



In this authoritative series of four articles Clive Shepherd reveals the critical aspects of designing effective blended learning. Here, he continues by clarifying how to define learner characteristics and constraints.

DESIGNING BLENDED SOLUTIONS

PART 2: LEARNERS AND LOGISTICS

Blended learning is the strategy of choice for most major employers. It addresses performance problems through the application of a mix of different learning methods and media, both formal and informal. It flexes, to support complex learning requirements and varied audiences. It shifts the focus from one-off learning events to on-going processes that assist employees as they build skills and confidence in carrying out their jobs.

In Part 1 of this series, I outlined a simple process for designing blended solutions that is both efficient and effective: analysing the unique characteristics of the situation in which the solution is to be deployed; selecting the right blend of methods to meet the needs of the situation; and determining the delivery media best suited to these methods.

I started with the first step in the process –

analysing the situation. This stage comes first because the information that we gather informs every one of our design decisions. I explained that situation analysis has three elements, which can be described quite simply as **the three L's** – the learning, the learners and the logistics. In Part 1, I concentrated on the learning. This time I'm addressing learners and logistics.

EVERY LEARNER IS DIFFERENT

There's a lot of talk in learning and development circles about learning styles, which are supposed to help teachers and designers of learning experiences to adapt their work to reflect the characteristics of different categories of learners. This seems a reasonable endeavour, until you reflect on the fact (I walked into that – I'm now labelled a 'reflector') that there are literally hundreds of competitive models which

cannot, of course, all be right. Indeed, not one of these has come through any critical test of its validity.

The Association for Psychological Science concluded that: 'There is no adequate evidence base to justify incorporating learning-styles assessments into general educational practice.' And in the UK, a review by The Learning & Skills Research Centre found the various theories 'seriously wanting' and with 'serious deficiencies'.

Many were downright dangerous as they 'over-simplify, label and stereotype'. Donald Clark has reviewed this research in some detail in his blog *Plan B*. The fact that we have yet to find a reliable way to categorise learners, does not reduce the need for a learner-centred approach to design or for empathetic teaching. As molecular biologist Dr John Medina makes clear in *Brain Rules*, every one of the world's seven billion

inhabitants is different: "What you do in life physically changes what your brain looks like.

"Our brains are so sensitive to external inputs that their physical wiring depends upon the culture in which they find themselves... Learning results in physical changes to the brain and these changes are unique to each individual."

Interesting as all this is, I'm not sure it takes us that far in terms of the big decisions we have to make when designing a blended solution. In my experience there are two learner characteristics that are far more influential than learning preferences. One is the extent of their prior learning; the other is their motivation to learn the subject in question.

THE IMPORTANCE OF PRIOR LEARNING

As we've discussed above, learning, both formal and informal, literally re-wires the brain. The more a person learns about something – a work task or a subject of interest – the more elaborate become the mental schemas that connect the various underlying concepts and principles. These schemas provide us with an understanding of how all the elements of a domain fit together and enable us to solve problems and make decisions based on this understanding.

After a while, we become so competent in a particular area that we seem to respond to situations intuitively, i.e. without conscious thought. All learning is a process of establishing patterns and

making connections. When we know very little about a subject, we have very little prior knowledge to connect to. Without pre-existing schemas to build on, we need examples, stories, metaphors and similes to help us relate new information to our other life experiences.

The novice craves a well-structured and supported programme of learning which allows them plenty of time to process new information and make sense of this in the context of practical application. They need reassurance and encouragement to help them through the difficulties they will inevitably encounter. In short, novices appreciate and benefit from good teaching and should, as a result, be the main focus of attention.

An average experience satisfies no-one

The more expert you already are in a particular area, the less structure and support you need to learn something new related to that area. We all have aspects of our life that we understand really well, whether or not we could easily explain what we know to someone else.

We may be an expert in molecular biology, photography, accounting, office politics, bringing up children or the tactics of football. Because of our understanding, we can pretty well cope with any new information relating to our speciality.

We are very hard to overwhelm or overload, because we can easily relate new information to what we already know. We can sort out the credible from the spurious, the important from the trivial. As an expert, we can cope with a long lecture, a densely written textbook, a forum with thousands of postings, or a whole heap of links returned in response to a search query.

These are the extremes. Of course, there are many gradations of expertise and only a minority of learners are complete novices or acknowledged experts. But it is easy to see how, if we are not careful, we can end up providing an 'average' learning experience which satisfies no-one.

We can over-teach those who already have a lot of expertise:

- We patronise them with over-simplified metaphors, examples and case studies
- We frustrate them by holding back important information, which we then proceed to reveal on a careful step-by-step basis
- We insult them by forcing them to undergo unnecessary assessments
- We waste their time by forcing them to participate in collaborative activities with those who know much less than they do

And we can under-teach the novices:

- We bombard them with information that they cannot hope to process, providing nowhere near enough time for consolidation
- We provide insufficient examples and case studies to help them relate new information to their past experience
- We are not always there when they get stuck or have questions
- We do not go far enough in providing practical activities that will help them to turn interesting ideas into usable skills

It may seem that I am suggesting you double your workload by providing two versions of each learning experience, but it doesn't work like that. The relative experts need resources not courses and, of the two, resources are much easier to assemble.

Many times you can just point the expert at the information and let them get on with it. And by doing this, you've reduced the population that requires a more formal learning experience considerably. You can then start to give the novices the attention they deserve.

THE MOTIVATION TO LEARN

Another characteristic that will have a big influence on our design is the degree of likely motivation the target population will have to learn about the topic in question. It is hard to bring about learning without a degree of emotional engagement. Simply put, when our attention is aroused we remember much more.

If you know that learners will be coming to your programme full of enthusiasm, you have the luxury of being able to get straight on with the teaching without much in the way of preliminaries.

More often, learners need some convincing to devote time in their busy lives to what you have to teach. It is possible they have no choice about whether or not they go through the programme and are feeling just a bit resentful.

In these situations you have to build into your design whatever steps are necessary to overcome such obstacles. You need to show why the topic in question is relevant to the learner's working life and why time spent engaging with it will yield real benefits.

Of course it's not that simple

I've concentrated on the two characteristics that seem to have the biggest impact on your design – prior learning and the motivation to learn – but learners are more complex than that. You'll



want to find out as much information about your target population as you can. For example: distinguish the cultural differences in the way formal learning is carried out; discover the expectations about formal learning based on past experience; bring to light different levels of computer literacy; uncover any obstacles, such as

child care responsibilities or travelling to training events; and ascertain the degree and nature of any disabilities.

ALL DESIGN TAKES PLACE WITHIN CONSTRAINTS

The third element of the situation that you need to investigate, after the learning

requirements ('the learning') and the characteristics of the target population ('the learner'), is the logistics. You need to know what practical constraints (or to put it more positively, what opportunities) you will have to accommodate or (in the case of opportunities) to exploit.

All design takes place within constraints. I'm sure film director James Cameron moans about his measly \$200m budget and his unreasonable two-year schedule.

Chances are you have much greater limitations to work with, but this is completely normal and can be seen to help by closing down the options you need to consider. See boxout 'Logistical factors likely to impact on your design.'

In Part 3, we'll move on to use what we have discovered about the learning, the learners and the logistics – to start making decisions on the methods and strategies that will bring us the results we're after.

Logistical factors likely to impact on your design

- The size and geographic distribution of the target population
- The amount of time available for training
- The budget
- The deadline
- The facilities and equipment available
- The human resources available for design, development and delivery and the skills and knowledge they possess
- The software tools available for development and delivery
- The organisation's policies and procedures with regard to learning and development

All design takes place within constraints that will limit the options you need to consider.

Clive Shepherd, consultant in learning and communications technologies, Onlignment.
<http://onlignment.com/about/>
<http://clive-shepherd.blogspot.co.uk/>



The Broadcastpod is a fully-equipped video broadcasting studio in a box.

Inside there's everything you need to make a live transmission, our bespoke video management software the VF Hub is at the heart of the solution. The Broadcastpod can be built in a single day and once built, users can sit in a comfortable, self-contained, fully automated environment and broadcast their presentations to their audiences without the expense or hassle of additional technical resources.

- Live terrestrial broadcasting
- Live Webcasts including Adobe Connect 9, Google Hangouts, Webex and ON24
- On demand video creation including video blogging
- Full video review / approve / distribution
- Webinar creation including video Slideware and Chapters
- Fully automated, self contained broadcast environment

In association with

Request a demo and find out more 0845 6006122 www.broadcastpod.tv
 info: twitter.com/dreamtek facebook.com/dreamtek linkedin.com/dreamtek



||| DREAMTEK virtual
forge