

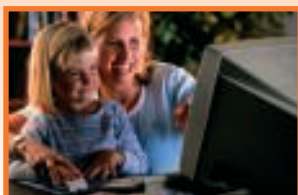
## Information Society and Education: Linking European Policies





**The Information Society brings important benefits for education and training. To help ensure this promise is fulfilled, the Information Society Policy Link initiative is linking Information Society projects with relevant European policy-makers in areas as diverse as collaborative learning and teaching solutions for schools and universities, new approaches for lifelong learning, advanced training systems, and standards for educational ICT.**

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## Challenges for Education, Training & Youth

Education is a primary concern in all European countries. It assumes particular importance in the context of the Lisbon strategy: in the emerging knowledge-based economy success – both for individuals and for Europe as a whole - depends crucially on realising human potential. Making this happen requires a fundamental transformation of education and training throughout Europe. This process of change is being carried out in each country according to national contexts and traditions and is being driven forward by co-operation between Member States at European level.

On the one hand, the role of traditional educational institutions – schools, colleges and universities – in educating younger generations has never been more important than it is today. To succeed in tomorrow's knowledge-based economy and society, we have to equip young people with the knowledge and skills necessary to cope with continuous change in their private and professional lives. They need not only the technical skills necessary to engage with the new technologies – so-called “digital literacy” – but also the “softer” skills such as creativity, problem-solving and team work.

Approaches to training are changing too. As the world of work becomes ever more complex and portfolio careers become the norm, barriers between work and learning are disappearing. Employees are moving in and out of work and between working tasks in a world where skills, disciplines and jobs mutate rapidly. Organisations require a flexible workforce with broad competencies and increasingly individuals are taking responsibility for their own professional development as part of their lifelong learning.

Hence, learning today is no longer confined to educational institutions, companies or training centres. New technologies and tools offer learners greater flexibility, easier access to information and the opportunity to match learning to their specific needs, circumstances and learning profile. The home is increasingly important as a learning environment. So too are other contexts, from prisons and community centres to care homes.

The boundaries of learning are changing all the time. Technological developments, such as the internet, mobile communications and virtual environments, create possibilities to support learning in new ways. In our addition, our definitions of learning are changing, as we gain new insights into how people learn and what they need to learn to adapt to changing economic and social conditions.

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## Education, Training & Youth Policy

To ensure their contribution to the Lisbon strategy, in 2001 Ministers of Education adopted a report on the future objectives of education and training systems in the EU, agreeing for the first time on shared objectives to be achieved by 2010. This resulted in a 10-year work programme, Education and Training 2010, approved by the European Council. These agreements constitute the EU strategic framework of co-operation in the fields of education and training, and are implemented through the open method of coordination.

Member States have agreed on three major goals to be achieved by 2010 for the benefit of citizens and the EU as a whole:

- to improve the quality and effectiveness of EU education and training systems;
- to ensure that they are accessible to all; and
- to open up European education and training to the wider world.

Actions to achieve these goals are based around thirteen specific objectives covering the various types and levels of education and training (formal, non-formal and informal) and aimed at making a reality of lifelong learning. Systems have to improve on all fronts: teacher training; basic skills; integration of ICTs; efficiency of investments; language learning; lifelong guidance; flexibility of the systems to make learning accessible to all, mobility, citizenship education, etc.

Education and Training 2010 integrates all actions in the fields of education and training at European level, including vocational education and training (the "Copenhagen process"). As well, the Bologna process, initiated in 1999 is crucial in the development of the European Higher Education Area. Both contribute actively to the achievement of the Lisbon objectives and are therefore closely linked to the *Education and Training 2010* work programme.

### Where the Information Society meets Education

The crucial role of information and communication technologies (ICTs) in building Europe's social and human capital is reflected in the strong emphasis given to technology in educational action programmes.

The eLearning Action Plan (2001-2004), part of the eEurope initiative, has supported actions that foster new approaches to education and training and the development of quality multimedia contents and services. These efforts are being continued under the eLearning Programme for 2004-2006, which focuses on a series of priority areas chosen for their strategic relevance to the modernisation of Europe's education and training systems.

The opportunities brought by ICT also feature prominently in the EU's policy on lifelong learning. In its Communication entitled, *Making a European Area of Lifelong Learning a Reality*, adopted in 2001, the Commission notes the need to develop education and training measures for lifelong learning across Europe. Member States should adapt their formal education and training systems to the demands of the modern environment, breaking down barriers between different forms of learning and giving all EU citizens the chance to develop ICT skills.

Two important instruments that promote the effective use of ICT into education and training are the two key EU programmes in these fields, namely Socrates and Leonardo da Vinci. Socrates has an action line, Minerva specifically dedicated to open and distance learning, and the educational use of ICT. The vocational training programme Leonardo da Vinci has been innovation-led from the outset and supports many projects that make extensive use of ICT for training purposes.

## Information Society Activities

### Fifth Framework Programme

Under the Fifth Framework Programme, IST's education-related research was supported through the activities on ICT for Education and Training Applications. Around 100 projects were funded with a total budget of almost €140m, covering innovative technologies, systems and services for schools, universities and vocational training, and for lifelong and non-formal learning.

Key results of work in this field include:

- Networks and applications to support collaborative learning and teaching in schools, universities and training centres;
- Experimental services and applications for "virtual universities";
- Methods and tools to enhance and facilitate lifelong learning anywhere and anytime empowering individuals with personalised learning solutions;
- Advanced training systems to support professional training and to demonstrate the benefits of just-in-time and on-the-job training;
- Open and interoperable systems and tools enabling education and training centres, companies or service providers to implement and maintain learning management services.

### Sixth Framework Programme

In FP6, relevant IST research is undertaken under the Strategic Objective on Technology-enhanced learning (TeLearn) which aims to improve the efficiency and cost-effectiveness of learning, for individuals and organisations, independent of time, place and pace. The research focuses on three areas:

- The development of open systems and services in support of ubiquitous, experiential and contextualised learning and virtual collaborative learning communities.
- Exploring interactions between the learning of the individual and that of the organisation in order to improve how current or emerging ICT can mutually enhance their learning processes;
- Contributing to new understandings of the learning processes by exploring links between human learning, cognition and technologies.

The first two objectives are mid-term, reflecting the challenges posed by ubiquity of access and delivery in mixed formal and informal learning settings. The last is longer term and aims to build on and advance the interrelationship between cognition and learning processes and exploit links to other disciplines.

### Other Activities

The eTEN Programme is concerned with the large-scale roll-out of public interest services, primarily in support of the eEurope Action Plan. In this context, eTEN projects address eLearning as a main action line. Activities support the efforts of the Member States to accelerate the adaptation of education and training systems for all in the EU and the development of virtual campuses.

The eContent Programme supports the production, use and distribution of European digital content and promotes linguistic and cultural diversity on the global networks. As a key user of cultural and linguistic content and public sector information, many of the projects target the education sector. Furthermore, improving the accessibility and usability of educational material remains a key priority under the follow-on programme eContentplus (2005-2008).

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## Next Steps

The research synopses and policy cases presented here represent only the first stage in linking Information Society activities to EU policies. Information Society & Media DG is now working with Education & Culture DG to establish a policy interface to improve synergies. A virtuous circle should develop, with improved communication between researchers and policymakers ensuring that:

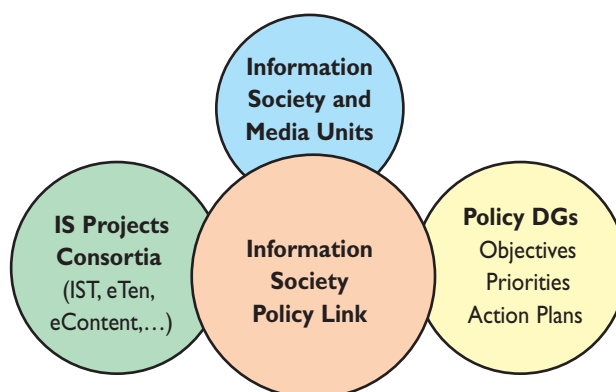
- Information Society & Media programmes better reflect relevant EU policies;
- EU policies better account for Information Society technologies;
- ICTs are better applied to meeting Europe's challenges.

At a later stage, specific actions will be launched addressing policy-makers in national and regional administrations in Member States, European institutions and national parliaments..

## Getting Involved

The *Information Society Policy Link* initiative links policy-makers and researchers in a number of ways, so as to leverage the benefits of Information Society & Media projects for European policies. A variety of activities are planned, including a series of Policy Workshops and events targeted at the European policy community.

Project Consortia play a crucial role in the development of this joint effort, providing a valuable source of information for European policy-makers on relevant technological developments, as well as improving the quality, impact and awareness of their own projects for the benefit of EU policies. Organisations involved in past or present Information Society projects with relevant activities or results are invited to contact the Initiative at the address shown.



## Information Society Policy Link at a Glance

Information Society related actions constitute a considerable effort of the European Union. For instance, Information Society Technologies (IST) research has been the largest thematic priority in the EU's Fifth (1998-2002) and Sixth (2002-2006) Framework Research Programmes. Together they represent an investment of over €7bn in IST research, and are complemented by programmes such as eContent (€100m) and eTEN (€315m), which focus on digital content and eServices deployment respectively.

The projects funded by these programmes offer benefits to all areas of Europe's economy and society. To fully realise these benefits the technologies need to be linked closely to European policy-making in the relevant areas.

**Information Society Policy Link** is an initiative of Information Society & Media DG to identify and reinforce links between its projects and relevant EU policies. More than 3000 projects from Information Society programmes are being analysed, identifying a wealth of concrete results that support EU policies across all of the principal policy domains.

By exchanging information and experiences, the Information Society Policy Link initiative aims to ensure that results from European ICT research provide greater leverage, both in implementing current policies and shaping priorities for the future.

## Further Information

### Information Society Policy Link initiative

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### Europe's Information Society: Thematic Portal

[http://europa.eu.int/information\\_society/](http://europa.eu.int/information_society/)