

Box-ticking in e-learning design



Are we including elements just for the sake of it?

Welcome to 'Mission: Happily Ever After' where we let one couple loose with a £12,000 budget to plan the wedding of a lifetime. There's just one catch: the bride isn't allowed to know anything about it until the wedding day – she has to leave all the planning to the groom!

Today's lucky groom is Harry. He and girlfriend Daisy have been engaged for a year and the big day is looming.

Daisy: I love Harry but he can get a bit overexcited, I just hope he plans me the perfect wedding.

Harry's brought along best man Eric to keep the lid on his excitement and make sure he spends the budget wisely. He's asked his friends what kind of wedding they think he should have and the answers have been...mixed.

Harry: Based on what everyone said I think we should have an ice-skating barbecue wedding with a Lord of the Rings theme!

Eric: Woah there, Harry, let's think this through. Are you maybe trying to do too much? You don't have to say yes to everything.



Identifying the audience

Harry has actually fallen into one of the traps that often come up in the design of e-learning - he's excited to have all this money to spend and is trying to please everyone. One of the most important steps in the process is often missed out - considering the audience. Harry has asked all his friends what they want but hasn't considered his real audience: Daisy.



Many people think that the first step in developing a training program is to work out what the audience need to know to get the job done, but this actually skips over an important step: identifying who the audience really is.

How will they use the information that you give them? Instead of just asking yourself, 'What do they need to know?' ask, 'What do they need to do better?' and 'How can I communicate this information most effectively?'

It may be that e-learning is not necessarily your best solution. Sometimes e-learning is chosen for reasons of time and cost rather than because it is the best and most effective for the audience.

Who is the audience?	Training	Is e-learning the best solution?
The entire organisation	Introduction of a new policy	Yes, quite possibly. With such a wide audience e-learning could really work for you. It's still important to try and find out as much as you can about them though, as trying to please everybody rarely works.
Engineers and technicians	Demonstrating a new bit of technical gear and how it works	Perhaps - you could create a 3D interactive model of the gear and allow learners to explore it. Be careful of overloading them with text and keep it to-the-point.
Young, tech-savvy	Introducing a new system for inputting client data	Possibly not - this audience have probably seen hundreds of data-input forms and don't need you to show them how to do it step by step. Just give them a dummy system and let them play around with it for a few hours without the restrictions of systems training.

So you see, e-learning isn't always the best solution, though it can often be effective, especially if we take the time to find out about our audience.

A great way of doing this is through surveys and diagnostic assessments. Try talking to 'typical' learners and find out what they want from the training. For example, if what they want to know is how to sell product x to their clients, there is no point including that section about 'the history of product x'. Find out how learners use the skills they will learn in real life - are they practical skills? Would it be good to include a face to face component so that learners can role play situations? Or some videos that show the skills being practised?

What kind of media should you include in the training? Can't go wrong with a nice animation, right? Well, not always. Ask the learners: What do they do online? Read newspapers? Listen to podcasts? Look at Youtube videos? Talk to their friends? Many of these things can be replicated and used for training purposes in an e-learning programme. Tapping into some of the activities learners already do is a great way of working for and with the audience.



A diagnostic assessment can be used to tell you what learners need to improve and, crucially, what they already know. If you have an experienced audience, there is no point starting from zero and including extraneous detail that they already know. This type of audience is also quite likely to have worked through many e-learning programs before and be quite blasé about them – so a diagnostic assessment can signpost them to what they really need to work on and avoid wasting their time.

The point of all this is that we should be designing with a specific audience in mind. We need to find out who that audience is: what are their requirements? What are they currently not doing that they need to do/need to do better? How does this align with the needs of the business? We can then design a course specifically for that audience.

Saying yes...selectively

Let's catch up with Harry and Eric at the wedding cake shop where they've been trying samples of cake.

Cake shop owner: And how do you feel about artificial flower decorations?

Harry: Yeah they sound great.

Cake shop owner: OK, so far we have a chocolate and red velvet five-tier cake decorated with flowers, icing, bows, sugar paste toppers, diamantes, butterflies, feathers and hearts - anything else?

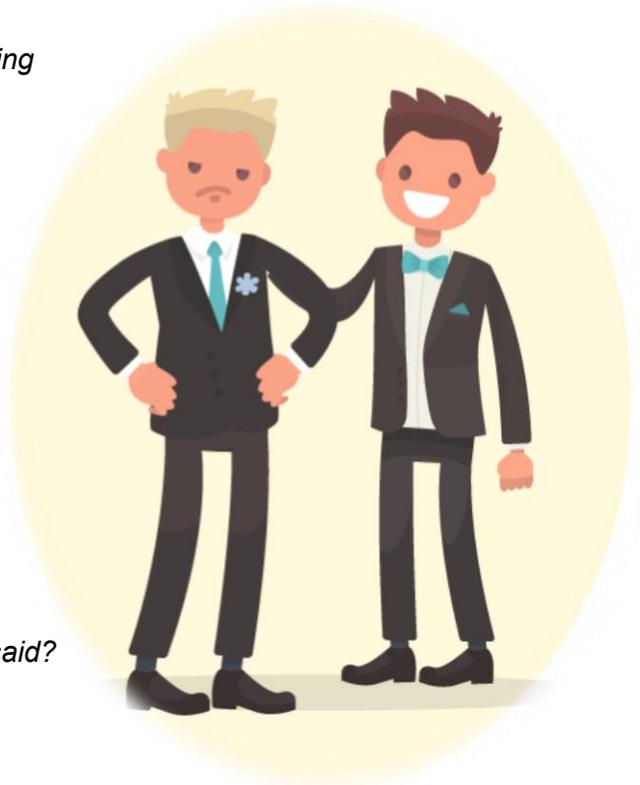
Harry: Do you have anything else?

Eric: You don't need anything else! This cake isn't going to stay up. Remember what Daisy said? 'Keep it simple!'

Harry: I don't remember her saying that.

Eric: It was in that text she sent you five minutes ago!

Harry: Oh yeah! Erm...how about just the flowers and cake toppers then.



When commissioning e-learning we often tick the box that says 'Yes' without having really thought it through. We have a lot of technology available to us and it is tempting to use it all.

For example, when told that courses can be made available for mobile devices we can immediately think, 'Ah yes, if I make the course available on a phone I can engage all the young people with their selfie-sticks and apps!' And while it is true that mobile learning can be a great way of engaging many different kinds of learners, simply transferring a course designed for desktop use onto a mobile is not necessarily the best way to deliver the solution.

Yes, we have this flexibility (often courses can be output as a mobile version with very little effort), but is it really the right route? In designing a course that will be suitable for both desktop and mobile use we may be compromising the quality of the course.

We are not saying you should not develop mobile learning - it can be a great medium, if used correctly. Instead of just ticking the box that says 'Would you like the course to be available on mobile devices?', why not think about developing supplementary content specifically for mobile use. This could consist of article-style learning aids, podcasts or videos, all of which would work better in mobile format than simply a smaller, less visually interesting version of the course itself.

Now let's turn to graphics or visuals. We often begin designing e-learning with the directive that the course needs to 'look good', and this is very important, but do we underestimate the power of visuals in training? Graphics can do more than look good - they are just as important as text in facilitating learning, bringing courses to life and acting as memory aids to learners, to name just three functions.

So what do we do wrong? Sometimes we use graphics just for the sake of it. Obviously nothing but text on the screen can be bad but if you have a space that needs to have an image in it, make it mean something. Every graphic is an opportunity.

Another graphical sin is using graphics that don't match or don't suit the tone of the course. If your course is light-hearted and creative don't detract from that by using tired stock imagery. The content is king - yes, having nice looking pages is important, but think about what the content requires. Choose the right image and make it the right size and style to deliver your message.

Think about the purpose of a graphic before you include it. Every image (like every audio clip, video, learning activity etc) should have a reason for being there. Try not to make graphics purely decorative. Even if an image is just on an introductory page, it can be valuable in setting the scene and tone for the course, delivering an emotional message, or appealing to learners and making them want to learn.

Graphs and charts are useful for displaying complex information. You might also consider using infographics where appropriate for added visual interest. For example, you might change your pie chart about people's eating habits into an actual pie.

Function	Examples	
Decorative	<ul style="list-style-type: none">• On the splash page of a course	As this table shows, every graphic in a course serves a function.
To represent	<ul style="list-style-type: none">• A screenshot• A 3D model of a piece of apparatus	
To aid memory	<ul style="list-style-type: none">• A picture or series of pictures that are used throughout the course to represent a concept	Every time you struggle to think of a graphic to fill up that empty space on the page, you have an opportunity to help the learners.
To show relationships between content	<ul style="list-style-type: none">• An org chart• A course diagram	
To show complex content in a visual way	<ul style="list-style-type: none">• A line graph• A pie chart	
To show processes or changes over time	<ul style="list-style-type: none">• An animation of a process	Don't waste it!

Popping the (multiple choice) question

Let's go back to Harry and Eric. They've sat down at the computer to write Harry's vows.

Harry: Wow, look what I found! It's a website where you just type in the name and they write your vows for you. That's another thing ticked off the list.

Eric: Harry you can't do that! Daisy's going to want to know you thought about her when you were writing your vows, that you wrote them just for her.

Often the end of course quiz can seem a bit like Harry's vows - just another thing ticked off the list with no thought about what the end-users actually need. An assessment or quiz is often added as an afterthought, 'because how else are we going to know that the learners have got the message?' In fact, quizzes don't always reflect how well the learners can now do what they have just been taught to do. Most quizzes incorporate a few multiple choice questions and all they are really testing is the learner's ability to parrot back what they were taught ten minutes ago. Quizzes often only test short-term memory, showing only that learners can pass a quiz, but not that they can do the task or job. We need instead to be testing long-term application of knowledge.



Multiple choice questions (and variations such as drag and drop style questions) are used in assessments because they can be measured and tracked by the system. Their weakness is that they can sometimes over-simplify the content. Even if mini-scenarios are used, they are rarely complex enough to really test the learner's skills. And what if it's not a knowledge based course but is all about behaviour change or soft skills?

So what is the alternative? Perhaps instead of an end-of-course quiz the learner could be set a series of real-world tasks that would require them to use the knowledge they have just gleaned. They could be supported by learning aids which would act as prompts. In this way learners would be able to test *themselves* on how well they could complete the tasks, which would tell them if they needed to return to the course for a refresh.

Another box that's often ticked is the 'tracked assessment' box. Yes, we have the capability to track assessments, which is useful, but are we using it in the right way? Is the data that's collected actually being used for anything? Simply knowing that a learner can answer 75% of the quiz questions right doesn't really tell you much. We can do better than that.

Learning Management Systems can allow us to customise the tracking and make it work for us. Drill down to question level and see what questions learners have struggled on - the results may surprise you. Then use this data to inform the training going forward. Use the data that you collect to see what people have spent time looking at, and what they haven't taken in and then build secondary learning materials based on the data.

Perhaps the data is telling you that, although learners seem to have grasped the fundamentals, they haven't fully understood how to apply them. Or maybe they have the competence but not the confidence to apply them. So create some on-the-job guides or tip sheets that target and support the areas people are struggling with.

Often we are told, *'we need to include an interactive activity every few minutes or learners will go to sleep'*. This may be true, but just including interactivity for the sake of it is not the answer. Interactivity is important but, as with graphics, every interactive exercise is an opportunity – so make it something useful, not just another multiple choice question.



The time spent thinking up memory-checking multiple choice questions could be spent designing a single, more meaningful scenario, one which perhaps branches, making the learner think about their choices and use what they have learnt. The learner's progress could be measured by an LMS, which would provide information on how they were doing to administrators.

Style and substance

Cake, flowers, dress, venue...tick! Harry is nearing the end of his list of things to organise. Next on the list is food for the reception. Let's catch up with Harry and Eric at the caterer's. Caterer: And this is our deluxe banquet package. It's silver service with a starter of caviar and oysters, served with champagne...

Harry: Say no more, that's the one for us! Daisy and I are deluxe banquet people!

Eric: Come on, Harry, I bet you don't even know what caviar is. And what about your guests? I'm sure our mates would be happier with chicken wings.

Harry: Eric, you're no fun.

Like Harry's flashy banquet, animation is often included in courses to jazz them up a bit. However, content doesn't immediately become interesting just because it moves around, or appears and disappears. Starting with an animation can add learning value, but only if it's done in the right way. Simply welcoming learners and showing them some attractive pictures may not be the way to go.

If you *are* going to open with an animation, why not set up a scenario that you're going to follow all the way through the course? Or if you're trying to win hearts and minds, you could start with an animated story or anecdote to shock learners into paying attention. Storytelling is important in e-learning. Research has demonstrated that learners find content presented as conversations, stories or case studies engaging, easy to understand and easier to recall.

Alternatively, instead of an opening animation, the animation budget could be saved to animate a key sequence, for example an important part of the story could be animated using voiceover in an engaging style. This could be more valuable than including an opening animation that will explain what you are going to go on to explain anyway.

The general rules for using animation are to keep it short and snappy and make it meaningful. If you try to use an animation to replace a piece of training, you may not be able to hold people's attention; you'll simply be creating a passive version of an ordinary training course. Most animations should be no longer than 3 minutes long and shouldn't overwhelm the learner with information.

There should also always be a reason for animating something. Sometimes animation can be used for long and rather pointless page transitions, which we may think are enlivening the course and adding quality, but will, when the course is actually being used, be frustrating to learners. Learners have seen enough animation by now not to be impressed when it is over-used – so only use it where it's going to have an impact.

Sometimes we can be a bit like Harry, ie confusing showiness with quality. Once again, we are not suggesting that animation should not be used. It is undoubtedly a very useful tool for engaging and, crucially, teaching learners, but it must be used in the right way. Before ticking the 'Include animation' box, think about how you want to include it. Look through the content and decide where it would be most useful, talk to learners about memorable animated sequences that they have been exposed to, and make sure that animation is being used for the right reasons.

Play that funky music...but not all the time

It's the day before Harry's wedding and he's come up with a brilliant idea. He phones Eric to let him know.

Harry: Eric, I had a fantastic idea, I'm going to sing a song for Daisy at the reception!

Eric: Wha...what? Why?

Harry: To express my love, of course.

Eric: Harry, you're my best friend I can't lie to you, that's a terrible idea.

Harry: Really?

Eric: Yup. You see, you're a terrible singer. When you sing it sounds like you're having an asthma attack.

Harry: That reminds me, I must bring my inhaler to the reception.

Eric: My point exactly. Don't sing.

One of the elements most commonly included in courses due to 'box-ticking', is unnecessary audio voiceover. This is often included for the best of reasons: inclusivity, with the voiceover added either to provide for those with accessibility needs or for 'auditory learners'. However, the learning value of having all the text you see in front of you but read out at a slower pace than you could read it, is debatable; as is including it for accessibility reasons, since a text transcript could be provided for use with a screen reader. Many people who regularly use screen readers have the speed set faster than a human narrator would use anyway, so including audio for their benefit is not helpful. This is, again, an example of the importance of considering the real needs of users.



Many people choose to include 'key points audio' as an alternative to complete text narration. This is a better alternative but can still be irritating for learners. Arriving on a page and having a voiceover read what is in front of you in slightly different words can be confusing and frustrating. Learners don't know whether they should be reading or listening and do not understand why points are being repeated. And not being able to move forward until the audio has finished is even more annoying!

So instead of choosing audio voiceover out of hand, why not consider other audio options? Audio does not need to be present on every page, but if spread throughout the course in useful ways, and carefully signposted each time, it can be a highly effective learning tool.

For example, shorter audio clips could be used on click-and-speak style pages. These could be mini conversations, such as a simulated customer conversation, or personal stories and testimonials from colleagues, customers or experts that will help learners put the learning in context. Audio could also be used in key sequences to bring them to life. For example, a narrator or narrators could tell the story of a scenario/case study as it unfolds alongside appropriate imagery.

A podcast could also be recorded to accompany the training, with experts discussing what has been talked about. This could then be linked to, or made available to download from the course.

These are all options that could be used to bring a course to life, the way audio voiceover is designed to - but with a more narrow focus, and with more thought having gone into their design, they *would* actually contribute in a very real way to the learning experience.

Happily ever after

Well the wedding went off without a hitch and all the guests seem happy, but what does the bride think?

Daisy: Well I must admit I never thought he'd pull it off, but this has been the best day of my life.

Harry: Well I couldn't have done it without...myself.

Eric was no help at all, he kept making stupid suggestions.

Eric: Thanks, mate.



Harry is set to live happily ever after, following a successful wedding. He listened to Eric's advice and thought about what his bride and his guests actually wanted from a wedding. We need to do the same thing when designing learning experiences. When presented with a list of options to include, don't just tick boxes. Really think about what is going to be useful and how you're going to use it. Who are your learners? What do you want them to know, but more importantly, what do you want them to be able to do when they have completed the training?

Everything you use should have a reason for being there. Let's use the flexibility, resources and technology that we have available in the most effective ways possible.