



The e-learning skills gap

Clive Shepherd

Surprising as it may seem, most educational and training methods are relatively timeless. Most of the familiar options, whether that's providing instruction, leading discussions, delivering case studies, running role plays and simulations, coaching, running apprenticeships and so on, have been practised for hundreds, if not thousands of years. True, we do make different choices from the available methods, as we learn more about learning (we're less likely to deliver lectures, we're more likely to engage learners in work-based projects), but the options stay pretty consistent.

The range of available learning media options, on the other hand, has been growing exponentially. Put yourself in the shoes of a trainer, just thirty years ago. You'd have felt lucky to have such a plethora of media choices available to you - including blackboards, flip charts, film and video, slides, books and posters. You'd have been familiar with *all* these media, because in those days, no trainer would have regarded any of these as being particularly specialised - they were the basic tools of the job. But with the arrival of PCs, mobile devices and in particular the Internet, the media options available have increased so dramatically that it has been hard for the trainer to keep up. As a result, many of the tasks associated with the use of technology for learning have been left to specialists, and many trainers have become disengaged, perhaps even alienated from technology.

For as long as we have had computers, we've been trying to find ways to use all that speed and power to try and bring efficiencies to the worlds of education and training. Some of these initiatives have been extremely successful, although in the early days they were severely hampered by high hardware and software costs, a lack of IT skills amongst teachers and learners, and the limitations imposed by the fact that computers were typically stand-alone devices, unable to talk to each other. All that has changed, and dramatically. Computers, in their various forms - as PCs, laptops, mobile phones and other handheld devices, games consoles, TV set-top boxes, DVD players and much more - are now so inexpensive as to be available to almost anybody who wants one. At the same time computer literacy has grown significantly, particularly amongst the young, and the internet now allows any computer to be connected to billions of others around the world at high speed.

While early computer-assisted learning was limited to the delivery of self-paced lessons to individual learners, increased connectivity means e-learning now has a much broader scope. While it's still extremely useful to be able to connect learners to relevant learning content, perhaps the greatest benefits come from the connections that can be made between learners and trainers, and between learners and their colleagues. Think about the way your own use of the internet has changed over the last ten years: chances are that you now spend as much



time interacting with other users, through technologies such as email, social networking and instant messaging, as you do hunting down information or making transactions. Learning is no different, except perhaps in that the need for this communication is even more important.

At the same time, organisations are facing unprecedented pressures, which are forcing them to re-evaluate the way they carry all aspects of their business, including learning: the pace of change means that skills and knowledge have to be updated much more swiftly than ever before; concern for the environment is causing many employers to re-think the amount of business travel that they undertake; and extreme budget pressures are leading to radical rethinks about how money is spent. Learning and development is not immune to change, as any practitioner is only too well aware; it must adapt to the new realities and take advantage of any new opportunities. This undoubtedly will lead to a much greater use of new learning media, not as a specialist, peripheral activity, but as the responsibility of every learning and development professional.

In *Driving Business Benefits*, a report published by Towards Maturity CIC in January of 2009, the second and third greatest barriers to the successful implementation of new learning technologies in 2009 were cited as 'lack of knowledge about its potential use and implementation' (more than 65% of organisations) and 'lack of skills to implement and manage e-learning' (nearly 55%). These shortfalls cannot be met, like they have been in the past, by relying on one or two internal specialists and then outsourcing the rest - the new learning technologies permeate every aspect of I&d and that means that every professional working in this field needs to be up-skilled to some degree. This starts with some basic underpinning knowledge: computers and how they work, the theory and practice of adult learning, the internet and how it works, the scope and potential of e- and blended learning, key principles of usability. Sure, some people need to know much more about these topics than others, and some start with a fair degree of prior knowledge; but just about everybody needs to know the basics. There are then four key areas of skill. Bear in mind that not every I&d professional will need to be confident in each of these areas and only specialists will need to be equipped with the highest levels of skill:

Strategic skills: These managerial skills are applied in the development and implementation of an organisation's e-learning strategy. They may be applied by I&d managers, other key stakeholders within an organisation, external consultants or some combination of these. The skills include analysing strengths, weaknesses, opportunities and threats with regard to the use of e-learning in the organisation; establishing an overall strategy for the use of e-learning; establishing the technical infrastructure; overcoming any resistance among key stakeholders; marketing the e-learning strategy; and evaluating the effectiveness and efficiency of e- and blended learning programmes.

Curriculum design skills: These skills apply to the design of any learning intervention, whether or not the decision is taken to include an e-learning element. However generic this process might be, these skills must be in place if e-learning is



to be used appropriately. The skills include analysing the learning requirement; analysing target audience characteristics; analysing practical constraints and opportunities; selecting effective methods for each key stage or element in the intervention; and selecting learning media to efficiently deliver each of these methods.

Content creation skills: E-learning content can take many forms, including tutorials, simulations, games, assessments, videos, podcasts, troubleshooting guides and simple reference material. This content may constitute the full extent of the intervention or, more commonly, represent an element in a blended solution that may well include components that are not delivered online. E-learning content creation skills may be applied by I&d professionals, e-learning specialists and subject experts, with elements contributed by creative and technical specialists. The skills include project managing the process of content creation; designing the content; preparing the written and spoken elements; preparing interactions and test items; sourcing audio-visual assets; using authoring tools to build the content; and testing and refining the content.

Facilitation skills: As e-learning evolves, it is likely to involve communication and collaboration between learners and facilitators, as it is e-content. These skills relate to the involvement of learning and development staff in the delivery of a learning intervention, with technology as an enabler. The skills include facilitating live online sessions using web conferencing tools or virtual worlds; setting up a learning intervention in a virtual learning environment (VLE) or learning management system (LMS); designing and facilitating online learning activities; and employing computer technology effectively in the classroom.

There is already a wide range of educational, training and networking opportunities to help I&d professionals to acquire the skills they need. The problem is one of scalability. Currently the numbers involved can be measured in hundreds per year, whereas the gap runs to tens of thousands in the UK alone. We need many new tutors and coaches, and some really great learning content - surely not such a problem for the e-learning industry.

So, what's available now? Well, at the top end are postgraduate courses in educational technology, run by major universities. These will provide any participant with a valuable experience of online learning and in-depth theoretical knowledge, but are, in many cases, orientated much more towards education than the workplace. There are then highly successful certificate programmes, running on a blended learning basis over anything from a few weeks to a number of months, delivered by organisations such as the CIPD and the Training Foundation. If you need a quicker solution addressing a very specific skills gap, a number of organisations run short courses on a public or in-company basis. And then there are the more informal approaches, using free online content, webinars, conferences and networking. You'll find a quick reference guide to some of the most popular resources at the end of this article.



Technology now provides so many opportunities for learning and development that it is no longer viable for trainers to keep their distance, leaving new media to the geeks and the digital natives. The pace of change is so fast that those who keep their distance stand to be marginalised on a permanent basis. The new learning technologies provide opportunities for *every* trainer to play an active role, whether that's as an online tutor, facilitator or moderator, as well as a content designer or developer. All that's needed is a willingness to get engaged, adapt and apply. Without the involvement of those who really understand adult learning and how it applies to their workplace, e-learning could easily be applied inappropriately, as it has been on occasions in the past. With every trainer engaged, new media options can be properly integrated with existing approaches in the form of blended solutions that deliver results effectively and efficiently.