

**learning
and skills
development
agency**

LSDA reports



Distributed open and distance learning

How does e-learning fit?

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Published by the
Learning and Skills Development Agency

www.LSDA.org.uk

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Registered with the Charity Commissioners

Editor: Yvonne Percival
Designer: Dave Shaw
Printed in the UK

ISBN 1 85338 713 4

R1161/11/01/2000

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Note

The Learning and Skills Development Agency
was formerly known as FEDA.

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Introduction

The terms 'distance learning', 'open learning' and 'flexible learning' are often used interchangeably. Differences in meaning are sometimes blurred even further by combining the terms, as with 'distributed open and distance learning' (which forms the unfortunate acronym DODL). If we are to make progress in managing and resourcing forms of flexible learning, some clear distinctions need to be made between them.

The Further Education Funding Council (now the Learning and Skills Council), through its DODL subgroup and other bodies, was moving in this direction. The Learning and Skills Council distinguishes open learning from distance learning on the basis of extended definitions.

The recent concept of 'e-learning' has added to this already confused picture. E-learning refers to the application of the internet and web-based technology to learning processes. It is often assumed that e-learning is open and flexible by its very nature. Insufficient attention has so far been paid to whether the features of e-learning fit better with some sorts of flexibility than with others.

This paper proposes a taxonomy for analysing forms of flexible learning. It then applies this analysis to e-learning to illuminate some key issues. The paper has been presented at a number of conferences and has benefited from practitioners' feedback.

Classifying DODL

Key features of flexible learning

The distinctions made between types of open and distance learning broadly equate to the concepts embedded in the slogan 'learning at a time, place and pace which best suits the learner'.

To help understand the key features of different types of flexible learning, we can make the following distinctions:

1. *Distance learning refers to geography.*
We can contrast **distance learning**, where the learner is not in the same place as those providing support, with **centred learning**, where the learners and those supporting them are in physical proximity. This model does not take account of variations in the distance; learners and their supporters are either in the same place or they are not. To take into account the degree of distance is theoretically possible. A scale based on miles might be devised, or a distinction made between those who are distant but always in the same place and those who are peripatetic. These distinctions are not felt to be significant.
2. *Open learning refers to time.* We can contrast **fixed learning**, where the time of a learning activity is preset, with **open learning**, where it is not. Time has two components in this respect:
 - duration, ie how much time is involved
 - date, ie when it happens (including the time of day).These distinctions are important, at least for resourcing purposes. We note one further distinction, between duration being variable and being unlimited, but do not develop it here.
3. *Flexible learning* is a generic term referring to any and all of the above.

Types of DODL

Combining these distinctions allows in principle for ten different types of DODL. These are summarised in Figure 1. Can these abstract constructs be related to observable types of activity?

Fixed learning

The two types of fixed learning are relatively easy to identify:

- Cell 1 refers to traditional class-based learning. It takes place in a predetermined location at set times and for a set duration.
- Cell 2 shows that distance learning can be equally fixed. Teaching a class by video conference, for example, can be every bit as fixed in time and duration as face-to-face teaching, whether the class is together at another centre or at a variety of locations using different screens. The internet might also be used in this context, though whether it would be sensible to do so is another matter.

Open learning

Cells 3 and 7 under Open learning are logically equivalent to Cells 1 and 2 under Fixed learning.

Centred learning

- Cell 5 shows entitlement to a specified number of hours of support, which can be accessed whenever the learner wants – like having a book of undated tickets.
- Cell 6 represents the drop-in workshop; it can be accessed whenever the learner wants and as often as necessary – like having a season ticket.
- Cell 4 allows the learner to book as much support as they think they need, but at predetermined times. Some colleges run workshop provision on this basis, called 'flexastudy'.

Distance learning

- Cell 9 is the distance equivalent of Cell 5 – access to an agreed level of support. Most colleges offering the 'flexistudy' provision developed by the National Extension College (NEC) do so in this way.
- Cell 10 is the distance equivalent of Cell 6. With Cell 10 there is no fixed level of support, although the exact analogy with Cell 6 would fix the hours of the day it was available. A helpline is a distance drop-in workshop.
- Provision depicted by Cell 8 is like a clinic – you can go as often as you need, but the times at which support is available are restricted.

So, as two cells (3 and 7) overlap and Cell 1 is neither open nor distant, we can identify seven forms of DODL. It seems likely that future research will catalogue their relative suitability for different learners and different types of learning.

Figure 1
Types of DODL

	Fixed learning	Open learning	
		Fixed	Open
Centred learning	1	Fixed date(s) 3	4
		Open date(s) 5	6
	2	Fixed date(s) 7	8
		Open date(s) 9	10
Distance learning			

General points

The different dimensions identified can, do and should vary. This simple point is frequently overlooked. Many commentators write as though the maximum degree of flexibility represents an ideal, and arrangements that impose limits on learner freedoms fall short. In practice, some of the most successful examples of flexible learning have limits. The long-standing collaboration on flexistudy between the NEC and FE colleges is a good example.

Types of flexibility are not linked necessarily or systematically to particular technologies. Over the next few years by far the most widespread example of flexible learning will be the 'entitlement' of full-time 16–19 year olds to appropriate arrangements for tutorial support. It fits the description of Cell 6 in Figure 1, yet is likely to be predominantly unmediated face-to-face contact.

Some forms of flexibility result in resource-scheduling problems for providers, as they cannot predict when or how many resources will be needed. To the extent that these problems are not mediated by legal or practical constraints (such as being closed at night), the consequence is to drive up the cost of provision. This raises the question of who should pay the extra cost.

Flexibility and e-learning

For the purposes of this paper, 'e-learning' refers simply to the support or enhancement of learning activities through the use of the internet and related technologies. Ufi has positioned itself as a champion of e-learning and it is helpful to consider here aspects of the Ufi approach. E-learning is, however, wider than its specific application by Ufi.

Ufi insists that arrangements made by hubs and centres must allow maximum flexibility. While using the web is one way of making this possible, it also makes the task of establishing and managing the new initiative much more demanding. It is not clear whether Ufi, or other advocates of the e-learning revolution, ever recognised that being flexible does not necessarily mean loosening all constraints, merely some of them.

E-learning can, of course, be embedded in all forms of flexible learning, and also, by contrast, in 'inflexible' learning methods. The following paragraphs highlight some key points.

Cell 1

Timetabled classes

E-learning does not have to be flexible in the sense used in this paper. It can be, and is, accessed in conventional classes. Teachers already use many different types of technology in class settings – books, films, in experiments and investigations, and in a range of practical tasks – and there seems no reason in itself why e-learning should not be substantially used in a timetabled class setting. So-called 'learning centres' often refer simply to the practice of moving classes to the part of the building where computers are located.

Cell 2

Timetabled distance learning

E-learning could be used for timetabled distance learning, but in general this would not use the technology to its best advantage as it fails to exploit the potential for asynchronous communication. One possible application might be for a structured and timed e-mail discussion – this could be more beneficial than simply being a member of an online mailing group.

Cell 4

The 'book-in' model

A practical way of managing the development of e-learning is for learners to book sessions, just as they would book driving lessons. This is also a highly successful model of flexible learning, as, like e-learning, it involves a system of one-to-one support, an individually tailored programme and expensive kit. The booking enables providers to plan the necessary human and material resources. Other models of access provision are less efficient for the learner – providers can make optimum use of their resources by undersupplying them so that there are frequent queues, or by imposing higher unit charges to cover the times when facilities are under-used.

Cell 5

The 'book of tickets' model

This model gives the learner more flexibility than the 'book-in' model, but increases resource-scheduling problems for the provider. The learner may pay the price for this flexibility if the resources are fully occupied when they want access to them; or if the provider allocates resources to meet the peaks of demand and restricts access (to bear the shortfall) in the troughs.

Cell 6

The 'drop-in' model

This model is the most challenging for resource planners. The provider cannot predict when the learner will require access, nor how often. In practice, this is often managed by pre-existing constraints: centres have fixed opening hours and limits on capacity. The model works, however, in both education and commercial internet cafés.

Cell 8

The 'clinic'

This arrangement might apply to a series of planned telephone tutorials. It would be possible to handle the same transactions via e-mail, though apart from unusual circumstances (eg for people with partial hearing) it is difficult to see why anyone would want to do so. It is more likely that an agreed pattern of telephone support could be the best method of supporting learners who are following a programme primarily by web-based self-study.

Cell 9

Flexistudy

Cells 9 and 10 align with one of the key advantages of e-learning – the ease of asynchronous communication by e-mail. It is much more likely that the internet will be used to send written messages which are responded to within an agreed period than for 'live' e-mail conversations. However, this does not represent either a major change from, or a major advantage over, letters sent by post. Two of the big advantages of e-mail – that it is instantaneous, and that a single communication can be sent to multiple users are only of limited value in such an asynchronous and individualised context.

From the learner's point of view here, the use of electronic media and communications does not represent a significant change from books and paper. It seems likely, therefore, that the organisational forms that worked well in the old context will transfer well to a similar group of learners in e-learning. Change may well be driven largely by the economies that providers can gain from the ability to copy electronic documents very cheaply.

Cell 10

The helpline

The helpline is the distance form of the drop-in model, made more complex in the context of e-learning by the capacity of e-mail to overcome the restrictions of opening hours. Staff at a drop-in centre can go home; special arrangements are needed to protect individuals and organisations from the prospect of unlimited demands from e-clients. E-mail overload can lead to anger and anguish, and even to giving up altogether. It might be wise not to generate unlimited expectations in the first place.



Conclusions

The variety of settings that can be accommodated within umbrella terms such as 'flexible learning' or 'e-learning' make the use of such terms very limited for either analysis or policy. We need to stop asking general questions, such as 'What are the benefits of e-learning?' or 'How should we resource flexible learning?'. We need to focus instead on specific applications, such as: 'How should we resource a learning centre which students can access on a drop-in basis as part of their course?'

We must accept that flexibility is not an end in itself and that more does not automatically mean better. New technologies will be used to maximum advantage when we are clearer about the specific combinations of fixed and open parameters, and about old and new technologies that work best for particular learners and specific types of learning.

The direction for future research is clear: we need to find examples of particular types of flexible learning and, when we have sufficient examples of a particular type, to characterise it in detail. By investigating these contexts we can begin to assemble an understanding of good practice; to identify learners for whom a particular type of flexibility seems to be appropriate; and to identify the levels and patterns of resource use associated with acceptable learning outcomes. Only then will it be possible to develop an understanding of how specific learning settings need to be funded.

The Learning and Skills Development Agency has already started such research. It is working with the NEC to benchmark practice on the type of flexible learning described above as 'flexistudy'. It is also seeking to clarify what is meant by 'learning centre', to develop a similar analysis. The development of Ufi learning centres will give further opportunity for detailed investigation.

The terms 'distance learning', 'open learning' and 'flexible learning' are often used interchangeably. Now there is also 'e-learning'. But what does each term mean, and how do they differ? A clear understanding of the distinctions between them is needed if the various forms of flexible learning are to be successfully managed and funded. This paper classifies the key features of the different types and defines seven forms of distributed open and distance learning. It shows that each type can be organised using information technology – e-learning – or without it. It examines the relative merits of applying e-learning technology to the various models, from timetabled distance learning to flexistudy by e-mail, and considers the new demands on both providers and e-learners.