

The Changing Face of Learning and Technology (Jan 07)

If we did 'learn something every day' we would all be better at it. Technology is now bringing that about. Vaughan Waller investigates.

I want to talk about learning. But not the lifeless, sterile, futile, quickly forgotten stuff that is crammed in to the mind of the poor helpless individual tied into his seat by ironclad bonds of conformity! I am talking about LEARNING - the insatiable curiosity that drives the adolescent boy to absorb everything he can see or hear or read about gasoline engines in order to improve the efficiency and speed of his 'cruiser'. I am talking about the student who says, 'I am discovering, drawing in from the outside, and making that which is drawn in a real part of me.' I am talking about any learning in which the experience of the learner progresses along this line: 'No, no, that's not what I want'; 'Wait! This is closer to what I am interested in, what I need'; 'Ah, here it is! Now I'm grasping and comprehending what I need and what I want to know!' Carl Rogers 1983

This inspiring quotation from Carl Rogers taken from his seminal book spells out just what learning is about. Although the book is primarily aimed at education it should be essential reading for anyone designing learning within a workplace environment especially if that is going to be delivered using technology. Ever since computers were invented their contribution to the delivery of learning has been recognised as a curate's egg; partly good, partly bad and hence not satisfactory overall. This is not the computer's fault of course but rather how we humans use them. It will not be news to anyone that computers now come in all shapes and sizes, even a mobile phone has elements of a computer inside. Whatever its shape, size or function someone somewhere is trying to think of a way of using its particular attributes in the delivery of learning. Much of this is a long way from e-learning as we have come to know it and maybe that is just as well. From the start e-learning was always only one part of the overall learning experience. It never did, nor was it ever going to replace existing and well tried delivery methods. But is this ever increasing range of ways of doing it changing learning itself? By this I mean the perception of learning as something we do at work or at home, sometimes voluntarily and sometimes not. More importantly is it becoming better?

I must say immediately that what one person interprets as being better may not be the same to someone else.

Various people could argue that better means more effective, more enjoyable, easier to create or deliver, easier to change or just plain easier. To others it could be all of these things or none. So how can you evaluate whether the advances of technology have made any real difference to learning as we know it and what should we do about it if the conclusion is 'could do better'?

Our life long learning journey

I have been told that by the age of six, we have learnt 60% of everything we will ever learn. This may come as a surprise to many university professors but we are talking about the sort of skills and knowledge without which we would not be able to learn anything else. Our learning journey continues through our school years and for some a university education, after which we enter our working lives.

Here, in the workplace, we move from pedagogy to andragogy and the requirement to learn has a whole new impetus. According to a survey carried out by NIACE, participation in learning declines with age and it falls dramatically after the age of 65. The University of the Third Age wants people to go on learning into the fourth age within which many people are in care and the NIACE survey showed that learning in this age group can reduce an individual's dependency on others. The Open University now takes 6% of its intake from the 55 to 64 age group. There is no reason why we should not keep learning all the days of our lives since it has been shown to be beneficial at a personal and social level even in retirement. So why do we not learn (or want to learn) more

during those years when we are in work and it is available and we are being encouraged to do it? Why is it that some companies see learning as a necessary evil rather than an opportunity to increase the performance and wellbeing of its employees?

In most people's lives, learning interventions come along like the diagram below long periods of nothing with the occasional course or burst of learning activity.

Sometimes we go for years with no revision or expansion of our knowledge or skill sets and eventually we lose the ability to learn as a consequence. Those who have returned to learning after a long break will know only too well that you have to learn to learn all over again. Imagine if we deliberately learnt something every day; this deliberate practicing and development of the skill of learning would make us all, in theory, proficient learners. This is not necessarily doing a learning nugget or a part of a course every day. Various jobs require an amount of learning on a regular basis every day in order to keep the individual up to date and therefore effective but they would not necessarily see reference to data sources as learning. It could be argued therefore, that if whatever it was that we were learning every day was wanted, needed and which enabled us to be better at our work, then that was a positive act for all concerned.

How learning technologies help

Firstly, I should say that a lot of what I am discussing above may or may not use technology. I am making no claim that technology can succeed above all other methods of learning. It is only part of the learning mix after all. However recently a number of new or adapted technologies have enabled learning to get closer to what e-learning always promised but never delivered, and that is that it can deliver learning when you need it.

One example of these is context sensitive learning which knows which function of which computer application you happen to be working on, and at the click of your mouse directs you to a relevant piece of learning. This is an advance on electronic performance support systems which did the same thing but not with as much versatility.

The key word here is relevance since there is nothing worse than having to do a training session which has no relevance to your work. The apparent ease with which these small modules of learning can be created means that any new computer application need hold no fear to new users even if the application is not made by Microsoft! But what is the big deal here? This isn't a profoundly new idea just an improvement on an old one. The implication, however is that learning can happen more spontaneously and perhaps less consciously than before. Here the learning may be remedial, reinforcing what was already known or simply acting as an aide memoir. After all unless the application is extremely intuitive the operator would have had some original instruction on how to use it.

Rapid content development tools are also changing the face of learning. Being able to produce a short programme of instruction in a matter of minutes at almost no cost instead of weeks of costly development, is a major break through for many companies. These programmes would not necessarily be long lived or top notch in terms of instructional design but in many cases this does not matter. The important point to make is that once a training need has become identified it should be addressed as soon as possible. This new technology has in theory reduced the wait time between the result of some sort of training needs analysis and the delivery of the solution, from weeks to a matter of hours.

Learning on the move

What could be more convenient than learning when you have time available in the car, on the train or in a plane? A large majority of all ages carry mobile phones and some of these increasingly sophisticated devices can now be used to deliver short succinct learning nuggets when the user has time to do it. The same can also be said of masses of other devices now

available or coming onto the market that will enable learners to learn when they have time to do so, something which seems to be in very short supply when we are at our workplace. This is not the place to provide a review of the latest devices, their capabilities and prospective applications but it is sufficient to say that the opportunities for the delivery of learning are increasing dramatically. However these new technologies will only help if and only if they are used carefully and knowledgeably as a delivery platform.

What about learning from nelly?

Although there are many definitions of informal learning the one by Margaret Dale and John Bell (1999) comes fairly close in my opinion. Informal learning is:

Learning which takes place in the work context, relates to an individual's performance of their job and/or their employability, and which is not formally organised into a programme or curriculum by the employer. It may be recognised by the different parties involved, and may or may not be specifically encouraged.

There is much discussion nowadays as to how informal learning can be monitored and tracked without, by so doing, making it formal learning. Here technology can make a massive difference since the use of wikis, blogs, RSS feeds etc all allow learners to share what they found useful with others around them. Much of this falls under what is now referred to as Web 2.0 technologies and in particular what has been called the architecture of participation. In the context of learning, this means that there is as much push as pull, openness and a culture of exchange and collaboration. Naturally, this takes more organisation than exchanging ideas around the water cooler but the potential is enormous. And neither does this mean that management have to monitor and track what is going on because the whole point of it is that it is, or can be, egalitarian and empowering.

Again, the sharing of thoughts and ideas is not new and examples from aircraft factories from decades ago spring to mind, however it is now so much easier to do. Worry not, it is going to be on a PC or a PDA near you soon.

All the above points us in one direction learning is becoming easier to access. Instead of thinking of learning in terms of learning interventions attended or done on some sort of schedule at certain dates and times, we can now start thinking about learning that is around us all the time, pervading every business process. This may make it sound pernicious but it is, on the contrary, liberating and infinitely more effective than the occasional lump of learning as in the diagram shown previously.

What is also important is that much of what we now call learning will no longer be seen and understood to be something that is done according to formalised plans but as part of ordinary day-to-day work almost unconsciously on the part of the learner. Furthermore it creates the ability and enthusiasm to continue to learn.

The result will be as shown above.

The everyday learning interventions described in this article perform two main roles.

1. Instead of losing the ability to learn between major learning interventions that skill is exercised on a daily basis.
2. It makes learning relatively unrecog- nisable as an event and more as something done as a normal everyday activity.

Many trainers and educators are worried about this. They see that the presence of a myriad of learning opportunities will not produce real, hard learning, but with great respect to them I think they are missing the point. These real hard learning events are important and life changing and they must be as effective as they possibly can be.

If learners arrive at these events already in learning mode as proficient learners as a consequence of doing smaller learning activities on a daily basis, then they will get more out of the event than would otherwise have been the case. In this way technology is changing the face of learning today and there is no way back.

Dale, M. and Bell, J. (1999) Informal Learning in the Workplace. DfES Research Report 134, London: Department for Education and Skills Rogers, C. Freedom to Learn, Merrill, 1969

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