

**Strategic approaches to digital libraries and virtual learning environments (VLEs)** [Originally published by Emerald Group Publishers, in *Library Review* 2005 Vol. 55:1 pp. 5 – 9.]

<i>Purpose of this paper</i>	Argues that the successful introduction of digital libraries in the 1990s has important lessons for the successful implementation of e-learning strategies.
<i>Design/methodology/approach</i>	An opinion piece based on current and recent trends in digital library and e-learning development.
<i>Findings</i>	Pragmatic information strategies have important parallels with potentially effective strategies for introducing VLEs. Information strategies were marketed as tools for pursuing more efficient ways of conducting existing forms of research and teaching. Initially, e-learning platforms may well be best marketed as tools for facilitating existing forms of teaching carried out with transmission-based pedagogies.
<i>Research limitations/implications</i>	An expression of belief about what may prove to be likely methods for implementing virtual teaching and learning tools. Offers potential for exploration via more in depth research.
<i>Practical implications</i>	Offers a concrete strategy for successfully implementing in everyday academic teaching practice, and bases this firmly in the lessons to be learnt from practice in library and information management.
<i>What is original/value of the paper?</i>	The suggestion that by taking a pragmatic approach to the introduction of virtual teaching and learning tools, one based on the acceptability of existing pedagogic practice, many of the more 'blue skies' ambitions of e-learning may be eventually achieved, thereby encouraging deep-seated and long-lasting changes in educational delivery.

**Keywords:** e-learning; virtual learning environments; digital libraries.

Traditional library and information services have been 'going digital' for some time.

More recently, schools, colleges and universities have started to put their teaching and learning activities onto an electronic platform by the introduction of virtual learning environments. And beyond the school and university world, there has been

a mushrooming of companies dedicated to producing digital learning content for a variety of markets, both in the corporate world and in the public education sector.

How do such changes come about? Obviously these processes have a certain momentum of their own. But they also need to be planned and managed.

The creation of information strategies, facilitated for example by the Joint Information Systems Committee in the UK (JISC, 1995), helped us introduce digital libraries alongside traditional library services. And now we are formulating e-learning strategies, in order to help us roll out this new tool, the VLE into the mainstream of our school and higher education teaching activity. This inevitably leads us to ask: can we learn lessons about VLEs and e-learning strategies by looking back at the previous decade and seeing how we introduced digital library services on the back of well-formulated information strategies?

To answer this question we should first ask another question, namely, how do we define e-learning? Because we cannot formulate a strategy to achieve something unless we know what it is we are trying to achieve. For some, e-learning is simply learning done on an electronic platform, it is an entirely tool-based concept (as in the definition, "e-learning is 'Education via the Internet, network, or standalone computer.' "<sup>1</sup>). Others would disagree strongly, saying that developing e-learning is not simply 'rolling-out' a new technology but is rather a question of changing teaching and learning in some fundamental way.

A recent report by Bonk (2004), reviewing trends in online programmes in colleges and universities both in the United States and around the world, describes the following features (among others) as innate to e-learning:

- The desire of teachers to empower the learner, for example, in searching for additional course content online.
- The power of future developments such as simulations and virtual world technology to move the focus of distance education from lecturing and memorisation to performance examinations in 'real life' situations.
- The focus on promoting generative learning rather than the passive reception of learning in students.

These are features which many identify with the 'constructivist' approach to education and, in this vision of e-learning constitute its true goal.

Defining what e-learning is important in two ways. Firstly, by defining what we want to achieve in terms of e-learning, we can derive performance indicators for measuring success. Do you just want 90% of your university's courses to be done on the VLE (a measure of the take up of the tool)? Or do you want the intrinsic nature

of education to change in some much more profound but measurable way (which is admittedly much harder to measure quantitatively)? Secondly, it points out the historical difference between creating an e-learning strategy and an information strategy. Because fundamental questions about 'What is information?' did not play such an important role in creating information strategies and introducing digital libraries (this is not to deny that a lot of complex thinking took place to create 'the digital library', but practitioners didn't complicate things too much by talking very philosophically at grass-roots level with teachers and researchers). At the propagandist level, electronic information was differentiated from traditional information entirely in terms of the medium or tool by which it was communicated rather than by some inherent or intrinsic difference in the nature of that information. Thus, an article from the British Medical Journal was viewed as intrinsically the same regardless of whether it is downloaded as a pdf or read in hard copy, but the electronic journal service made life easier for you.

This gave librarians rolling out digital libraries a peculiar advantage over today's proponents of e-learning who present it as a completely new learning philosophy which just happens to be uniquely well facilitated by tools such as VLEs. For example, in universities it meant that we librarians simply had to convince academics that digital library services were straightforward ways of facilitating what they had always done before. They the academics were the ones who knew about teaching, learning and research, it was not down to us humble information professionals to tell them what their philosophy of academic practice should be. We were just offering them tools that worked better than before: you didn't have to go to a library building to read a journal any more, you could get the same thing over your desk-top by accessing it electronically.

If this aspect of information strategies were carried over into e-learning strategies then some of the difficulties of the advocacy of e-learning would be removed. As one academic might have put it, 'I don't like to be told to use a VLE as part of a larger *managed* learning environment: who should *manage* learning in universities, the academic staff or the proponents of learning theory who are trying to impose something in us in a top down way?'

The librarian would simply ask, why provoke this reaction in the first place?

Just as there were barriers to be overcome in making the first digital library services acceptable (e.g. the problems in initial uptake and acceptability of e-journals), there are also barriers to be overcome in the uptake of VLEs. For a start, off the shelf packages such as WebCT have rich but complex and daunting interfaces. Mastering them is rewarding, but not straightforward. So it would be doubly unfortunate if the challenge of changing the philosophical principles of one's teaching were also viewed as an inevitable part of VLE uptake. This may be too much of a challenge. Especially when changing the principles of one's teaching does *not* have to be seen as an

inevitable part of VLE use - the two should be seen separately.

Thus, if some academics are more at ease with a transmission-based model of teaching to passive students, and want to use the VLE as a way of replicating this pedagogic model, then they should not be led to believe that the VLE is a tool which is indistinguishable from the constructivist e-learning model. It is quite adaptable to both.

So, for example, the outreach aspect of VLEs (a transmission capacity) should not be underestimated – just as digital library services are the best form of services for lifelong learners who are in work and remote from campus, so are networked VLE-based courses eminently suitable for students who are remote from campus. The VLE in this sense empowers learning by ‘transmitting’ education beyond the physical boundaries of the campus, rather than by uniquely empowering students to construct their own learning. We shouldn’t underestimate the power of transmission, which is denigrated in some e-learning circles as mere spoon-feeding: if it has sold digital libraries to students and academics, it will also sell VLEs to the same market.

This may seem rather pedestrian as a philosophy of learning environments. But it does derive from library and information professionals’ experience of the nature of traditional libraries and digital libraries. Digital library innovation succeeded because it was introduced as part of information strategy, not knowledge management strategy. If knowledge management (which of course adds value to ‘mere’ information) is now the coming thing, that is because we succeeded with information strategies first. So perhaps we need to build e-teaching, transmission-based strategies for electronic learning environments as the first step before moving towards fully achieved e-learning strategies.

However, if this seems unambitious, we should note one final point. The uptake in university digital library services was driven in particular by the demand for electronic database access (in particular, the first BIDS database services in the UK) and by electronic journals. These electronic tools are undeniably identified with project-based, independent learning pedagogies where students have to research their own topics and create their own collections of information resources to write unique pieces of personal work. By contrast, in many academic libraries e-book services have lagged behind these developments. Teaching collections, which largely spoon-feed students prescribed reading, often remain largely hard copy in nature.

No definitive conclusions can be drawn from these facts, but they may show that there is something intrinsic to the nature of electronic services (be they virtual information services or virtual learning platforms) that identifies them with independent, self-directed learning. This is good news for the proponents of e-learning as a new philosophy of education, because it may give succour to ‘deterministic’<sup>2</sup> or ‘essentialist’<sup>3</sup> beliefs about the new digital media. Even if you do

not promote the introduction of these media on the back of a new learning philosophy, your teaching and learning will evolve into new constructivist forms regardless. But from a propagandist perspective, just don't push the constructivist learning model too hard or too fast at the beginning – you may alienate people who are actually very good at traditional teaching and know they are too. Take a 'softly softly' approach and let the power of the new learning technologies – once adopted - do a lot of the work for you. As talented traditionally minded teachers explore the intrinsic capabilities of VLEs so will teaching evolve into learning, just as information management appears to be turning into knowledge management.

We should recall that digital libraries were introduced in an entirely neutral way, with no philosophical fanfare, but have turned out to be powerful agents for the promotion of independent learning. If VLEs are promoted neutrally, simply as a useful tool, without alienating conservative academics who teach with traditional pedagogies, then the intrinsic nature of these media will affect the teaching that they facilitate.

In this way, a new educational philosophy will be adopted as teachers and learners discover the power of the new media for themselves. This approach to educational strategy is not pedestrian or dull –it is a pragmatic approach based on a belief in the innate capacities of the new digital educational technologies. As such it represents the most optimistic view possible of what VLEs can offer us.

So let's not to spoil things by overstating what can be achieved by such technologies in the first instance. A minimalist approach may well lead to a maximum impact, as the true impact of e-learning is discovered by the educational mainstream. The great irony is that pragmatic information professionals know more about this than many proselytisers for e-learning: another quiet victory for the humble librarian!

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### Notes

1. Learnframe. About e-learning: glossary of e-learning terms <<http://www.learnframe.com/aboutelearning/glossary.asp#E> last accessed September 24th 2004>
2. A determinist view of the new learning media regards these media as having their own ability to determine, form or decisively influence the nature of any educational process which is conducted through them. In this case these media are seen as determining the shift from traditional teaching to electronic learning.
3. An essentialist view of the new learning media regards these media as having an intrinsic nature or essence which informs, shapes and changes the educational

activities they support. In this case again the change would be the change from traditional teaching to electronic learning.

### **References**

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