



Simulation With Attitude: Techniques to Increase Learning Effectiveness

Anyone can make a simulation, simply by stringing together a sequence of user actions and system responses. But a simulation that actually *teaches*, like a work of art, takes skill and experience to create.

Here are some things to consider when developing training simulations, particularly ones that teach “soft skills” such as coaching, sales, and leadership. Each is focused on improving learning effectiveness.

Focus on building judgment

It takes good judgment to apply skills and knowledge appropriately. Simulations are ideally suited to helping learners develop the judgment they need to succeed at their job.

It’s easier to build judgment a little at a time. Dumping too many points into a single interaction diffuses focus and inhibits skill transfer. Instead, create a series of interactions, each focused on different skill sets. For example, in a simulation teaching sales skills, include situations that target question-asking, others that target handling objections, and others on knowledge of products and/or processes.

At the same time, don’t overly simplify the simulation. One of the keys to a simulation’s effectiveness is its ability to train in context. Capturing some of the noise and blend of capabilities required for success in the real world is essential to learning. The art is to simulate the complexity of the real world, without overwhelming the learner.

Simulate decision-making, not reality

There’s a temptation to simulate everything involved in a task. That’s not a good idea. Ultimately, you want to empower employees to make the right decisions on the job. If something in your simulation isn’t facilitating better decision-making, get rid of it.

For example, in a simulation designed to sharpen sales techniques, you may be tempted to include steps in submitting an order, because that’s a necessary part of the salesperson’s job. But, if there aren’t selling skills associated with it, then it isn’t serving the core mandate, so leave it for another module or course. Simulations portray reality, but they are *not* reality—learners know this as they engage in one. Include only elements that contribute to the learning, and skip everything else.

Make choices short and sweet

You should be able to read through a set of choices and tell each one apart without rereading them. A simulation, like any interaction, has a rhythm. Short choices create a quick pace that keeps learners engaged.

To accomplish this, write user choices that represent what people want to *accomplish*, not what they want to say or *do*. For example, in a coaching simulation, a user choice such as “Ask about the current situation” is better than a choice such as “What do you think is going on in your department?” The reason is, in the latter, the focus shifts to *how* you say something, rather than *what*

you say. Since there are many ways to say the same thing (e.g., “How do you feel about the current situation?” and “It sounds like you have some ideas regarding the current situation. Can you share them with me?”), learners can get caught up in the words rather than the underlying strategy. They might not choose an option because they think to themselves, “That’s what I’d say, but not the way I’d say it.” You would rather have them thinking about the strategic decisions they have to make, rather than the verbiage.

It’s also interesting to note that when actions are written at the level of what the user says, the correct choice is often the longest. This makes it easy for learners to “game the system” and succeed without thinking deeply about the content.

Use narration to skip the dull stuff

Good simulations immerse users into a story and ask them to make decisions at critical points. Don’t waste time by asking users to make decisions that don’t matter. When there’s information that supports the story but doesn’t create a critical decision, insert a “narrative bridge.” A narrative bridge is an intervention—a popup window, a coach, a voiceover, etc—that describes the next events and so “fast-forwards” them to a later point in the story, like a movie voiceover that takes viewers to a critical plot point more quickly.

For example, in a simulation focused on customer service skills, you might insert a bridge at the point that the agent needs to gather information necessary to call up the account on the CRM screen. This may be part of the task in real life, but unless it involves decision-making related to customer service, chances are it’s better served via narration. So, rather

than having learners execute the steps that are involved, you can simply insert a popup that says “You take the necessary information from the caller and call up the account on your screen.”

Provide realistic consequences of decisions

Whenever possible, show, don’t tell. When learners make a mistake, let them see how it plays out – let them feel the burn. This will have a much greater impact on them, and so improve learning. It also adds to the excitement level.

This is so important that, if you can’t show the consequences of an action, consider leaving it out. If you simply tell learners what happens when they do something wrong, they might not believe you, and even if they do, they’ll probably forget it. We all learn better by the seat of our pants.

Be frugal with coaching

Some simulations stop a learner whenever they make a mistake, to provide feedback and send them back to try again. This creates the “boy who cried wolf” effect: after a while, the learner blocks it out and doesn’t pay attention. Focus your coaching on mistakes that have big consequences. Otherwise, a learner may question why a mistake matters.

When you do provide coaching, resist the temptation toward long sermons. Simulations are all about learning by doing, not learning by being told. Make your point and let learners return to the action, before they lose their focus and forget what was going on.

The last thing to consider when creating coaching is that when you provide it, avoid giving the right answer away. You want learners to think, so

make them stretch a little. At the same time, coaching should be informative: don't be overly cryptic or vague, either. The trick (as any parent or teacher knows) is to be helpful, without taking over.

Give learners a chance to recover from mistakes

When you make a mistake in the real world, you can't press rewind and do it again. Don't let learners of your simulations do so either. Create additional choices that either correct mistakes or make them worse. Build in the ability of learners to pursue multiple strategies, and to work out of jams.

This has a dual effect: not only does it heighten learning by getting learners to think deeply and thoroughly about an issue, but it makes the simulation more challenging, and hence enjoyable to use, which keeps them engaged.

Don't let learners flounder too much

While it's important, both cognitively and motivationally, to give learners the opportunity to recover from mistakes on their own, be ready to intervene at some point if they get stuck or get too far off track. Otherwise, they'll become frustrated, which isn't conducive to learning and may drive them away from the training.

At Experience Builders, we often employ a "3-strikes" rule: when learners stray from the correct path, we give them several opportunities to recover and get back on track. If they don't recover after several opportunities, we then intervene to provide coaching and either send them back to the beginning, or re-route them to a later point by means of a narrative "bridge" (covered previously). In many domains, this works very well.

Provide a debrief after the simulation

When the simulation has ended, always provide a high-level recap of the learner's performance. This reinforces the learning that happened in the simulation. It also helps re-focus the learner on the forest, instead of the trees.

The critical thing here is that the feedback should be at a high level and cover general trends in the learner's performance. Don't simply provide a detailed play-by-play. Instead, give them a small set of lessons to take away from the training.

Design your interface around the content

A good simulation needs to be immersive. Don't allow bells and whistles on the interface to detract from the core task at hand. If people are paying more attention to the interface than to the "story" in the simulation, something is wrong.

Focus on the interaction, not the presentation

Devote your resources to creating compelling user actions and system responses that play out the consequences of learners' decisions. That's where the biggest payoff will occur from a learning standpoint. Don't let the simulation become simply a vehicle for delivering a lecture to the learner. If people are doing more reading and listening than decision-making, you've sacrificed the effectiveness of your e-learning.