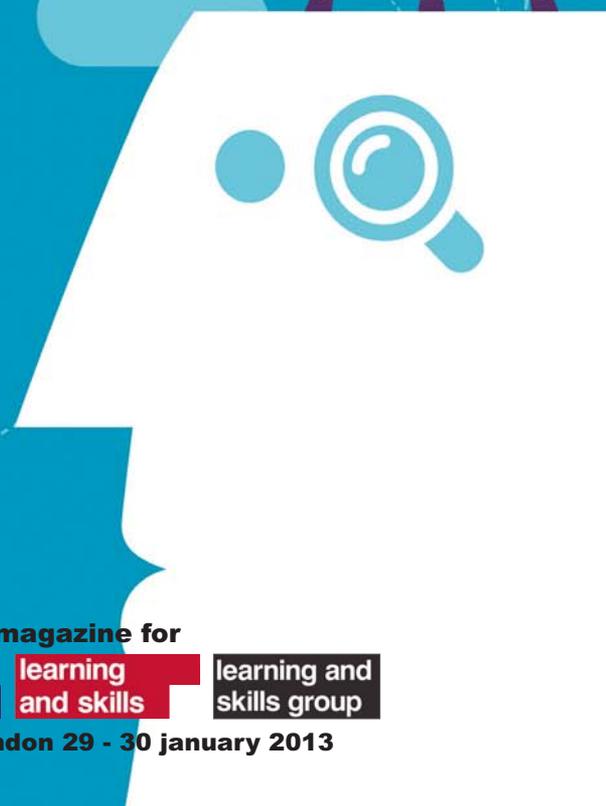


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SIMPLE BUT EFFECTIVE BRANCHING STORY TECHNIQUES

Clark Aldrich explains why one type of educational simulation, known as 'branching stories', is perfectly suited to organisational learning.

An increasing number of organisations are using educational simulations in their learning resources to develop competence and conviction in their employees. The Branching Story is a particularly successful technique that allows students to progress and learn by making a series of discrete decisions that affect an outcome. Specifically: students start with a briefing (for example: "You arrive at work and find a..."). They then advance to a first multiple choice decision point, or 'branch'.

1: Save learner time by keeping your back stories lean and your names descriptive

Players hate to learn the names and histories of companies and characters. While this is sometimes necessary, keep it to an absolute minimum. Instead, use amalgamations of well understood companies where possible. Use the business case study honoured tradition of 'Big Search' for a Google-like company, 'Temp Workers Inc.', or 'SportsWear Corp.' Use character positions instead of – or alongside – names. So use 'Jack Jones, the defence lawyer' or just 'the defence lawyer' every time that character is featured, rather than just introducing Jack Jones at the beginning and expecting people to remember him.

2: Give the learner no-consequence decisions that mirror the real world

For many branching stories, such as those used in this example of ethics training (figure 1), everything comes down to a single moment. Does the player do something wrong, or not? And almost inevitably, players are on their best behaviour. A traditional solution is to present such an excruciatingly contrived scenario that the player – understanding that it is A Big Choice – studies it and then comes to an intellectual conclusion, which may still be right or wrong.

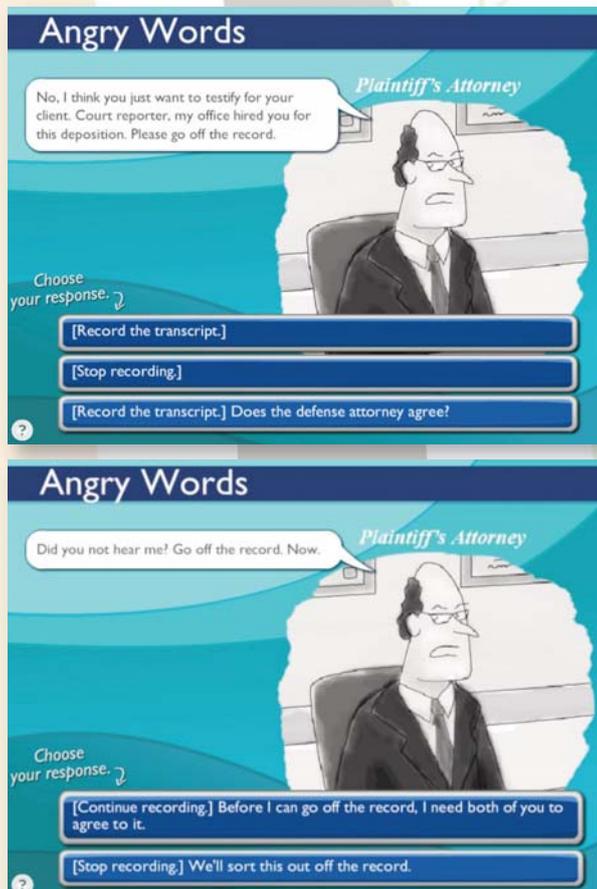
Instead, why not create a more nuanced scenario? Decisions, right or wrong, are made in a similar emotional state and context matching the real world, either heightened or overly routine. In some cases, I deliberately desensitise the player to the type of big decision they will eventually be required to make. In one simulation, the player has to decide if they are going to give the onscreen character some sensitive information, or not.

Based on their action, they see a scene that provides feedback, advances the story and sets up another decision. Students continue making decisions until they either win or lose. They then get some type of review.

Many have experienced high-end, video-based examples of such sims from virtual experience company WILL Interactive. In contrast, a 30-minute training course may use seven or eight distinct mini-scenarios.

When creating these smaller scale branching stories, the following six techniques will turbocharge your programmes and enable you to have a much greater impact than a relatively low-tech resources and modest budget would suggest.

And, yes, many of these techniques also work in other types of e-learning.



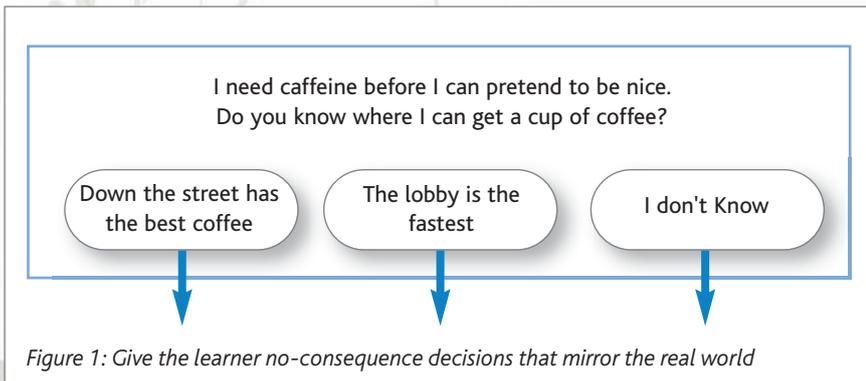


Figure 1: Give the learner no-consequence decisions that mirror the real world

To set this up, I gave the learners a bunch of short, no-consequence choices to be made with the on-screen character, leading up to the big one, as in figure 1. This also meets a second goal. **In this age of computer games, we must keep the metronome of user engagement predictably brisk.** Try to avoid situations where the player has to read or hear more than three sentences before performing some activity.

3: Nest information and available actions to encourage learner rigour

Make some information and action available only if the player seeks it out. The technique works especially well when *non-essential* and *critical nested decisions* are used in the same sim. For an example of non-essential information, consider figure 2. This makes the sim easier for a player to go through a second time, so that they don't have to hear the same back-story repeated over and over again.

However, it also sets a useful (and misleading) precedent that nested information is non-essential. Then, when

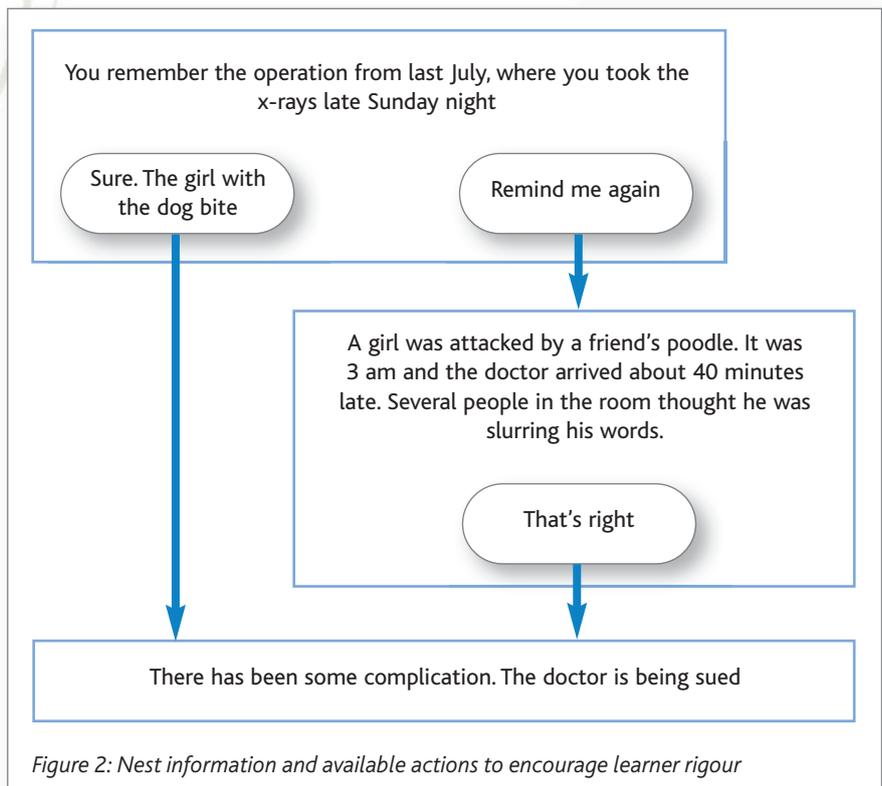


Figure 2: Nest information and available actions to encourage learner rigour

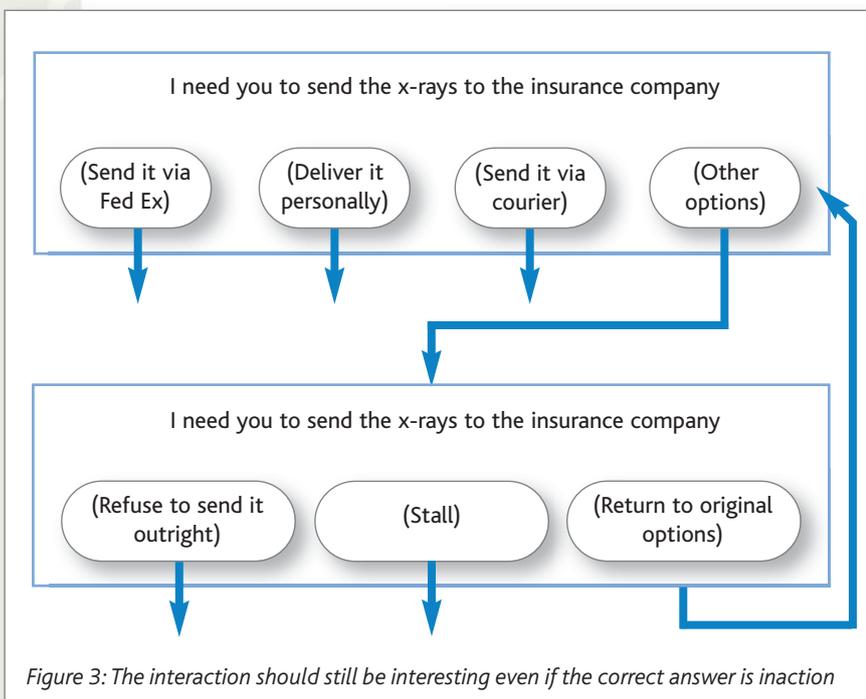


Figure 3: The interaction should still be interesting even if the correct answer is inaction

the real high-stakes ethical or legal question emerges, it can be buried (nested). The right answer could be to do nothing at all, as in figure 3.

Every interaction should continue defining the character, moving the story along, and creating a feeling that there might be consequences of inaction for the player.

4: Use character and mood to increase emotions and real-world impact

For a short branching story, you can use characters and mood to create the target

emotion. If, for example, the right ethical choice requires disobeying a direct request, you might create an opinionated persona for the individual making the request, perhaps judgmental and authoritative. You could further characterise the person as being pressurised or in a hurry. For such an example, set in a data protection sim, see figure 4 overleaf.

If you have done a good job on the instructional design, the emotional pressure to choose an incorrect option, is very high.

The correct choice in a data protection scenario is of course 'Don't print the presentation' because this would involve using a thumb drive which compromises information assurance.

Similarly, if a player has to coach a person to turn down some work because of a conflict of interests, you could create a character who is highly sympathetic and in need of money. One should not telegraph the real challenge too directly.

5: Build lasting conviction by making sure learners know why they failed

When a player arrives at a negative outcome, show them the immediate, apparent, and high-probability consequences (which are often positive) of the traditional behaviour. But also show the long term, hidden, and/or unlikely-but-possible consequences (which can be devastating).

Allow the player to experience the direct negative consequences emotionally. Visualise the 'invisible system', which is the flow of events that people can't normally see, but which lead to problems.

For example, consider a cyber-security sim. Do not just say: "You fail. Putting the thumb drive in the computer is a violation of IA Policy 17543b."

Instead, point out the consequences of their action, with illustrations: "Unknown to you, the thumb drive had been infected with a worm during the manufacturing process that had not yet been identified by any major anti-virus company. When any thumb drive is put into a USB port it auto-runs a small programme. This time, the virus was able to infect the local computer and then two days later, the server. Within a week, the virus had spread to remote computers as well.

"Mobsters in a foreign country were able to access passwords and then other critical information, which they sold for two thousand dollars to a foreign government. The criminals used this money to bribe officials to get a ton of heroin into the country. The foreign government accessed pieces of proprietary intellectual property, which they passed onto competing companies."

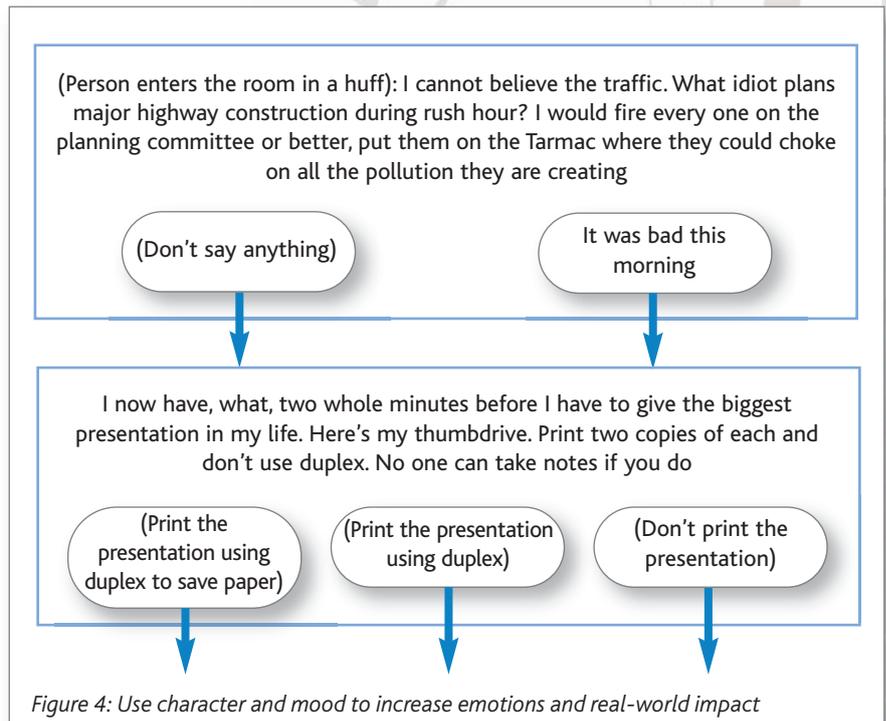


Figure 4: Use character and mood to increase emotions and real-world impact

Then, of course, allow the player to try again. This means **the mini-sims must be short enough to encourage replay**. Then – in a well-designed simulation – players should never make the same mistake twice. In fact, the player should exit the learning as an avid supporter of any relevant rules.

6: Sometimes put learners in the role of coach to develop empathy

Branching stories are primarily first-person stories. They are from the player's perspective. But this does not mean that the learner must always take on the character facing the high consequence

situation. One nice optional technique is to put the player in the role of the coach.

Structurally, **this means that someone comes to you with a problem**. For example, a friend may say: "Can I take you out to lunch? I need your advice." Then, when eating out, the friend can explain the problem and solicit advice. Try to avoid any kind of formal relationship (i.e. boss, HR department, actual coach, teacher, superior officer) in these coach roles, unless that is the explicit purpose of the scenario. I like to create an assumed high trust relationship (such as a friend you haven't seen in years, or a former employee, or former mentor, or the adult child of a best friend).

Most importantly, this develops player's understanding of their proactive role in shaping their environment, and not just their own behaviour. For many organisations, **the simplicity of branching stories and their ease of deployment make them easy to commission or to build in-house**. But be warned – you may soon get hooked! **They are the perfect 'gateway drug' to the habit-forming usage of many more interactive educational simulations and serious games.**

Download his sample portfolio from <http://dl.dropbox.com/u/27077549/clarkaldrichdesignsimulationportfolio.pdf>

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Having It All

You find it difficult to split your attention between taking down the testimony, monitoring the video on the laptop, and adjusting the audio levels.

You wind up with more errors than normal in your transcript, and, when you review the video, the quality seems very poor.

The audio is too low in some portions, and the charts and exhibits that the deponent referred to are off-screen.

Choose your response. ↷

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