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# Learner Managed Learning: an emerging pedagogy for online learning?

John Stephenson

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## Research into online teaching

In a review of 100 research reports completed in the past 3 years, Coomey and Stephenson (1) found little if any definitive evidence of the overall effectiveness of online learning compared with conventional learning. Instead, most research was focused on features of design and structure, leading to feedback on what seemed to work and what didn't in the case in question. The authors' conclusion was that the new media should be looked at as new opportunities to do new things, and efforts should be put into ensuring that good practice is learnt and developed.

A critical factor which the designer of learning materials has to take into account is the overall educational pedagogical model for which the material is required. For instance, most teachers and trainers seek materials within the traditional paradigm of teacher control and tightly specified tasks and outcomes, whereas the new media open up opportunities for different pedagogical approaches to be used. Moreover, they argue, the technology itself is driving pedagogical change towards a more learner managed approach. Strict comparisons of relative effectiveness of ICT and classroom teaching are not only hard to find - they might not tell us much about how the future of online learning should be developed.

## The new media

At the simplest level, online learning offers alternative ways of delivering materials previously delivered in print form or in lectures or classes, often appearing to the learner as 'electronic page-turning'. In such cases, learners can simply print out the texts and use them as hard-copy handouts. Student assignment reports based on that material make the return trip, posted to teachers as attachments to emails for printing out by the teacher. Such usage replicates the pedagogical practice of many lecture theatres and classrooms - content delivery, follow-up activity, materials submitted for assessment, albeit with considerable savings in time and distribution costs.

Online learning, however, has much more to offer than easier text exchange between student and teacher. The following *features of online learning* should be of particular interest to teachers and learners.

- Easy **access** to and interrogation of high volumes of **diverse learning resources**, including texts, pictures, library materials, learning tools and other aids to learning assembled by the teacher and institution;
- Ease of **access** to other **materials from other sources**, including non-educational sources;
- Ease of **access to experts**, inside and external to the institution;
- **Dialogue**: - teacher - student, student - student, specialist closed groups, open groups, in real-time (synchronous) or over a period (asynchronous), one-to-one, one-to-many, many-to-many;
- **Routine recording** of all transactions in an accessible form capable of adaptation and access as lessons from other students' experience and concerns, threads of discussions and development of argument, frequently asked questions, and for quality assurance and accessible archives;
- **Access** to a range of **personal support** by e-mail with tutor and mentors, or through specialist or peer discussion groups;
- **Ease of navigation** to sources and persons - within and outside the package of materials - according to the interests and needs of the learner;
- **Logging** or tracking of activities for personal records or sharing;
- **Multi levels of engagement** via navigation buttons - to different depths of understanding, different volumes of data, difficulty of learning activities - according to the interest or capacity of the learner;

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- **Feedback** loops, either from teachers, peers and others or from within the materials themselves through **progress checking**, quizzes and online assessment;
- Linkages to **other media**, such as sound, video and TV;
- Ease of access to **simulations** of dangerous or complex activities for learning purposes;
- Choice of **learning styles** within the same package according to needs of the learner;
- Opportunities for working 'live' in **collaboration** with others from anywhere in the world.

The overriding feature of online learning is that it has the potential to allow each of the above features to be controlled by the learner - at the same time if necessary - in their own learning station, home or place of work. Moreover, online learners are not confined to the materials, services and activities provided by the instructor. If all of the features of online learning are to be exploited to best effect, there needs to be significant changes in the roles of the teacher and the development of the skills to carry out those roles. We will need to rethink the idea of the course as the main organising structure for learning.

The hardware and software necessary to take advantage of online learning are increasingly available outside the formal educational system, beyond the control of teachers. Many homes and work-places have one of the most powerful learning tools ever invented, controlled by potential learners. The tide of 'online anything' is still running strong. Commercial companies, including major publishers, broadcasters and film companies are moving in.

This cultural trend is being matched by technical innovations. Publishers and designers of materials are beginning to '*dis-aggregate*' their archived materials, broadcast clips etc, into bite-sized learning objects capable of being stored and easily retrieved in any order or combination appropriate to the user's needs. This is being matched by developments in electronic '*meta-tagging*', whereby each dis-aggregated learning object can be tagged with details of its characteristics, to facilitate high-speed retrieval and re-assembly according to individual learners' needs. New software tools, or 'agents' are being developed which will further reduce learners' dependence upon tutors to mediate what they learn. Intuitive or 'intelligent' agents can give access to complex and multi-level data sources and can present material in a format appropriate to the learner's requirements. Some agents can learn about their users' learning styles, interests and intentions intuitively *from the learners themselves*, and automatically gather information, monitor the learner's progress and assist in the planning of further learning.

These pressures and technical innovations are likely to push the next generation of online teaching and learning more towards learner managed learning. ***Any new pedagogy which fully embraces online learning is likely to see 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 will 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 will be learning support environments which provide 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.

Such a scenario is fully learner managed, exploits the features of online learning and is consistent with current trends and developments. It may not happen exactly that way - there are always surprises and disappointments in educational technology. But one thing does appear to be certain: the challenge facing teachers is not *whether* to give their online students responsibility for their own learning, but *how much* responsibility are they going to *deny* or *facilitate*, and *how* they are going to do it.

**John Stephenson**

Head, International Centre for Learner Managed Learning, Middlesex University  
J.Stephenson@mdx.ac.uk

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A more extended version of the above can be found in *Teaching and Learning Online: pedagogies for new technologies*, edited by John Stephenson, to be published in March 2001 by Kogan Page, London.