
Beyond
the Next
Button
THE eLEARNING
GUILD

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Introduction

The term "eLearning" has been around for well over a decade. It's amazing to look at the technologies we have today, and to look back at how much has changed since the term first emerged.

Hardware itself has changed. While we still use desktop computers, they are much more powerful. They're also not the only game in town anymore. For many, smartphones and tablets have emerged as the primary device for consuming content.

How we access content has also changed dramatically, as we have moved from locally saved content to content accessed in real time via cloud-based platforms. The internet itself, and our constant access to it, has impacted the world of computing more than any other technology.

These changes, among others, have rapidly transformed the ways we access and interact with data and one another in a digital world.

Our practices in the world of eLearning haven't always kept up with this pace of change. While there is amazing and innovative work being done in our industry, many struggle to go beyond standard templates in a world that constantly asks us to deliver solutions faster and cheaper. This can easily lead to a sizable gap between what your eLearning is, and what it could be.

This eBook is a tool that can help you bridge this gap. We've reached out to some of the most respected and innovative professionals in our industry and asked them a fairly simple question: What navigational and narrative structures can eLearning professionals consider to drive their learning programs?

The question was intentionally vague, as we didn't want the irony of repeating the problem the eBook was hoping to solve—that is, breaking out of the box eLearning can find itself stuck in when we constantly follow the same template.

Beyond the Next Button collects the answers and suggestions these industry leaders shared. You can apply many of these suggestions in your work right away.

My larger hope is that the variety of suggestions shared in this eBook will open your mind to what is possible when we look beyond the traditional "Next button" paradigm, sparking new ideas of your own that will lead to more innovative learning programs for your organization, and for our industry at large.

David Kelly
Executive Vice President and Executive Director
The eLearning Guild

Clark Quinn

Clark Quinn is the executive director at Quinnovation, where he consults on performance systems architecture and strategy. He combines a deep background in cognitive science with broad experience in technology, delivering innovative and successful solutions for Fortune 500 organizations, government, not-for-profits, and education. An in-demand presenter, Clark is also the author of numerous articles and four books, including titles on games and mLearning; his most recent book is *Revolutionize Learning & Development: Performance and Innovation Strategy for the Information Age*. Clark holds a PhD in cognitive psychology from the University of California–San Diego, and he received the Guild Master Award in 2012 for his accomplishments and contributions to the eLearning community.

Many years ago, we were creating an early online learning course. This wasn't your typical university course of the time, but instead was intended to be either straight to consumer or straight to organization. We were partnered with a company that taught how to deal with the media, and we figured a course would help with this topic that, purportedly, people fear worse than death.

We did a number of innovative things: We had a very scaffolded learning path with increasing challenge, we took a professional writer to my overthought prose and boiled it down (lesson learned), and we used comics as a low-bandwidth, high-concept medium. We also had a programmed answering machine as part of the final practice, to really require performing at a prompt. And we were innovative about the navigation.

We had a recommended path, of course, but we wanted to support learners in taking control of their learning. While we followed good instructional design principles, we also wanted to support learner choice. This was before authoring tools had auto-built outlines, so we were handcrafting the learning experience.

We had a rigorous structure around our content, with concepts separated from examples, and again from practice. They were labeled in user-friendly terms, of course, rather than our design terms: *Why, How, What Works, Your Turn*. But we didn't assume learners would necessarily want to see them in our order. We reckoned some folks might want examples first; others might want to see the problems first.

We didn't even have built-in Next buttons back then, but we thought that we should provide a recommended path, as well as supporting learners to choose the path they might prefer. We used the "follow the bouncing ball" approach—in this case, a dotted line led from image to text box to other content element down the page (as the content was brief and spaced out) and then pointed to the one button out of several that was our *recommended* path, but the rest of the options were there too.

Of course, we had created our own panel in the upper left with the course outline that also could work as a navigation mechanism, and from there you could go anywhere in our three-module course (with sub-modules). The buttons on the page were just within the module.

What we found, incidentally, was that about half the learners followed the bouncing ball, and half took responsibility for their own learning path. This was also the learning design that subsequently (and independently) was seen in the UNext courses.

These days, having the outline available and visible to the learner as a navigation tool (even if it is only available through a click) is one approach. Learner control is a good thing, as long as they also have a way to follow the recommended path.

Another approach, similar to what we did in the Workplace of the Future course, was to make the problem central, and make the content available as links to open *from* the problem. That is, you were facing a challenge when you accessed the information, making it more relevant.

And, of course, complex practices—e.g., branching scenarios or full simulation-driven experiences—can punctuate the "Next" experience to drive real meaningful decisions and then learning.

Ultimately, it's about learner control and making that visible. Provide a safe path, but also support the explorers. It'd be interesting to see how those who choose their own path do relative to others!

Diane Elkins

Diane Elkins is a co-owner of E-Learning Uncovered and of Artisan E-Learning, a custom eLearning development company specializing in Articulate Studio, Storyline, Trivantis Lectora, and Adobe Captivate. Diane has built a reputation as a national eLearning expert by being a frequent speaker at major industry events, such as ATD ICE, ATD TechKnowledge, DevLearn, and Learning Solutions. She is also the co-author of the popular *E-Learning Uncovered* book series as well as *E-Learning Fundamentals: A Practical Guide*, from ATD Press. She is a past board member of the Northeast Florida and Metro DC chapters of ATD.

Branching scenarios let students make choices and experience the consequences of those choices. If you design them right, they can make your courses more relevant and make it easier for your learners to understand how to apply the information back on the job.

Most eLearning authoring tools make it pretty easy to set up branching: Button A takes the learner to Slide 7, and Button B takes the learner to Slide 8. But before you start *clicking*, you have to be clear on the *thinking*. The real challenge in setting up branching scenarios is making sure that you have a good story to tell, that you have relevant decisions for the learner to make, and that you have realistic consequences for the decisions.

Here are three design questions that can help you clarify your vision.

1. Is it an assessment or an exploration?

You might want to use the branching scenario to assess whether the learners properly understand how to perform in a certain situation. Other times, you might

want the scenario to help them explore the nuances of a situation or understand the consequences of certain choices. This choice will affect how you:

- *Phrase instructions*. On an exploration activity, you can encourage them to select an answer they know is wrong.
- *Set up navigation*. On an exploration activity, you probably want them to be able to go back and change an answer; on an assessment, you might or might not.
- *Structure everything in the authoring tool*. On an assessment, you may need to work within the quizzing features of your software; on an exploration, you may not have to limit your options.

2. How many decisions and choices do you need?

Branching scenarios can get complicated very quickly. Let's say you want to create a scenario between a supervisor and an employee. There are three different decision points in the conversation, and each one has two options to choose from. That results in eight different paths. But what if you wanted three choices per decision? That's 27 paths. The logic is simplest if every scenario has one right and one wrong answer, but real-life decisions aren't always black and white. You might need more choices for your instructional objectives—just be ready for the complexity.

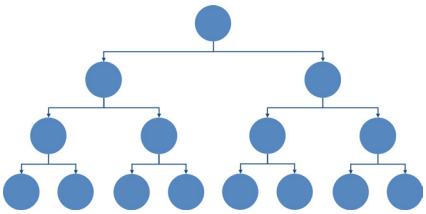

Figure 1: Three decisions with two options each

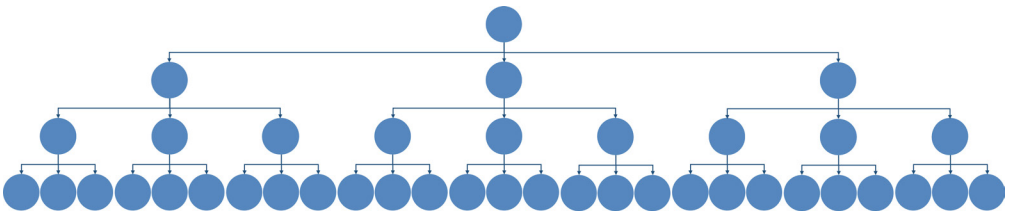

Figure 2: Three decisions with three options each

3. Do you want branching feedback or branching questions?

Sometimes, a choice leads to specific feedback or consequences for that choice, and then on to a next question that is also specific to that choice. For example, an employee who deals effectively with an angry customer will be in a much different situation than an employee who was rude to that customer. The whole scenario changes. So in addition to the immediate consequence, the next step in the whole interaction (and therefore the next decision) will be different for each path.

Sometimes you simply want a choice to provide the consequence of that choice. From there, you don't need each path to branch to a different new question—both paths can lead to the *same* second question. In a course on study skills, the student who makes the right choice would get a better grade on a quiz than the one who makes the poor choice (consequence), but both students might be presented with the same situation next (such as whether or not to start early on a research paper). So while the feedback branches, the next question doesn't.

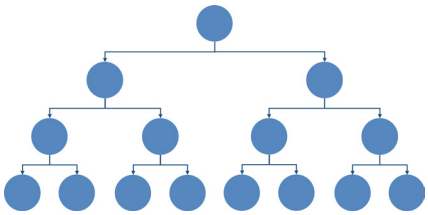

Figure 3: Each decision results in a new question

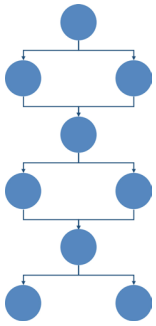

Figure 4: Each decision results in a consequence, but not a new decision

With all of these decisions, start by focusing on your instructional goals and the real-life situation you are trying to simulate. Try creating a flow chart to plan out and double-check your logic, to guide the person building the scenario, and to assist the people reviewing/testing it.

Jeff Batt

Jeff Batt is the founder and head trainer/sensei at Learning Dojo, a company dedicated to training people to become software ninjas in a variety of eLearning-, web-, and mobile-related software applications. Jeff is also the lead eLearning producer for the Church of Jesus Christ of Latter-day Saints, producing online training for the church worldwide. With more than 10 years of experience in the digital learning and media industry, Jeff is a regular conference speaker and industry leader regarding eLearning technologies such as xAPI, Articulate Storyline, Adobe Edge Animate, Captivate, Camtasia, HTML5, and more.

For the past couple of years in our organization, we have been trying to think of various ways we can change up standard learning delivery methods—from interactive videos to xAPI-enabled apps. Not too long ago, we were working on a course and wanted it to be something different from your standard eLearning course. We wanted the learner to navigate in a different way than just clicking a Next button. Most eLearning courses and tools you come across use a standard Next or Back button; functionally, it works, but it is the same on most courses.

For this course in particular, we decided to build it using custom HTML5 rather than a standard eLearning tool. The main reason was to get a different experience than clicking Next; we wanted more of the parallax experience, scrolling from section to section, so we had to think outside the box of what standard tools could do and custom-build it.

Even though we were not using the standard Next or Back buttons, we still needed the ability to section our content and we wanted one section to slide in as the other slid out. We found a framework that would help us with the parallax effect called FullPage.js. The nice thing about FullPage is that we could build it all in a normal text editor like Sublime with simple code snippets, and Sublime and FullPage are free!

Once the course was built, we ran into several stakeholders saying it was going to be confusing for users. But knowing how users look at websites, or even sites like Facebook, we figured people are used to scrolling and a simple flick of the finger or scroll of the mouse wheel would be enough to scroll through the different sections. Just to confirm, we ended up doing a big group test of over 100 users in one day. We had each user come in, we gave them each an iPad, and we had them take the course. To our surprise, not one of them mentioned being confused about how to navigate; all it took was one simple prompt in the course to scroll up on the first couple sections, and then they had it from there. It was intuitive to them.

That experience was over a year ago, but it changed the way we build all our courses. We now build all our courses using this framework, and we've even worked in other frameworks and APIs for our own custom solution. What I love about this approach is that it gives us the flexibility to create whatever kind of experience we want. We can easily implement xAPI or even custom AR/VR experiences using other coding libraries.

I would love to see us push the limits in this industry, explore tools and frameworks that are common among industries, and see how we can implement them in our own industry with a learning perspective. I look at what's available in web industry tools and compare it with eLearning industry tools, and there is a night-and-day difference in some regards.

We can take advantage of what is out there and challenge how our eLearning is structured. I would love to see more scrolling pages rather than having to click Next every time—or even something like a VR room, where each chapter is a room in a house and the learner goes into each room to explore and learn various topics. There are so many different options to break from the standard mold of "click Next" courses. Try something different. It will be a nice change of pace for your learners, and it will keep them more engaged in your learning.

Mike Taylor

Mike Taylor directs learning technology and online learning at Mindset Digital in Columbus, Ohio. He has over 20 years of experience successfully developing and deploying a wide variety of learning strategies and technologies. Mike holds an MBA degree from Ohio University and a master's degree in educational technology from San Diego State University.

The most important eLearning interactions have nothing to do with how you design your course or which tool you choose to build it with. The determining factor for the success of your eLearning project is the interaction between the *people* involved.

Let me explain...

The success or failure of many eLearning projects is determined way before a designer makes any choices about how the course will look or function. One of the biggest things separating the best eLearning pros from everyone else is knowing when *not* to build an online course.

For example, stakeholders often ask us for courses when they are either overkill or unneeded. Other times, they do need a "course," but only to check a box. In either case, developing courses wastes valuable resources that could be put to better use—not the least of which is the time your learners could be using for productive, revenue-generating work instead of taking a course. Forcing people through a course with little or no value is an interaction to avoid at all costs.

Now, I can almost hear what you're thinking: "There's no way I could ever get away with telling my boss/stakeholders 'no.' That would definitely not be a positive interaction!"

Fortunately, you can borrow a simple improv trick to help with those potentially challenging conversations. Instead of saying no, try "Yes, and..." As in, "Yes, I'd be happy to build that course for you, and we could also look into other more efficient, more effective options?" You'll be amazed how this simple phrase can change the tone of the conversation.

As professionals, we have a responsibility to challenge and validate that creating a course is the most effective and efficient approach. At a time when most training departments are being asked to do more with less, this is truer now than ever before.

If you don't already have this perspective or don't feel comfortable navigating this conversation, I can tell you that it is well worth the effort to develop this skill. To paraphrase Seth Godin, if you haven't "done the reading," why would you expect to be treated as a professional?

In our field, "the reading" includes a confident grasp of things like:

- The questions you should ask and answer before beginning any learning program
- How to determine whether a higher- or lower-tech option is more appropriate
- How to determine when a course or non-course alternative is more appropriate
- How to steer stakeholders to more "efficient" options

A couple of my favorite books on this topic are *Analyzing Performance Problems*, by Robert Mager and Peter Pipe, and *Performance Consulting*, by Dana Gaines Robinson and James Robinson. Both are great options for anyone wanting to take a deeper dive.

Here's the bottom line: Both you and your organization benefit from the recognition that training isn't always the best option for improving performance, and from knowing what alternatives are available.

Melissa Milloway

Melissa Milloway is a senior instructional designer at Amazon, where she specializes in designing and developing digital learning experiences. She was selected as a "30 Under 30" learning leader for Elliott Masie's Learning 2014 conference and is also an avid blogger in the industry.

Designing digital learning experiences is my jam. I love researching UI and UX design and then putting my designs to the test. When it comes to designing navigation for a learning experience, there are a few core rules I follow. Here are five things I consider when designing navigation.

1. What's the use?

When it comes to designing navigation, think about the type of learning experience you're trying to create. Is it a game? Is it a project that will be used to quickly reference something? Is it a complete curriculum that might only be taken once? Will it be viewed on a mobile device, computer, both, or something else? You'll want to have different navigation for different types of experiences.

2. Play copycat

Once you know the kind of experience you are trying to create, you will want to check out similar examples. There's no need to re-create the wheel. You're creating something for the web, and there are tons of great examples out there that will inspire you. Go forth and be inspired! Some of my favorite sites to find UI inspiration are Dribbble, Behance, and Collect UI. In addition to UI inspiration sites, I also look to working examples for inspiration.

3. Consistency is key

Keep navigation consistent throughout your project. You want the challenge to be in the learning, not in trying to figure out how the navigation works. One way to maintain consistency and scale design is by creating a design system for your team's projects and products. Design systems that I love include BuzzFeed Solid, Nachos by Trello, and IBM Design Language.

4. Avoid information overload

You want your navigation to be consistent. Lighten your users' cognitive load by creating sub-navigation when you need it. Sub-pages should only go about four pages in maximum, and adding breadcrumb navigation will help users see where they are located.

5. Test, test, test

Once you come up with your navigation, do some testing with users. Consider creating a test for users, such as asking them to locate a specific page in the project or topic. You'll want to check how long it takes the user to successfully find the page, the path they take to get there, and how many clicks it takes them to get there. One great way to track user interactions is by using Experience API (xAPI).

Sam Rogers

Sam Rogers, the president of Snap Synapse, creates effective, efficient, and engaging ways to deliver learning for clients including Google, Capital One, Deloitte, and AAA. He produced YouTube's first online certification training, and he is a writer, director, producer, composer, and performer for stage and screen. Sam also writes and speaks frequently at conferences, sharing his passion for solving the problems that matter and inspiring learners to action.

Like most instructional designers, I'd never really considered video navigation to be different than any other type of navigation. It's just a page in an online course, right? Sure, when I was content to build my Storyline, Captivate, or other SCORM-compliant courseware, that worked just fine.

Then I took a contract with YouTube. Suddenly, nothing was a given.

When I was brought on to build the YouTube Certified online training program (a nearly impossible three-month project), they had never delivered an online training, let alone an online video training. There wasn't a video camera anywhere in their HQ, and they didn't even know how to spell LMS. Still, not knowing what they didn't know, they wanted to use YouTube itself to deliver what had previously been a two-day instructor-led training in six to eight hours, complete with a robust 100-question certification exam.

Clearly, I had to get very creative, very quickly. Fortunately, there were already many brilliant educators and other creators on the YouTube platform pushing all the limits. So I learned from their examples what could be done with video.

One of the first things I found is that online video is entirely different from TV or movie screens in two key ways:

1) User data collected
2) User navigation control

Data collection is a topic for another time, but basically, anything you watch online is watching you back in some form. Data about you and your interactions with online videos is being stored somewhere. Because this data isn't generally stored in an LMS, L&D isn't using it much yet. But the data is simply too revealing and too valuable to ignore. It's coming soon to a system near you.

As for navigation, I saw people using simple links to refer to specific parts of a video, popping up clickable hotspots and in-line navigational messages, directing users to actions on other platforms, making customized playlists to leverage content created and managed by others (without needing to ask for any permission), and generally doing everything really fast.

This shifted how I think about video, navigation, and all the instructional work I've done since. Let's take a look at the familiar video player controls with a fresh perspective.

Online video has at least two controls: Play and Stop. Even if it auto-plays and there's not a button in sight, learners can refresh the browser window, or exit it, at any time they choose.

We tend to forget this in our design, preferring the illusion that our learners are in a classroom and can't escape. They can, and they do—often, according to all the data I've seen. Your video eLearning is good or it's off. (The ROI on an unwatched video is $0, by the way. No pressure!)

Figure 5: Standard buttons on a tape player

You're probably familiar with the set of buttons on your old VCR or tape deck. What these icons mean now can be just as simple, though the icons can also be used for much more!

Play is usually combined with Pause into a single icon. When the video is playing, this pauses it. When it's paused, this plays it again. It seems quaint to spell this out now, but just a decade ago this was not well known to most users, nor was it available in our course creation tools.

It's become so ubiquitous since then that the Play/Pause navigation is very frequently omitted now. Tap anywhere on the video itself to pause it; tap it again to resume play. This is implied whenever you see a video on a screen. Your learners expect this behavior, and it frustrates them to do without it. Are you currently satisfying this navigational demand?

Also, it's probably worth pointing out that Play happens automatically with nearly all online video, so why have a button for it? Sometimes there's a sound instructional reason why you need one, but mostly not. So ditch it anytime you can to become one step friendlier for your learners.

Regardless of whether or how the icon displays, Pause is a critical navigation feature for any online video. Please never, ever omit or restrict this ability in your eLearning video. Though we commonly consider Pause to be little more than a "hold on a second" function for use with real-world distractions, this simple navigation can be used as tool for increasing engagement and widening the audience of a given video.

Consider a video's pace. Given your learners' individual preferences, every video will be either a little too fast for them or a little too slow (or a lot too slow!). Unlike with the TV and movie screens you grew up with, you no longer need to split the difference and abandon the edges of your target audience in favor of the middle of the bell curve. You can now design a video to be in constant motion and let the learner slow it down by freezing the frame whenever they need.

Granted, this behavior is not the same viewing experience that many of your learners may be expecting, so it's only right to start them out with an orienting interaction. But trust me, anyone who can name a YouTube star will already be very well oriented to this approach.

In fact, as I found at YouTube, this is the very reason why YouTubers flash things on the screen, edit out the spaces between their sentences, and generally go so darn fast! They're counting on you to pause when you need to see something standing still, or navigate to another application to do something, or simply take a moment to understand. The act of doing so actually keeps viewers more engaged. You, too, can do this.

For this reason, it's rare to see Fast-Forward as a video control these days. Remember when you could press that button on your tape deck and hear it play at chipmunk speeds? For audiobooks and podcasts, you'll see speed controls such as 1.5x, 2x, etc., that work kind of like that and allow us to listen in less time. But for online videos, the thing to do instead is allow users to "scrub the playhead" or click the progress bar that represents the length of the video and jumps the user to the approximate position they clicked. Luckily, it's way more intuitive than that last sentence.

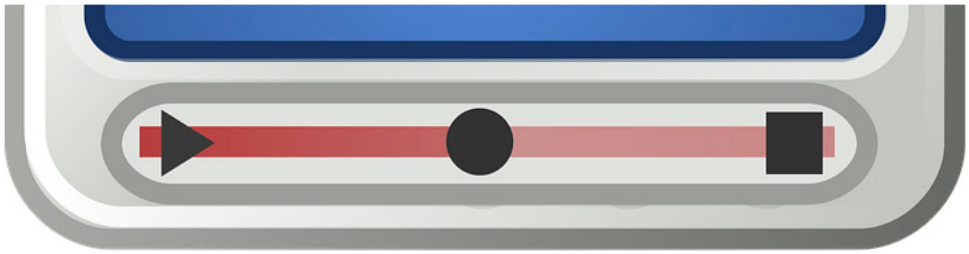

Figure 6: Common icons on a progress bar

Sometimes we display a progress bar to our learners without letting them have the navigational control to do something with it. Why? When they see it, they will want to use it. Don't tease. Either provide the functionality or don't show it. And please grant this ability by default. Again, you may have a really specific and good reason not to allow learners to jump around in your eLearning video, but unless you do, don't skip giving your learners what they are used to: control.

Speaking of skipping, occasionally we'll still see the Skip controls on a video that move the user to the next section. I've seen the kids on YouTube make fantastic use of this via links, building out a whole table of contents within a video overlay or bookmarking major points. For your eLearning video, however, the urge to do this is probably a sign that your video is too long. It's likely better to make several shorter videos than one big one, if for no other reason than to make your videos easier to produce and update.

General rule of thumb: one well-written learning objective = one video. New point? New video. The Skip concept breaks down into the progress bar and the Next button.

Last but not least, there is Rewind, or moving backward in the progress bar. I believe this to be the most important and most underestimated function of all.

Of course, if you missed something due to the phone ringing or some other real-world distraction, rewinding gives you a chance to go back without starting all over. But your savvy learners will use it for a lot more than that. If you're not quite sure you understood a key point and want to listen again, if you need to replay and pause what just went by too fast, or if (let's be real here) you were glancing at your phone while the video played on your computer and you just plain missed something, rewinding will save you. It is critical for allowing learners to learn at their own pace.

Rewind is also one of the best indicators of engagement—and of confusion! If you have access to your video analytics and can see that learners are rewinding and rewatching a certain part of your video, that's either an indication that you had them in the palm of your hand in that moment, or that this is precisely where you totally lost them. Figuring out which is which may still be more art than science, but without giving your learners navigational control and gathering the data about how they wield that control, you'll never know what you could be doing more of or doing better.

Back at YouTube, we did manage to go from scripting to shooting to serving up our online certification program in record time. It wasn't until about a month before launch that management finally agreed there was no way to deliver this training on the YouTube platform itself, given the specific constraints we were working within. I found myself uploading the videos and copy-pasting the exam questions into our newly approved LMS as part of a blended learning curriculum on Christmas Day in order to make our end-of-year deadline.

In the end, no "online course" or SCORM-compliant package was ever needed: just some PDFs, a well-crafted exam, and a bunch of engaging two- to seven-minute videos—with YouTube-like navigation.