TBT cycling round again ✦

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Some e-learning is proving excellent value and companies are reaping great benefits from it in their training and development plans. However rumours also abound that some e-learning is not delivering all it promised. The hyped dream of e-learning being the answer to all our training problems is developing large gaps and people are scrabbling around finding ways to plug the holes. But we have been here before. More than once. In fact, at least three times in the past 20 years, possibly more. The thing that is consistent is that history teaches us that we don't learn from the past.

And what is the past? There is a familiar TBT cycle of events, which the 'industry' keeps going round. First, a new technology is developed. This new advance in technology produces a surge of activity when possibilities of using the technology within training, development and education are experimented with, which results in the 'New TBT'. Speed is important here, and in the rush training design at both the overall and detailed level tends to be poor, squeezed out because there is insufficient time to do it properly. Consequently the new TBT may look good superficially but misses the training objectives, and consequently gets a poor training image because it doesn't deliver the promise. The full benefit of the new TBT is never achieved because it all gets tarred with the same brush. And then there is a new development in technology and off we go again round the cycle. As advances in technology appear at shorter and shorter intervals this cycle will continue unless something is done differently.

As with nearly everything in life, this cycle is not as simple as it looks. There are two different types of jumps in technology. Some jumps are not jumps as such, but progressions, an improvement on what already exists. In the 1980s to 1990s there were several progressive changes in TBT, involving the PC and interactive video (using tape or laser disc), moving to multimedia on several items on hardware, and finally to CD with audio, video, and the programme all on one disc. Larger jumps come from the introduction of radical new technology, such as those which introduced the PC to mainframe users in the early 1980s, and in 1990s the introduction of Net based e-learning to TBT users familiar with stand-alone PCs.

Currently a digital revolution is happening, and maybe interactive TV will overtake the PC; maybe WAP phones will become ubiquitous; or maybe handheld computers will be the big next wave. Only time will prove which survive as media within the training and education field. But there is no need to assign previous technologies to the dustbin if they will do what is best required for the learners. Nor is it obligatory that only one method of delivery be used. Each wave of TBT has its strengths and weaknesses. Good trainers have been mixing delivery of training, using 'blended learning' for years, despite it currently being hyped as the latest advance in e-learning.

Other factors affecting the TBT cycle

Overlaying the technology issues are other factors that also help maintain the cyclical nature of TBT development. There appear to be at least three related issues: social

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issues of company culture relating to training; the Learners themselves; and the quality issue of the learning materials.

Company culture

Company culture related to training issues can be a nightmare if the training strategy has not been planned, developed and evolved to meet the organisation's business needs. The corporate investment required for TBT to be included in the training programme makes it even more important there is high level commitment to training and development.

One of problems is that new advances in technology are often driven by a group of people who have not been closely associated with earlier TBT uses within a company. A survey[1] published in 2000 found that 27% of those involved in developing TBT had less than two years experience in the field, and well over half had less than five years experience. Corporate memory in many organisations is lost in a relatively short time, and with it the lessons learned in previous uses of TBT. As an illustration of this, one large DIY company has recently launched e-learning to train its staff, but appeared unaware that in the late 1980s-early 1990s it was one of the national organisations leading innovative use of TBT. The lack of organisational memory is compounded when a new use of TBT is treated as a special project with a team drafted in from round the company. These people tend to be very interested in innovation and getting things up and running, but once the project is launched and training evaluation, and maintenance of the course become relevant the team is dispersed and people return to other postions within the company.

Training Departments

The politics surrounding training departments can be important when considering TBT developments. It is generally acknowledged that technologists drive new TBT 'methods'. Trainers understand how people learn, but often see TBT as a threat to the classroom, with which they are comfortable and familiar. And there is at least one major organisation that has dispensed with their classroom trainers and gone over to TBT delivery for all company training. Their fears have some grounds.

Is TBT another tool in the trainer's kit? Well yes, the finished product is, but it requires much more input from instructional designers to develop effective TBT than classroom courses. The techniques to develop good TBT are not the same techniques to develop good classroom materials, or even paper based distance learning materials. TBT designers need to be good anticipators and planners, rather than be able to think quickly on their feet and react to immediate situations, a skill at which classroom trainers usually excel. TBT designers also need to be aware of current advances in technology, what it can do well, and how to harness that within a course.

Another hazard faced by the Training Department is the 'not invented here' syndrome. This is especially true if it is a special project imposed from elsewhere, or a new training manager arrives wishing to have a clean sweep. There are examples of award winning training being left on the shelf long before its sell-by date for this reason.

The Learners

Humans still learn and assimilate knowledge, skills and behaviours within their heads just as they always have done. Immediate interactivity using the information just

acquired reinforces the learning process in the brain, which is a strong positive feature of TBT. Enhancing the speed of learning can be achieved by good design and good delivery – by good teachers, or well designed books, or well designed TBT and many other ways where design to aid learning been in-built, as opposed to random unstructured ways, which may or may not have serendipitous moments. Humans don't need exceptionally brilliant stuff to learn from all the time, though it helps. Good learning material is easier to find than the exceptionally brilliant, unfortunately poor learning material is even easier!

Quality

Quality of the materials produced is the key to the success of any training or development project. The results expected from a course and those that appear should match, which means the course or programme is Fit for Purpose. This can only be measured some time after implementation, or the pilot, and a proper evaluation has been made. Unfortunately many are not prepared for the wait, nor do they wish to evaluate the outcomes accurately – one may suspect in case it didn't work as known short-cuts were taken during development.

With any new training technology it is not how quickly it can be got out of the door, but how effective it is in helping learners achieve the learning objectives. In the DfEE survey media selection as a skill was not rated very highly, although one way to accommodate different learning styles is to use the richness of learning experiences that can be supplied by TBT. There is a need for vision by instructional designers who understand how adults learn and build in facilities for flexible use by organisations as appropriate, for example for reference, training, Performance Support Systems, and Martini-type availability (anytime, anyplace) for users.

One of the reasons why e-learning is losing its gloss is that many people, including those in universities as well as training departments have put classroom notes onto the web/intranet and call it e-learning. More accurately this should be called e-reading, which is more of a library application than pro-active learning. When web-based learning started the range of interactions was not as wide as those available using CD-ROM or delivery via a small intranet. This is no longer true. Today e-learning in many ways is not as interesting, motivational and stimulating as TBT was ten years ago. Which is sad, because well designed web based learning, making deliberate use of the added dimensions of e-tutoring etc can be very stimulating and interesting. E-tutoring bolted on to an existing course will not gain the full benefits this feature can bring.

In conclusion, one way of breaking out of the short-term cycles of new waves of TBT, which are quickly superceded and fall into disuse, is to ensure good instructional design is part of that wave. All those involved in the development, production and use of the training need to place the new wave of technology where it belongs, in the toolkit of those responsible for developing learning materials. To make the best use of each wave of technology keep the learner central to the design as a way of breaking the cycle.

[1]*Authoring for CBT and interactive multimedia, Guides for Managers, Practitioners and Researchers*, by Arenicola Designs, Published by DfEE Lifelong Learning and Technologies Division, 2000