

Putting the Learner First in e-Learning

Key-note lecture to

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The ICT Revolution

Information and Communication Technologies (ICT) are dramatically changing the way we do things and how we live. It serves our purpose in the context of this conference to illustrate the point by reference to just 5 fields where internet technology and usage have had great impact on myself. First, travel. I use my laptop to find the best value, and availability, for any journey on any airline, and secure confirmation within a matter of minutes. The same is true with hotel bookings. Second, music. The triumphant march of the iPod MP3 across the globe means I can access any of 5000 items of music any time any where. Sixty million downloads are reported by one provider alone. 600,000 people downloaded a Beethoven symphony from the BBC in 1 week. Third, News. I read about current events in South East Asia on the BBC news website, and anyone here can read news about UK, or indeed anywhere else, as it breaks. I read the Star, the Straits Times, the East Malaysia Daily Express and, less easily, the People's Daily to brief myself on current issues before I arrived in Kota Kinabalu. Fourth, business. I can sell my old radio online to anyone in the world via E-Bay and with internet banking I can instantly transfer funds between accounts, make payments and borrow money from my bank in London whilst in Sabah. Fifth, work. Call centres are replacing brokers, shops, salesmen and sales offices, and can be located anywhere in the world (I talk to someone in Bangalore, India, about my telephone account in the UK!). Wireless internet means I can do my banking, messaging and purchasing whilst on the train or in the park, and the Blueberry means I can take all my e-mail accounts wherever I go.

What these examples have in common is that the end user is in control. Businesses claim to be more efficient and provide a better service by providing the user direct access, information and

support. My life is enriched because I can order my priorities to suit my personal needs, not the convenience of the provider. The issue I want to address today is simply this: if ICT can give me responsibility for managing my access to travel, music, news, business and work why shouldn't it happen in education? I will spend the rest of this session exploring this possibility and showing ways in which it is already beginning to happen.

Educating for capability in life and at work

We are of course seeing changes beyond our immediate control as responsible educators. Students can now get their essays written for them by experts for a few dollars, countered by the development of plagiarism detection software. You can even purchase your degree online. Other peripheral developments are the growth of distance learning colleges and open source materials. Google Scholar is a major research tool giving browsing access to academic articles available on the web. However, the changes I am looking at today are much more fundamental. They concern the underlying pedagogical principles on which we traditionally operate, an irrevocable shift from teacher determined to learner centred learning.

For many of us in HE such a change is wholly welcome. In 1997, Lord Dearing produced a major report on the future of UK higher education in which he made the following categorical statement about curriculum: *"On leaving HE, all students should have developed the practice of taking responsibility for their own learning"*. Fujitsu's statement that *'Corporate capability is dependent on the motivation for continuous learning of everybody in an organisation'* is typical of industry's views. The challenge for us in HE is to find ways of giving students real confidence, based on real experience, that they can indeed manage their own learning. The process of learning, in this respect, is also the outcome of learning.

The dominant characteristic of our working lives in the 21st century is change – leading change, managing change, responding to change, coping with change. We can illustrate this with Stephenson's simple grid published in 1992, as in Figure 1.

Insert Figure 1 about here (at end after references)

Most of us operate, for much of our time, in Position Y in Stephenson's grid. In position Y, we are dealing with familiar problems for which we have learned familiar solutions. The context in which we are operating is also familiar. Position Y can apply to the work-place, the home, community activities or artistic pursuits. Good performance in Position Y may require technical skills and knowledge of the highest order, or at the simplest level. We give students information about the context; the more complex the context, the more information we give them. We give them information about the kinds

of problems they will meet, and details of the solutions which have been found to be effective. We might even give them practice in the implementation of the solutions and evaluation of their effectiveness. We seek to develop student capability in Position Y by passing on other people's experience, knowledge and solutions. Though no doubt effective in the context of Position Y, the resultant capability is essentially a dependent capability.

But Position Y is not the whole of our experience. As indicated above, change is the order of the day. Many more of us will be spending more of our time having to operate in Position Z. In Position Z, we have less familiarity with the context and we have not previously experienced the problems with which we are faced. The slavish application of solutions perfected for familiar problems may have disastrous effects in Position Z. To a large extent we are on our own, either individually or collectively. Very often, what distinguishes effective pilots, effective surgeons, effective social workers, effective teachers, effective builders and effective accountants is that they perform as well in Position Z as in Position Y.

The famous American cartoonist Gary Larson depicts a group of sheep in a cocktail party, uncertain about where to stand and when to eat. 'Thank God', one says, 'here comes a Border Collie'. Sheep, of course, have all the skills for being a sheep - they are expert at both eating and standing. They do both, at the same time, all day. Put them in a cocktail party and they are totally lost, dependent upon the arrival of a sheep-dog to tell them what to do. They have the skills but not the confidence to use them when circumstances are totally different. If these sheep were capable (in the sense in which we use the term) they would have three extra attributes: an **ability to learn for themselves**, and to quickly suss out the new environment ; a **belief in their personal power to perform** in new situations (they would have the confidence, having spotted the pasture discretely left by the host, to do something about it) and **powers of judgement** (they might even question whether it was appropriate for sheep to be at the party and simply leave).

Online learning pedagogy

In a review of current research on pedagogical aspects of e-learning, I was able to report to the American Education Research Association (Stephenson, 2003) that good practice could be characterised by 6 key words that also chimed with Position Z in figure 1:

- ownership,
- responsibility,
- flexibility,
- personalised,
- self-managed,
- on-line help
- recognition.

To achieve these features a clear view of the issues involved in learner managed learning is required. However, surveys by Bonk (2001, 2002) and Collis (2001, 2002) point to a lack of understanding of online pedagogy related to good e-learning design, leading to disappointing completion rates. The problem, it seems to me, is that the complexity and cost of setting up new e-learning systems requires the active involvement and agreement of six very different key professionals: the teacher, the supplier of software systems, the institutional manager (budget holder), the designer, the technician and, of course, the learner. Each has a different set of expertise, priorities and concerns. Each speaks a separate professional language making it very difficult to achieve consensus. Usually, the teacher and always the learner are left out of key decisions. And worse, the academic researcher who reviews what works and what doesn't, is rarely around the table.

We need a common language about teaching and learning to facilitate mutual understanding amongst all the key players. And we, the academics, do not help communication with the language we use to describe different pedagogical paradigms. Here is just a flavour: constructivist, instructivist, industrial, post-industrial, teacher centred, learner centred, authentic, situated, experiential, tacit, learning styles, problem-based, communities of practice. The list is not exhaustive. And academics like to argue about what each means thereby making communication with other specialists more difficult to achieve. My recommendation is to make it as simple as possible, hence Figure Two, The Online Paradigm Grid (Coomey and Stephenson, 2001).

Insert Fig 2 about here (see end after references)

Figure Two is based on two key variables: who controls the content / task and who controls the process? Is it the teacher or is it the learner? The creators of the grid (Coomey and Stephenson), avoided giving names to each quadrant to avoid arguments over choice of quadrant titles, hence the simple compass descriptors.

The North West quadrant is the traditional model where the teacher controls both the content and the process. Of the 100 case studies of e-learning examined by Coomey and Stephenson the vast majority were in the NW sector, including many creative and innovative schemes making imaginative use of a range of e-learning facilities. Many blended learning schemes are in this quadrant, despite employing a variety of media. The SW and NE quadrants are intermediate: in the NE the learners control the style, location, pace, duration and sequence of learning but not the task; in the SW teachers define the learning activity leaving the learner to decide and direction. But it is the SE quadrant that interests me the most. It is here where the learner is fully in control. The SE

quadrant is where students are most likely to develop confidence in managing their own learning in life and at work, as called for by Dearing and Fujitsu earlier.

However, many e-learning models used in HE are steadfastly in the traditional quadrant despite using sophisticated systems. Lectures on line, electronic page turning, email feedback on assignments submitted as attachments, online discussion groups and archived resources are commonplace. Traditional pedagogies are supported by very expensive and sophisticated systems such as online dispersed classrooms using web-cams and an array of virtual learning environments covering everything from content management, learner progress and learner-learner-tutor dialogue. Web-CT, Blackboard and First Class are well established means of sustaining a dependent learning model.

Moving out of the NW Quadrant

Technical developments and greater user confidence are greatly facilitating a drift towards the SE Quadrant. These include :

- SCORM – disaggregated learning objects
- Wireless networking
- Open-sources
- Intelligent intuitive tools
- Super search engines
- Large storage and indexing systems
- Open sources
- Blogs

The above features allow easy interrogation of content, leaving teachers free to provide advice and quality assurance.

I have two examples to show you. The first is Books 27x7, an example of publishers making all their materials available online, with sophisticated online search and advice services helping users to retrieve what they need. Encyclopaedias and specialist reference and research sources are also increasingly available, some without prior arrangement.

The second is an example from my own institution, Middlesex University. My research unit was approached by the British Council to provide a staff development service for the Islamic University of Gaza (IUG). In particular they wanted IUG us to train a core local team who could then train others in the development of electronic supportive content for use on IUG programmes. We were invited to send two advisers to IUG to provide 24 hours of face-to-face training in 5 days.

There was one major difficulty and one opportunity. The difficulty was practical. Because of the instability in the region our Vice Chancellor would not sanction staff travel to IUG. The opportunity was pedagogical, to give HE tutors real experience of being in control of their own programmes as a

way of giving them confidence to do the same with their colleagues in a cascading model of staff development. We used a learner managed learning approach in which we helped each participant to explore and articulate their personal starting and desired end points and negotiate online for our agreement and support for their individual learning programmes. Peer support was encouraged and resources were available online. We used web-based video conferencing for 1 to 1 and 1 to many exchanges to encourage a sense of urgency and belonging. By the end of the week, the 'students' were teaching their colleagues about their plans for helping others. They learnt about Web-CT: we did not teach them. I hasten to add it was my colleagues who did this work, and they were rightly given the prestigious award of '2004 e-tutors of the year' by the British Higher Education Academy.

Into the SE Quadrant – learner controlled content and process

In this quadrant we are seeing what in effect amounts to ***the end of the course as an organising structure for learning***. Fixed syllabi, pre-determined outcomes and assessments, and strictly time-tabled activities imposed by programme managers give way to frameworks or shells of support materials and services surrounding loosely defined fields of study, generalized outcomes, generic levels statements and activities pursued by the learners.

In the place of the course there is a learning support framework that provides easy access to online support from tutors, mentors or external specialists, open chat facilities, special interest groups, one-to-one exchanges with a personal supervisor, tracking and personal log services and links with other frameworks and activities. The framework will allow each individual learner to negotiate their whole programme, including its general field, content, location, time-scale and, above all, level and title of the intended award. Such a scenario is fully learner managed, exploits the features of online learning and is consistent with current trends and developments. I have time to show you two examples: The Ufi/learndirect Learning through Work programme (LtW) and the emergence of online e-portfolios.

Learndirect's Learning Through-Work programme (LtW).

The LtW web-site, viewable at www.learndirect-ltw.co.uk, provides direct help and personal support to enable any individual to review their working and personal circumstances, articulate their personal and working aspirations, design a programme of study built around their work to take themselves and their work forward, involve their employers as active partners, and secure an appropriate university qualification such as a first degree or master's degree. Each individual learner's programme and resulting qualification is negotiated online with the university of their choice.

There are three distinct stages to the LtW process:

Exploration – a free initial interactive online package designed to inform, provide diagnostic feedback and assist the learner in making a decision on the suitability of the scheme for

them. Learners wishing to join the scheme submit an online application to their chosen university.

Design – all learners must use this facility to negotiate a learning contract leading to a particular award. The learning contract must specify an individualised programme, its associated aims and components and the award sought. Learners negotiate their intended learning outcomes, the evidence they intend to produce and the assessment criteria to be used. The online Design Package contains many levels of help including downloadable expert advice on key processes and detailed help on the criteria relevant to different levels of award. Users have access to support from their university either via online dialogue facilities, private e-mail or telephone.

Implementation and assessment - learners undertake their agreed programme and present evidence for assessment with online support by their tutor(s).

Being online, Stages 1 and 2 are available to anyone at any time and place, whilst Stage 3 can be completed through work with online help from the University they have registered with. It means that learners may choose whichever university best suits their needs and are not confined to a nearby campus.

Since its launch in 2001, more than 25,000 have used the free online Exploration Package on the LtW site, many out of curiosity. Most were exploring what the programme involved and whether it suited their needs. At the time of writing a total of 1679 (61% female) aged between 21 to over 65 (mean age 32) have had their online applications accepted by one of the participating universities, 39% of them at post graduate level, and have moved into Stage Two. More than a thousand people have successfully negotiated learning contracts and are in Stage Three pursuing their own learning-through-work programme leading to full university qualifications. To date, three hundred have received their degrees.

Online e-portfolios

E-Portfolios are emerging as self management tool both within and outside formal educational programmes. I will illustrate with an e-portfolio I would design for myself. It would be customised as my personal site with myself in centre page surrounded by links to key services and support materials to enable me to take complete control of my own learning. These links would be:

Activities - ongoing, recent activities;

Self – diagnosis tools of needs, aspirations

Personal log - goals, achievements, credits from previous learning, private reflections

Resource library - assembled intuitively by the ‘back office’ in response to my stated / inferred personal and programme interests to be available when I need it

Personal development plan - strategic, immediate, progress made, priorities

Help - access to peers, tutors and mentors

Networking - peers, wider specialist community

Pooled experience - knowledge bank, archives of previous work, other people's experience

Awards qualifications – tools and help with levels criteria for target qualifications and procedures for negotiating their award

And to come

We must not assume that we have reached the end of technological changes that will further encourage the move towards the SE quadrant. We will soon see the convergence of computer game consoles (e.g. Play Station 3), wireless networking, high speed and high capacity platforms, internet access and mobile phone technologies providing in one single hand-held device multi-media streaming, web-accessed video tutoring (1 to 1, 1 to many), and group networking. With simple to use games and TV remote navigation (bypassing the keyboard) we will all be able to carry our personal learning facility wherever we go, and at the cost of a game console. What, I wonder, will be the learning potential of that?

Finally

I am not naïve enough to ignore financial considerations. As always the budget will constrain education policy. But I leave you with this simple argument in favour of learner managed e-learning to use with your institutions. Course content is now cheap and widely available; expert feedback and guidance on learning are essential and expensive; and the most expensive resource in the university is academic staff time. So... don't use your most expensive resource to deliver the cheapest item – leave that to the learners themselves. Use the most expensive resource on the most valuable service, tutorial support and guidance, and assessment. In that way we can ensure the learner is always at the centre.

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References

- Alexander, S., and Boud, D, (2001), "Learners still learn from experience when online", Chapter 1 in Stephenson, J., (Ed), *Teaching and Learning Online: Pedagogies for New Technologies*, Kogan Page, London.
- Aroyo, L. & Kommer, P. 1999, Intelligent Agents for Educational Computer-Aided Systems, *Journal of Interactive Learning Research*, Volume 10, Number 3/4 pp 235 - 243
- Bonk, C. J. (2001). *Online Teaching in an Online World*. Bloomington, IN, CourseShare.com.
- Bonk, C. J. (2002). *Online training in an online world*. Bloomington, IN. CourseShare.com.

Collis, B., & Moonen, J. (2001). Collis, B., & Moonen, J. (2001). *Flexible learning in a digital world: Experiences and expectations*. London: Kogan Page

Collis B. & M.C. van der Wende (eds.) (2002). ICT and the Internationalisation of Higher Education: Models of Change. Special Issue of the *Journal for Studies in International Education*.

Coomey, M., and Stephenson, J., (2001), "Online learning: it is all about dialogue, involvement, support and control-according to research", Chapter 4 in Stephenson, J. (Ed), *Teaching and Learning Online: Pedagogies for New Technologies*, Kogan Page, London.

Stephenson, j. and Weil, S, (1992), *Quality in Learning*, Kogan Page, London

Stephenson, J., (1998), The Concept of Capability and its importance in HE, in Stephenson, J. and Yorke, M., *Capability and Quality in Higher Education*, Kogan page, London

Stephenson, J (2003) A review of research and practice in e-learning in the work-place and proposals for its effective use Paper for AERA conference, Chicago April 2003.

Figure 1: Stephenson's Competence and Capability Grid

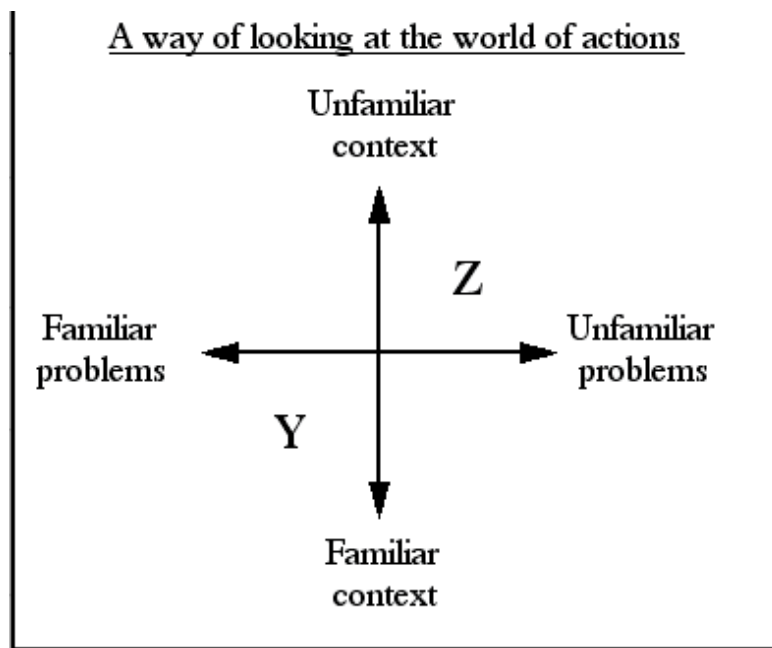


Figure 2

Coomey and Stephenson's Online pedagogy Grid

