are such an effective training strategy.

Q: What are simulations, and why are they an effective learning strategy?

A: Every simulation—whether it's for learning, scientific study, or entertainment—is a simplified imitation of some interesting aspect of the real world. For learning purposes, simulations simplify real-world environments enough for people to practice skills quickly, safely, and in a way that makes the learning relevant and engaging. "Learning by doing" has proven to be a sound instructional strategy, and simulations make it possible to pack more of this into a learning activity.

Q: What's the difference between a "game" and a "simulation"?

A: Some people think of games and simulations as one and the same, but there are some important differences.

Games teach or instruct through fun or entertainment. When they are used properly, the individual does not realize he or she is in the midst of learning. Engagement and activity are the leading elements and that's why the learning is embedded. Games work best when there are clear lessons and insights to be drawn from the game that apply to the real world.

Simulations, on the other hand, emulate the real world. Individuals are asked to make decisions and take action in the same way they would when back at the workplace. This training technique puts the learner in a "first-person actor" role. Simulations allow learners to experiment and make relevant decisions with meaningful consequences.

The main difference between games and simulations from the learner's perspective? Games create insight-building "Aha!" moments from your audience, while simulations typically generate "Oh, so that's how it works!" reactions. Both training methods are effective when used properly. But when it's real-world knowledge and skill development you're after, choose simulations.

Q: What will the participants learn and take away from the simulation experience that's different from other delivery types?

A: An effective simulation will feel like work to the learner, and it's not always fun. They require participants to immerse themselves in a real-world scenario, make decisions, apply skills, and watch to see the consequences of their choices – good or bad. Even if the simulation is set within an imaginary company or setting, the goal is to get the learner to think, wow, that experience felt real. Now I have a better sense of what to do when I'm in a similar situation back at work.

Because the connection between the simulation and the workplace is so strong, the learning transfer is quicker and easier than other instructional methods. Learners typically find that simulations build greater confidence and better links between the concepts and the practical application of those concepts.

Q: What is the 5-Step Simulation™ method and why is it so effective?

A: The 5-Step Simulation™ method is a way of designing simulations so that they are both effective and easy to manage. Each simulation starts with a short story to set the stage and pose a problem that requires a decision on the part of the learner. It moves the story ahead to another major decision, progresses to a concluding decision, and then ties up the simulation with an end to the story. Both the challenge to the learner and the underlying story itself are realistic, and this is part of what makes it engaging.

You can use the 5-step method to build simulations for individual learners, for partners, or for groups or teams of learners. It's a balanced approach to simulation design. It presents the learner with only the information he or she needs to make the decisions for that story. Extra details that don't affect the learner's decisions in the situation should be left out. This keeps the focus on the main learning and performance objectives the simulation is designed to support. Ultimately, the 5-step method makes it easier for the trainer or designer to decide where to focus and what details to include or leave out.

Q: What, if any, are the challenges or limitations of using simulations?

A: Simulations can be complex (some are VERY complex!) to design and facilitate. The job of the instructional designer or trainer is to decide how big – or small – to make the simulation. If it's too big or ambitious, it's difficult and costly to build, and the learners can get lost in the details and miss the learning points. If it's too small, it risks being seen as trivial or too shallow by the learners. As with any instructional activity, you have to know your audience, your outcomes, and what resources you have available to you. The intent of the 5-step method was to create a simple, step-by-step method for designing simulations that would be small enough for one trainer to manage, yet relevant enough to engage learners.

Q: What should a trainer consider before choosing a simulation and how should trainers use simulations in their curriculum?

A: The first consideration for the trainer should be, "What skills do learners need to be able to perform better?" Generally speaking, it is the organization's goals that drive this need for training. The better we can identify these on-the-job performance requirements and get specific about them, the easier it is to decide whether or not a simulation is the most effective training tool. I always encourage trainers to cut down the amount of explaining, and instead let the simulation be the mechanism for learning. That way, we get to "learn by doing" sooner and with greater impact. Use the simulation to get your learners doing the activity, rather than just talking about it. I like to help trainers convert more traditional presentation-and-discussion programs into simulation-enhanced learning by following this strategy.

Q: The *Reproducible Simulations Library* (RSL) includes 24 paper-based simulations. Can these low-tech simulations be used in an e-learning environment, and if so, how can a trainer make the conversion?

A: A lot of people I talk to automatically think "technology" when they hear the word "simulation," but that's not necessarily the case! Let's start by assuming that a trainer has some comfort with developing e-learning. You will need an authoring tool that supports branching. Personally, I like the functionality that comes with Articulate, but there are a lot of good tools out there. The sky is the limit if you have a technical partner to help you with the programming and development. The main design principles are the same whether you are using traditional delivery methods or e-learning – set the stage, make an initial decision, progress to another major decision, make a concluding decision, and reveal the results.

The *Reproducible Simulations Library* includes a wide range of pre-designed simulations, each providing all of the information a trainer needs in order to develop an e-learning version. This is a big advantage because it gives the developer a good starting point for converting paper-based simulations to an e-learning format. Having this framework streamlines and shortens the e-learning design process.

Q: Do you have a specific experience using 5-step simulations that you can share?

A: When I was developing a next-generation Train-the-Trainer course for the American Management Association, I built a performance consulting simulation into the program. This one was used as the capstone activity for the course. The “Venn Software” training needs assessment case was introduced early in the three-day classroom program. Information was added in each of the modules of the course, developing the situation and demonstrating other learning points. Finally, the participants entered a realistic simulation, armed with background knowledge about the simulated organization. At that point, the participant team received another "dose" of information along with a task. (Step 1: Setting the Stage.) Then they assessed the learning need, developed a recommended learning solution, and made a presentation to sell that solution to executive management. (Steps 2, 3, and 4: Make Three Meaningful Decisions.)

The debriefing period after the simulation took the actions and decisions of the participants, peer feedback, and instructor observations into account. (Step 5: Reveal the Results.) By working with the simulation task, the participants got the opportunity to "put together" the things they learned along the way. This gave them rich insights and material to consider for the development planning wrap-up. The overall result was a very engaging end-of-course capstone simulation that helped the participants lock in what they had learned by applying it in a realistic scenario.

About Steve Semler

Steve Semler is the Director of Simulation Design at LearningSim, where he has developed the 5-Step Simulation™ method and dozens of simulations for training and education. Steve’s simulations have been used by Personnel Decisions International, The Schwan Food Company, Honeywell, and many other Fortune 500 clients.