

# **Conference by EU Ministers of Education**

**Oslo**

**December, 9-11 2012**

**Organised by Cyprus and Norway**

**Under the Cyprus Presidency of the Council of the European Union**

## ***Background Note***

### **OPENING UP EDUCATION THROUGH TECHNOLOGIES:**

#### **Towards a more systemic use for a smart, social and sustainable growth in Europe**

#### **THE CHALLENGES AND ISSUES AT STAKE**

Recession is threatening the European economy and unemployment is growing fast especially among young people. Youth unemployment in the EU has reached a new historic high of 22.4%. Digital competences are becoming a precondition to learn, employability and finding a job. They are crucial for everyone to take part in an increasingly digital and networked society.

However, learners of today may be Information and Communication Technology (ICT) literate but lack the ability to use it creatively and critically. On average only 30% of students in the EU can be considered as digital competent<sup>1</sup>. At least 28% of students<sup>2</sup> in the EU have nearly no access to ICT, neither at school nor at home. They are in danger of being excluded from the digital society for a long period of their lives.<sup>3</sup>

Past surveys also shows that digital competence is not fully embedded within curricula and learning outcomes<sup>4</sup>. Only 40% of students in the EU are learning in a digitally supportive school. Digital resources of all types are also rarely used.<sup>5</sup> 80% of students in the EU never use digital textbooks, exercise software, broadcasts/podcasts, simulations nor or learning games.

Evidence also shows that teachers do not take up leadership in the digital world. While 70% of teachers in the EU recognise the importance of training in ICT pedagogies,<sup>6</sup> only 1 out of 3 students in the EU are taught by teachers for whom participation in ICT

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<sup>1</sup> Ibid footnote 1

<sup>2</sup> at grade 8 in general education and 11 in vocational education

<sup>3</sup> 'Survey of schools: ICT in education: benchmarking access, use, attitudes to technology in Europe's schools, 2012, EUN)

<sup>4</sup> Eurydice, 2011

<sup>5</sup> Ibid footnote 1

<sup>6</sup> TALIS survey (OECD, 2010)

training is compulsory<sup>7</sup> and only 1 out of 5 students are taught by digitally confident and supportive teachers<sup>8</sup>.

In the meantime, learners are bringing technology to the classroom. Mobile tablet devices are increasingly widespread among youngsters and thus also in schools and higher education institutions. This brings the opportunity to 'bring your own device' and providing access to and use of content, tools and apps recommended by teachers<sup>9</sup>.

Access and use of ICT are also mostly taking place outside of school and via informal learning. Open educational resources (OER) and digital media in society have changed considerably the context for education, and the boundaries between learning, working and living have become blurred. A tsunami of open educational resources and an 'open education' movement across the world are triggering education to open up teaching, increasing personalised learning, collaboration networks, etc. As an example, the Open Courseware Consortium has more than 21 thousand courses freely available online. Three projects alone offering Massive Online Open Courses (MOOCs) are reporting around 2 million students enrolled<sup>10</sup>.

Furthermore, this kind of informal learning is not being recognised neither or validated, is not part of any formal assessment system, and has no link with formal education curricula.

Today ICT offers much many unprecedented opportunities to make the learning journey more engaging and effective. This can all be harnessed through a more effective use of ICT in the learning environments. ICT opens up new ways to involve learners and motivates them to continue to learn; to assess learning outcomes, to foster innovation and creativity, etc.

The role of technology as an instrument to achieve an enabler to higher quality education transforms what we learn and how we learn:. More personalised and collaborative learning adapted to the individual learner's' needs; use of open educational resources .; more lifelong learning for all; increased professional skills development of teachers and a culture of innovation and creativity in education.

Member States of the European Union have already investing in ICT and digital media resources for education. The use of new technologies in education and training, its added-value for qualitative and innovative learning and its contribution to attract groups at risk of exclusion are growing issues in EU Member States. All recognise what has been achieved to date, but acknowledge that the rapid evolution of digital media platforms, content and devices require a reframing of the debate.

This Ministerial conference will discuss these issues along three different themes: opening up learning and teaching, opening up content for all and opening up collaboration.

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<sup>7</sup> [Digital Agenda Scoreboard, 2012](#)

<sup>8</sup> Ibid 1

<sup>9</sup> New Media Consortium, 2012

<sup>10</sup> The Observatory on Borderless Higher Education, referring to Coursera, edX and Udacity together.

## CHALLENGES FOR OPENING UP EDUCATION BY EMBEDDING TECHNOLOGIES

***Opening up learning and teaching:*** Learning and teaching should be based upon learner centred approaches. Opening up learning and teaching will allow the individual to decide a personalised way of learning. It provides opportunities to blend different forms and locations where his/her learning takes place (at school, at home, in the community, at work, for leisure, etc.). Schools and universities need to adapt to these new challenges and become dynamic, creative and innovative learning environments. This transformation will only be possible if pedagogical and assessment approaches fully take on board the possibilities offered by modern technologies. Professional development of teachers, as well as the role of both teachers and learners will be reshaped.

***Opening up content:*** Digitized content materials offered openly - free of charge or not - for learners and educators to use and re-use (open educational resources) have spread across the world. They are increasing the opportunities for informal learning. Having open access to quality content, alongside support and assessment services will reshape the educational scene by revisiting fundamental issues such as access to education, supply of quality content or certification of informal learning.

***Opening up to collaboration:*** Learning networks and communities of practices are becoming an increasingly common way to learn. Communities of practice can be an ideal platform for collaborative peer learning, exchanging good practices and even developing joint teaching activities between schools. Partnerships between industry, education and training and societal communities provide excellent bridges between formal, informal and non-formal learning. Peer learning between countries will provide good practice examples supporting effective use of ICT in educational practices.

### Questions:

***Do you agree that these three issues are the most critical ones requiring further action?***

***Which ones are most important for you at national and European level?***

## THE NEED FOR A NEW EU INITIATIVE

The youth unemployment rate is close to 23% across the European Union – yet at the same time there are more than 2 million vacancies that cannot be filled. Europe needs a radical rethink on how education and training systems can deliver the skills needed by the labour

market. The challenge could not be tougher in the context of widespread austerity measures and cuts in education budgets.

The European Commission has launched on the 20th of November 2012 a new strategy called Rethinking Education to encourage Member States to take immediate action to ensure that young people develop the skills and competences needed by the labour market and to achieve their targets for growth and jobs.

Rethinking Education calls for a fundamental shift in education. . Among other things, the new strategy paper announces a new EU Initiative "Opening up Education": a proposal to exploit the potential contribution of ICTs and Open Educational Resources to education and skills development by scaling up ICT-supported learning and creating access to high quality OER for all learning environments, which will be launched by mid-2013.

By building a Europe-wide supportive policy environment, the EU can leverage national efforts and build the necessary critical mass to induce the modernization of education and training systems. "Opening up Education" can be an instrument to foster the EU's leadership on the international agenda in matters related to ICT and education. The EU will use the tools at its disposal (policy guidance, EU regulation whenever relevant, funding mechanisms, exchange of good practices and innovative pilots) to:

- help to create a transparent and organized access to quality open educational resources, for use or re-use within formal learning settings or in non-formal and informal settings;
- enable an international political dialogue for reforms (bridging industry, education, society) in order to bring about long-term and sustainable policy efforts in this domain;
- promote European leadership in the international context through its support for innovative practices in education and training;
- develop the EU knowledge base by networking best practices, successful implementation strategies and critical success factors in order to foster evidence-based policy making.

### **Questions:**

*How can ICT be used as a tool to modernise education, make education more relevant and address the major challenges described above?*

*What are the most important challenges at national level and how could an EU initiative be of help?*