Bringing knowledge within reach

Multimedia and internet technologies are opening new pathways to lifelong learning in universities, schools and workplaces. E-learning promises to enrich Europe's skills base by giving individuals control over what, where, when and how to study.

Learning to compete

Without world-class learning opportunities, Europe will be unable to sustain its competitiveness and prosperity. E-learning encompasses new applications and services based on information and communication technologies (ICTs), designed to help individuals, organisations and society as a whole to enhance skills through better, more continuous learning processes.

ICT is already helping learners to study at times and in places they choose. Pilot research projects have demonstrated the potential for learning 'on the move', and for reaching disaffected and excluded learners.

Within organisations, ICT-based training and self-directed learning at work are contributing to new models for competence and skills building. New technologies can simulate real-life work situations to provide training without exposure to risk, for example. They are also beginning to support the sharing of knowledge between learners.

A Priority for EU Action

The EU defines e-learning as "the use of new multimedia technologies and the internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration."

Efforts to bring this about are now being followed through in the **eLearning Programme** which gives

EU-level support for actions aimed at:

- improving digital literacy;
- developing virtual campuses;
- school-twinning on the internet;
- sharing of experience and good practice; and
- developing analysis and forecasting tools.

The emerging model of e-learning puts the learner firmly at the centre of the learning process.

Complementing this, research into **technology-enhanced learning** aims to:

- support collaborative learning;
- study the use of virtual presence and simulation services;
- facilitate transfer and sharing of knowledge; and
- extend access to new learning opportunities independent of time and place.

The Commission is giving a new impulse to eLearning and knowledge society skills in the i2010 initiative for the 2006-2010 period. The challenge is how to reap the benefits of ICT in a way to ensure that everyone acquires the necessary competences and attitudes to be able to participate in the information society.

eEurope at a Glance

The eEurope initiative was launched in June 2000 to speed up Europe's transition towards a knowledge-based economy and to realise the potential benefits of higher growth, more jobs and better access for all citizens to the new services of the information age.

The first phase – the eEurope 2002 Action Plan – included 64 targets, the majority of which were achieved by end 2002. eEurope 2005 was launched in June 2002, focusing on promoting a secure, broadband infrastructure, eBusiness and public online services (eHealth, eLearning and eGovernment).

The new strategic framework, **i2010 – European Information Society 2010**, promotes an open and competitive digital economy and emphasises ICT as a driver of inclusion and quality of life.

Innovative services and systems

ICT-based learning tools and systems are more and more common in schools and universities, the workplace, and in emerging services to support independent and life-long learning. However, a more fundamental change will be needed if we are to meet the ambitious goals for learning and skills set out in the "Lisbon" agenda (Commission policy which aims at making Europe the most successful knowledge-based economy in the world by 2010) – a change that builds on the results of recent and ongoing research.

Towards the virtual campus

'Virtual campuses' can be instrumental in opening facilities to lifelong learners. Distance teaching universities increasingly use such systems to reach many tens of thousands of students. Typically, they offer remote access to university courses and course materials, provide electronic 'chat' facilities for students, and offer teacher support both virtually and through real-time video links.

The virtual campus is being further developed to create new 'workplace' environments for research and learning, using GRID technology (which links up huge arrays of computers) to enable researchers and students to collaborate in virtual laboratories.

Such developments bring benefits – cost-sharing for the development of specialised course software, for example – but also create new challenges.

Schools of tomorrow

Schools are now using ICT to learn – rather than just learning how to use ICT – showing how it can extend learning beyond the classroom. Field data can be collected on hand-held devices for later examination in the classroom, for example. Virtual laboratories can be visited over video links, allowing groups of pupils to conduct and analyse experiments at a distance.

All of this relies on widely available broadband or fast internet access – another eEurope priority.

New market places for courses

Projects such as METACAMPUS have demonstrated that **brokerage systems** can provide students with a virtual market place in which to find courses and then enrol using authenticated payment networks.

Europe-wide networks and infrastructures are emerging to support **knowledge pools** of high-quality learning resources.

However, significant barriers to the growth of a strong EU **single market for educational content** remain. To remove these is part of the rationale for the Commission's eContent*plus* programme, adopted by the Council and the European Parliament in March 2005.

The future of eLearning

Despite the considerable efforts undertaken, the eLearning sector is still fragmented and there are many open questions surrounding the use of ICT and the skills needed to participate in the information society. A broad partnership between the various stakeholders of industry, education and training, public sector and civil society and social partners is needed to make progress and reap the full benefits of ICT and learning in the Knowledge Society. Therefore the Commission held a large conference in May 2005 to take stock and identify policy gaps.

The conference resulted in a statement, signed by Commissioners Reding and Figel (Commissioners' joint statement) Promoting skills and digital literacy is one of the key challenges that the i2010 initiative will address under the inclusion pillar.

See Also:

- Fact sheet 6: Beyond eEurope 2010
- Fact sheet 19: eContent and eContent*plus*
- Fact sheet 35: i2010 - A practical Policy Framework for achieving economic Growth and Jobs

All Fact sheets and more can be downloaded from "Europe's Information Society: Thematic Portal", below.

Further Information

- **eEurope 2005: eLearning**
  http://europa.eu.int/information_society/eeurope/2005/all_about/elearning/index_en.htm
  http://www.elearningconference.org/
- **Europe's Information Society: Thematic Portal**
  http://europa.eu.int/information_society/
- **Information Society Directorate-General:**
  Av. de Beaulieu 24, 1160 Brussels
  http://europa.eu.int/comm/dgs/information_society/index_en.htm