Virtual College

Effective learning design

A guide to thinking outside the box

Learners want digital learning. They want to learn at a time and place that suits them. They want to work at their own pace and be able to access it when they want it. They don't want a passive experience, but one that is engaging, interactive and challenging. They also want the variety that e-learning brings – the downloadable resources, relatable scenarios, and quizzes to help test and embed the learning.

But designing effective digital learning isn't easy. There is a skill to it, an art. It isn't about using the fanciest approach, or just converting your workbooks into digital slides, instead there needs to be a clear understanding of what digital format works best for the learning.

This is what this guide is for. To help you understand what type of learning design to use and when. **To help you think outside the box.**

To bring you the latest ideas, we turned to L&D experts for insights.*

Learning Experience Designer Team Leader

Learning Design Manager

Graphic Design Manager

* This guide has been adapted from an article that appeared in our June 2021 report *Creating Training to Suit the Learner.*

Learning Design
What you need to know
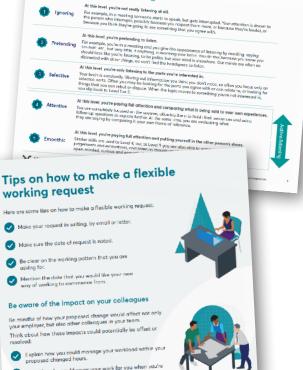
Downloadable resources

Downloadable resources are always popular, and for good reason. They provide an easy way of accessing the learning; they allow the learner to take away summaries of the learning and keep them for reference, and they are a great way of providing additional information or context to the course.

Top Tip

They are useful as reminders of the key learning points, or as job aids, such as checklists. But when writing them, it is important not to regurgitate the course; instead make sure they are written and designed so they are easy to digest and clearly summarise the key points.

Videos

Videos can be used in a number of ways and are a great way to take into account different learning styles. They can help break down and describe a complicated subject or concept in a way that words alone could not; condense large amounts of learning and make it easier for the learners to understand, and help put learning into context and bring it into real lifelife. A great example of this is 'talking head' videos, which tell stories and can have a bigger impact than a written account.

But there are considerations that must be made. To ensure that they are suitable for all learners, closed captions and/or transcripts should be provided, and the length should be considered – they shouldn't be too long, as this can lead to learners switching off. If there is a lot of information that needs to be conveyed, several shorter snippets are best, with some questions in between. This will help make sure the learner understands the main points of each snippet before moving on to the next one.

Top Tip

Try to avoid using video for the sake of it. If you want to provide some simple facts or basic information, a piece of text can be better, especially as text is much easier to scan or skim read.

Interactive elements

An interactive element is anything with which a learner interacts and can range from a simple 'click and reveal' to a complex scenario – in fact, a lot of our list here can be classed as interactive.

Training can be dry and dull, and interactive elements are a great way to keep engagement high, cutting through the monotony and helping to 'mix things up'. They also help keep the learner motivated, as it is something to look forward to.

When used appropriately, they are also wonderful tools to help reinforce the learning. For example, a 'click and reveal' is a great way to help learners digest and remember complex information. By breaking down the information into manageable chunks, they allow the learner to focus on it a bit at a time, making it much less overwhelming than a solid piece of text.

Top Tip

Beware: 'click and reveal' can be overused and leave the learner with too many 'clicks', which can be frustrating. It's easy to fall into this trap, but it's important to try and find a balance between overwhelming the learner with too much information at once and requiring them to click through too many smaller chunks, but using a variety of interactive styles should help here.

Practice questions

Practice questions can play an important part in training. They allow the learner to be tested in a safe setting, and to try without fear of failure, both of which can help improve confidence before attempting the 'real' test. Not just that, they also help reinforce knowledge, support the memory and allow the learner to identify any knowledge gaps or areas that they may need to focus on.

Top Tip

There are many types of questions and it is important to realise that not all questions are fit for all purposes. To get the most out of them, the goal of the learning must be thought about carefully. For example, if you want to teach facts, then the questions should be simple knowledge checks which focus on the facts – these are a great way to support understanding and memory. For learning which needs to drive behaviour change, the questions should make the learners think, such as requiring them to make decisions, and then provide useful and detailed feedback.
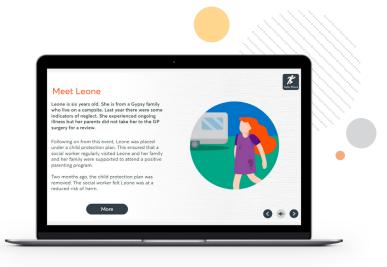
Different styles of interactive questions

Interactive questions are engaging but they are also much more than that. Learning by thinking and doing is usually much more effective than passive methods, and interactive questions help learners tap into this style of learning.

The questions should reinforce what they have learnt so far, helping the learner build their understanding and memory of the learning, and achieve a deeper understanding. When choosing which question style to use, you should first consider what you want to teach. A text entry is a great tool for reflection and will work well in a module focusing on awareness or behaviour change. Multiple or single choice activities and drag and drops can be great to check knowledge, though you could also use a multiple or single choice to create a simple scenario. Questions can also be used to encourage learners to think more deeply about problems and questions themselves, with the feedback confirming if they were right or wrong.

Top Tip

It is possible to use too many questions. I recommend spacing them throughout the learning: start with some informational slides and follow them by a question or two to help the learner reflect or test their memory.

Meet Leone

Leone is six years old. She is from a Gypsy family who live on a campsite. Last year there were some indicators of neglect. She experienced ongoing illness but her parents did not take her to the GP surgery for a review.

Following on from this event, Leone was placed under a child protection plan. This ensured that a social worker regularly visited Leone and her family and her family were supported to attend a positive parenting program.

Two months ago, the child protection plan was removed. The social worker felt Leone was at a reduced risk of harm.

More

Scenarios

Scenarios are a great method for driving behaviour change or raising awareness and can be used in a wide range of types of training, from safeguarding to health and safety.

What makes them so useful is that they help put the learning into context, such as a real-life setting that the learner can relate to. This provides them with an opportunity to put what they've learnt into practice and, importantly, allows them to learn from any mistakes in a safe space.

A popular use is to help learners make decisions and then learn from the consequences. For example, a learner might have been taught a process on how to deal with a customer complaint and they are then introduced to a scenario where a customer makes a complaint. This puts the process into context and allows the learner to work through what must be done.

Top Tip

There are lots of different styles of scenarios, including text-based scenarios, graphical scenarios and videos. As with all these elements, it is important to think about the aim of the learning and choose the appropriate style.

AR/VR

VR and AR (virtual reality and augmented reality) provide different ways to interact with environments. VR is similar to a 3D game, as it creates a virtual environment. Learners can interact with it through a headset, and are immersed physically and mentally. AR enables learners to look at their environment through a device, such as a smart phone or tablet, and things are placed in that environment with which they can interact.

Like 3D elements, they are great for complex training needs. They are incredibly beneficial and provide a safe way of using and exploring dangerous pieces of equipment, allowing the learner to practise in a safe place without the dangers of real-life consequences. They can be used for a range of different needs, from teaching how to fix or maintain complex pieces of equipment to medical training.

3D elements

3D elements, such as 3D modelling or virtual 3D games, are useful for recreating large-scale, technical, accurate life-like objects or locations. This makes them the perfect introduction to a piece of equipment or an environment, allowing the learner to interact with it without being physically there.

As you can imagine, there is a cost attached to them and they take time to create, but organisations choose them for the long-term benefits they offer. This is especially the case for complex pieces of training, where learners will need to know a piece of equipment inside out.

Top Tip

They are a great way to allow learners to practise as many times as they need, giving them the time to focus on amending any mistakes or uncertainties they have, which helps them build their confidence. They are also durable – no wear and tear that would happen to an actual piece of equipment!

Top Tip

Yes, they are costly but they have so many benefits that they are worth the consideration. They decrease health and safety risks, provide unique learning opportunities, allow for multiple learners to train at the same time, and are available 24/7.

The graphical appearance

Graphic design encompasses all aspects of training, from the videos to the downloadable resources. If you think about it, the design of any training will be the first thing a learner sees, and it can be a reason why learners disengage before they've even started. To avoid this, it is best to get to know your audience's likes, values and preferred graphical styles, and treat them with intelligence – don't dumb down the graphics, rely on assumptions and stereotypes or underestimate what they can gain from the graphics. You don't want your message undermined by thoughtless graphics.

They can be used in a very practical way, such as to add branding or ensure consistency with other training or organisational resources. They are also a great way to convey data, or enhance the text, which can be especially helpful to those who are dyslexic or have English as a second language.

They can also be used to emotionally connect with the audience; for example, by conveying different emotional messages, such as using softer colours for sensitive topics, or bold, bright colours to convey confidence.

Top Tip

When designing on a budget, consistency should be your key consideration. The graphics shouldn't be an afterthought, but be well planned, well thought out and well executed. If you don't think about them, or use a mixture of different styles, then it can result in an incohesive and jarring design.

Serious Games and Gamification

'Serious games' and 'gamification' are often - confusingly – used interchangeably. Though it's hard to claim there are concrete definitions, this is how we define them at Virtual College:

Serious games: these are big, immersive and complex. They are built like video games and often have stories, missions, characters and narratives that unfold.

Gamification: If a course has 'gamification', it usually uses some of the gamification techniques (such as characters, timers, or leader boards) that are found in serious games to enhance a piece of learning and make it more fun and interesting. But it won't have the depth or complexity of a serious game.

Both techniques can often be seen as frivolous, but in a learning context they are fun ways for the learner to engage with the training and test themselves, and can be extremely powerful.

They play on human psychology – such as motivating the learners to get their best score – which is a fantastic way of reinforcing knowledge. In addition, they can be used in a similar way to scenarios, as they can help learners develop knowledge by making decisions, learning from the consequences and retrying until they get it right.

There are success stories of businesses using games to help engage their workforces. One business we worked with used it in their health and safety training. They set departments against each other to drive them to get the best score, something they could only do by engaging with the learning. But it's important to know your learners, as not all learner groups may have this competitive drive.

On the downside, they can be time consuming and expensive to create – especially a serious games – so it is important that you pay attention to why and how you're creating them.

Top Tip

The most important thing is to start with who your learners are and what you want to teach them and make all your decisions based on this. You need to make sure that your game focuses on what you want to teach and not on the many 'cool things you can do'.