Introduction

Recognizing the need to keep pace with the fast moving developments in technology innovation and pedagogical thinking, which are driving the e-learning market, Emerald last year set up a research project to investigate trends in technology and the market for e-learning and to make recommendations for development.

Two main themes emerged as significant in the field of e-learning in the early 21st century:

■ the growth of distance learning and the need of institutions to support learners with a wide variety of tools and materials
■ the increasing recognition of the importance of informal learning as a mechanism by which individuals gather the information they need to solve day-to-day, work-based problems.

Distance learning

Distance learning continues to be a growth market globally, with institutions such as the Open University (OU) in the UK and the University of Phoenix in the US making full use of the Internet and other electronic tools to deliver classes, monitor student progress and measure participation on their courses. This growth shows no sign of stalling in the foreseeable future as the total market for higher education continues to grow, creating a massive gap between supply and demand, which is unlikely to be bridged simply by building more campuses and hiring more faculty (although this latter is the model currently favoured for the massive domestic expansion of the Chinese university sector).

There are other factors working in favour of the distance learning model. In parts of the world where populations are dispersed (as in sub-Saharan Africa), where access to higher and further education is limited or difficult (most of the developing world), or where there are social and cultural pressures to limit face-to-face interactions between students (such as the Gulf states of the Middle East), models of online, distance-learning institutions are expanding rapidly. This trend is being accelerated by governments’ initiatives to push collaboration between corporations, industry associations and other agencies.
Although distance learning is far from a new phenomenon, the advent of electronic media to support off-campus learners has greatly facilitated its recent development. For all that, the use of electronic aids to teaching and learning has enjoyed far wider adoption in the primary and secondary sectors of education than it has achieved in the tertiary sector. This may be due to lack of student support or poor course content rather than to problems with technology but the recent shift towards the more interactive Web 2.0 applications is expected to make a significant impact on this issue. The recent decision of the OU to cease its seminal television broadcasting of learning resources and focus on online delivery of these materials is merely the most high profile example of the ubiquity of the Internet in distance learning provision.

In many ways successful distance education hinges on learners appreciating its role in solving their information requirements. The provision of systems and training which enable such problem solving is seen as the key to the adoption of distance learning packages.

Informal learning

The democratization of information via electronic knowledge sharing platforms is a silent, unofficial but increasingly pervasive part of organizational life. People with access to the web are learning from one another on a peer-to-peer basis using blogs, listservs, user groups and other networking tools to allow participants to pose questions that are specific to the problems they are facing at that moment and to receive answers, suggestions and moral support from colleagues around the world.

Networks are beginning to emerge, along with communities of practice based on human-centric, fluid, rich-media interactions occurring anywhere, anytime, and with anyone; and these significantly impact on learning potential. E-learning can change almost everything for learners, whether they are college students or mid-level managers, as responsibility for learning moves from the organization to the individual.

This creates a need for tools that support informal learning opportunities, especially in the workplace. As the value of informal learning becomes recognized by businesses, this need is set to grow for the foreseeable future.

Informal learning is the unofficial, unscheduled, impromptu way people learn to do their job. It can be characterized as:

- deep, pervasive and natural
- typically acquired as part of a problem-solving strategy, in response to an immediate perceived need of the learner. For this reason it is inherently context sensitive
- beyond the control of management or training bodies within the organization, who, typically, neither track nor reward it
- it is powerful – this is the driving force of the real learning culture of the organization partly because it occurs at an almost subliminal level. People do not set out to ‘do some informal learning’; they set out to figure something out or solve a problem they have.

This makes it effective because:

- it effects change precisely when people make time to learn and are really keen to find answers
- it happens in context when someone is trying out an idea or skill ‘for real’
- it is quick
- it is cheaper than formal learning.

However, its effectiveness can be limited because:

- it can take up colleague time, usually requested when the learner needs it and not when it is convenient for the neighbour or other expert to give it
- it can be inconsistent and sometimes wrong – sources are not usually validated or verifiable
- it is often not captured or formalized, meaning that the results of this learning are not readily made available to others within or without the organization.

The real power of technology in informal learning can be seen in the way that anyone with Internet access is able to go online with a question, find a group or an individual with knowledge of the area, and get a timely and relevant solution to their problem. Membership of such an online community enables a give and take of information and experience across global boundaries and time zones.

Although it is the social aspect of informal e-learning that is perhaps its most powerful driver, the ‘e’ in e-learning continues to expand with more electronic gadgets and gizmos capable of
delivering learning anywhere at any time. Audio podcasting is becoming an accepted and desired method of delivering learning to a mobile workforce quickly and efficiently and both corporations and universities are expected to recognize the power of hand-held game platforms, like the PlayStation Portable (PSP) or Xbox, to be developed as courseware platforms.

**Emerald’s e-learning initiatives**

The final report of the project made a number of recommendations based on the findings about e-learning. Many of those were accepted and have been followed up over the last few months, resulting in product and service developments that allow Emerald to work more closely with its subscribers and users in developing e-learning resources.

**Emerald InTouch**

Social Networking Sites (SNS) are an increasingly popular and powerful means of establishing long-term relationships with users. Typically, these sites allow members to join and create online communities; post to and comment on blogs; syndicate their content to other users; subscribe to RSS feeds and store different types of files, which can either be made publicly available or restricted to selected users. The breakthrough in our thinking on this matter came when we considered the possibility of creating an SNS that combined blogs, wikis and other networking tools with an e-portfolio facility and the capability to search Emerald journal content. This concept has been realized as Emerald InTouch.

Emerald InTouch is a personal learning service open to individuals and groups with e-portfolio building facilities supporting lifelong learning. It is a powerful social networking facility for professionals, academics and students. Based upon an open source application, it provides its users with blogging facilities, RSS news feeds, rich tagging services and powerful networking and community-building tools. Emerald InTouch exploits emerging Web 2.0 concepts of user-centredness and participation by offering Emerald users a powerful tool for maintaining and building online social networks. The inclusion of community spaces supports collaboration and sharing of work, projects and resources as well as a search facility that encompasses the Emerald database, meaning that Emerald subscribers can access their journal content through this gateway, in addition to retrieving material from the Emerald InTouch platform itself.

**Adoption of RSS feeds**

RSS (Really Simple Syndication) feeds serve to keep users and communities in touch with the products, initiatives and developments they are interested in. RSS acts in many ways like traditional TOC (Table of Contents) alerts but has the advantage of not clogging up the recipient’s inbox. Our conclusion is that they are set to replace TOC alerts in the mid term. Emerald has therefore created journal RSS feeds which inform interested subscribers and other potential users of new articles available for them to view online, as well as a special interest ‘learning’ feed and a feed for the Emerald for Managers portal on their website. These feeds are all free to subscribe to from www.emeraldinsight.com.

**SCORM-conformant Emerald content for VLEs**

Virtual Learning Environments (VLEs) have become ubiquitous on campuses around the world over the last few years, although it is still unclear how widely they have been adopted by users. Many large corporate and public sector organizations also have VLEs and use them to deliver online learning to employees. Within this sector, much of the material delivered by these tools is expected to conform to established standards such as Dublin Core or SCORM (Sharable Content Object Reference Model) and certainly conformity to internationally recognized standards such as these increases the interoperability and discoverability of online learning resources.

Perhaps one of our most significant outputs was the development of a ‘SCORM wrapper’, which can now be applied to any of our journal article content to enable that content to be read directly from a university (or corporate) VLE. This could have a number of potential benefits to Emerald users, who would be able set up courses with embedded reading and support materials that can be directly accessed by designated students as part of their courseware. Emerald believes that developments like this will help bridge the gap between the digital library and the digital classroom, and hopes to roll this facility out to subscriber institutions during 2007.
Mobile learning

Mobile – or m-learning – is the next step in the development of e-learning. The exponential growth in the market for portable, digital devices like MP3 players, cellular ‘smart-phones’, PDAs, e-book readers and web-enabled hand-held organizers means people are no longer tied to their desks, PCs or even games consoles whilst they learn.

Emerald is actively engaged with a number of content and technology partners in researching how content might be accessed and consumed by a mobile learning workforce or student body. Research company GfK predicts that 3.8 million mobile phones will be sold in December in the UK alone and, with the best-selling handsets ‘content-orientated’, the company says mobile content will be king for 2007 and beyond.

This uptake adds to the bewildering array of devices and formats on offer to download and play back digital information whilst in transit. However, most of these machines accept memory cards of some type, and how the information is stored on these is largely the same. Emerald is therefore investigating how to supply its materials for storage on readable memory cards and what the licensing and copyright implications of such a move might be.

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Founded in 1967 by a group of academics from the University of Bradford School of Management, Emerald Group Publishing Limited this year celebrates 40 years of journal publishing, specializing in business and management and library information sciences. The company is still privately owned and based in Bradford, although it has grown to be a global concern with editorial and sales teams all over the world.

For further information or to discuss any of the matters raised above, please contact Amanda Briggs.

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