

E-learning and training in Europe

A survey into the use of e-learning
in training and professional development
in the European Union



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Cedefop Reference series; 26

Luxembourg: Office for Official Publications of the European Communities, 2001



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Introduction

Background

E-learning has the potential to change education and training radically, to open new ways of teaching and to increase the ability of people to acquire new skills. Its development is important for governments looking to widen access to education and training and to increase the qualifications of those entering the labour market and for companies seeking new business opportunities or to maintain or strengthen their competitiveness through continuously improving productivity.

E-learning has created new markets for teaching and learning material and equipment, attracting the attention of academic institutions as well as companies supplying them in different sectors – computer manufacturers, software producers, publishing houses and special training providers. It has also led to the reorientation of government policy, in the European Union (EU) in particular, towards encouraging the spread of e-learning techniques and developing the skills and know-how required for their use.

Therefore, e-learning was assigned a key role in the pursuit of the EU's policy objective, announced at the Lisbon Summit in March 2000, of making the EU 'the most competitive and dynamic knowledge-driven economy in the world'. The e-learning initiative was launched by the European Commission two months later to encourage its spread. This was followed by its incorporation into the European employment strategy in the form of a specific objective of 'developing e-learning for all citizens'. To achieve this, EU Member States committed themselves to ensuring that 'all education and training institutions have access to the Internet and multimedia resources by the end of 2001 and that all the teachers and trainers concerned are skilled in the use of these technologies by the end of 2002 in order to provide all pupils with a broad digital literacy' (Guideline 5, Employment Guidelines, 2001).

Despite its central importance in government policy and significant interest in the scale of the actual and potential market, there is an acute shortage of quantitative information on the extent of e-learning in providing initial and continuing vocational education and training and on the rate at which it is growing.

Although some surveys have been carried out on the size of the market and its rate of growth, many of these are of questionable reliability since the size and representative nature of the sample on which they are based are invariably difficult to discern. Those not confined to a single country often focus on large multinational companies, especially US ones and particularly those in the information and communication technology (ICT) sector. While unquestionably of importance these are by no means the sole or possibly even the main source of demand or supply. They also tend to treat the European market as a single entity without drawing any distinction between different countries or different subject areas.

This lack of hard evidence makes it difficult for governments, companies and other organisations to develop coherent and effective policies in this area. It makes it equally difficult for governments to assess the effectiveness of the measures introduced and the expenditure incurred and determine the action needed if the strategic objectives to encourage the spread of e-learning are to be achieved.

Although fairly straightforward to collect information from schools and colleges on the PCs and other multimedia they own and their access to the Internet and the exposure of pupils and students to e-learning techniques, it is much harder to compile similar information outside the mainstream education sector. To ascertain the extent and pace of developing e-learning in vocational education and training is far more complicated since the training market in Europe is highly fragmented and involves a huge variety of different players, private as well as public.

Aims of the survey

This report is the product of a study aimed at investigating the feasibility of collecting data on the use of e-learning methods in vocational education and training in the EU.

Its specific focus was on initial and continuing vocational education and training – i.e. the training provided to those in employment or seeking to return to work to extend or update their skills and knowledge – rather than on education.

The sample of companies and organisations covered is fairly small, particularly in some countries, even if larger than most previous surveys in this area. The survey is not scientifically based in the sense of covering a representative number of players in each part of the market. While it is impossible to ascertain how far the respondents from whom replies were received are representative of the organisations involved in vocational education and training, whether as suppliers or users, they, nevertheless, include different types and sizes of organisation from all EU countries. Therefore, the survey can claim to give a more comprehensive view about e-learning in the EU and its rate of development than has been available up to now.

Despite being kept deliberately short to maximise the response rate, the questionnaire covered the main points at issue: the use of e-learning in relation to other forms and methods of training in different subject areas; the extent to which suppliers of e-learning tend also to be users; the importance of e-learning as a source of income for training providers and as an element of expenditure for users compared with other training activities; and the growth of the e-learning market in terms of the revenue generated and the spending incurred.

Definition of e-learning

Although there is a tendency to equate e-learning with the use of the Internet for teaching purposes, this seems too narrow a conception of the term, since much the same training programmes are often provided either on an Internet website or on CD-ROM or a combination of the two. The definition of e-learning adopted here is that adopted by Cedefop since 2000. It is a rather broad one, namely:

‘learning that is supported by information and communication technologies (ICT). E-learning is, therefore, not limited to ‘digital literacy’ (the acquisition of IT competence) but may encompass multiple formats and hybrid methodolo-

gies, in particular, the use of software, Internet, CD-ROM, online learning or any other electronic or interactive media.’

Key considerations – the distinctive features of the study

The starting point of the study, which distinguishes it from most other surveys conducted in this area, was the recognition that, if meaningful results were to be obtained, it was important to differentiate between:

- ***different countries and languages***; the most obvious difference between European countries is that of language; this tends to affect the rate at which e-learning is taken up, if only because much of the content of new programmes has initially been in English, reflecting that most suppliers come from North America. Countries with English as a native language or with high levels of second language English speakers (the Netherlands, Denmark, Finland and Sweden, in particular) have obviously been targeted first by e-learning suppliers. Language, however, is not the most critical difference;
- ***different vocational education and training systems in Europe***; more importantly, each country has its own vocational education and training system. While having certain aspects in common with systems elsewhere, each tends to have its own distinctive national features which reflect economic, social and cultural characteristics as well as the system’s evolution and the broad institutional context in which it operates. These distinctive national features are likely to affect the development of e-learning in different parts of Europe – the way in which e-learning is incorporated into training and the pace at which this happens. In practice it will tend to take longer for e-learning techniques to be incorporated into vocational education and training in a country such as Germany, which has a highly structured system and where the possibility of pursuing a particular vocation depends on completing a well-defined programme of training, than in a country like the UK, where the system is much less structured;
- ***different types of organisation***; there are a range of players involved in providing vocational education and training. These need to be separately distinguished if a representative picture is to be obtained. Since there is no officially recognised system in Europe for classifying training providers into distinct categories, an initial task of the study was to devise such a classifi-

cation system which was not only specific to the study but which could serve more generally. The types of organisation distinguished were as follows:

- university/college of further or higher education,
- public vocational education and training organisation,
- sector/industry training body (organised by professional/trade association, trade union),
- voluntary or social organisation,
- private training company/organisation,
- private or public organisation (any sector) with internal training services,
- private or public organisation (any sector) with internal and external training services,
- organisation specialising in producing/providing training tools/content,
- other type of organisation;

- **users and providers of training**; the demand and supply sides of the market for e-learning, since they may behave differently and display different trends at this stage of early development, need to be distinguished from each other. Such a distinction, however, is too simplistic because consumers or users of training are often both suppliers and providers simultaneously. Indeed, one of the main findings of the study is that many organisations buying in training from outside are also training providers, either supplying training internally within the organisation itself or externally to other organisations;
- **different subject areas**; many e-learning surveys conducted in the past concentrated on the use of such methods in the training of information and communication technology; while this is undoubtedly one of the main areas of application, it is important to investigate the development of e-learning in other subject areas, such as language learning, acquiring other technical skills or in management, where its potential could be equally large if not greater;
- **current and capital spending**; the distinction between current spending, or expenditure on training content, and capital spending, or the investment in equipment required to receive or provide e-learning, is often blurred. But it is important to separate the two if data on the amount spent on e-learning are to be meaningfully interpreted. In practice, a significant proportion of spending on e-learning so far has gone on hardware and infrastructure rather than on software, the content of e-learning programmes tending to lag behind the capacity of hardware systems and the Internet to deliver.

The form of the survey

The survey was conducted via the Internet, by a web-based questionnaire (hosted on the European Training Village –ETV– website: www.trainingvillage.gr). This was carefully designed to elicit information on key aspects while being as easy and quick to complete as possible to obtain the maximum response rate. The issues addressed concerned:

- the types of organisation involved in e-learning and their size;
- whether they are providers or users of e-learning or both;
- the importance of e-learning in relation to classroom tuition;
- the use of e-learning in different subject areas;
- the amount spent by users on e-learning compared to other forms of training over the last three years;
- the revenue earned by providers over the same period.

To increase the response rate the questionnaire was translated into French, German and Spanish. A copy of the questionnaire is included as an annex to this report, together with more details of how the survey was carried out.

Requests to complete the survey (with follow-up reminders) were circulated to as many organisations involved in training as possible. Cedefop's own substantial contact database was supplemented by an extensive search to identify other databases and lists of participants in training provision in different parts of Europe.

It is inevitable that conducting the survey in this way is likely to bias the results, in the sense that it was confined to those with access to the Internet, who are more likely to use e-learning training methods or to supply training in this form. It was also limited to organisations with an expressed interest in training, as they were included in Cedefop or other databases or in lists of training providers.

Nevertheless, it is unlikely that a great number of training providers or significant users do not have access to the Internet, so the degree of bias revealed by the form of the survey may not be large. Although it would have been desirable to complement the web-based survey with a traditional, paper-based approach, assuming this would have produced a significant response, the aim was to create the basis for a repeatable survey of developments in the future. Use of the worldwide web for the survey was considered an important feature in itself.

E-learning has the potential to change education and training radically, open new ways of learning and increase the ability of people to acquire new skills. It has created new markets for teaching and learning material and equipment. Despite its importance, there is a shortage of information on the extent of e-learning and its rate of growth. This survey, while not a statistically representative sample, covers a range of organisations of different size and type from all EU countries. As such, it provides insight about the rate of the development of e-learning in the EU, the differences between the Member States. The survey was carried out online on the European Training Village (ETV) website www.trainingvillage.gr, by Cedefop, in 2001.

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Price (excluding VAT) in Luxembourg: EUR 40

3021 EN



OFFICE FOR OFFICIAL PUBLICATIONS
OF THE EUROPEAN COMMUNITIES

L-2985 Luxembourg

ISBN 92-896-0106-X



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