

PUBLIC CONSULTATION ON OPENING UP EDUCATION – A PROPOSAL FOR A EUROPEAN INITIATIVE

1. WHY A PROPOSAL ON "OPENING UP EDUCATION"

Information and Communication Technology (ICT) is changing all aspects of our lives. ICT has completely changed the way we work, do business, communicate and live. In the last decade, data traffic has exploded, social networks have spread and mobile devices have replaced the traditional desktop computers. ICT has also changed the paradigm in several economic sectors and professions: for example, open source, open access and file-sharing are challenging the traditional business models in several sectors from creative industries to recent ones such as software development.

Due to technological progress, knowledge is also increasingly available to all citizens, and is increasingly free. Over the last few years there has been an exponential growth in educational courses and other resources available via the internet, either free as Open Educational Resources (OER)¹ or paid-for educational content. In the field of education, the so-called "Open Education Movement" and other public and private initiatives are promoting the use of ICT for less barriers to education and more flexible and creative ways of learning, characterised by collaboration, bottom-up practices (both in traditional and new channels and markets) and where the user is also a creator of learning content.

Box 1: Data on Open Educational Resources

According to the OECD², evidence from higher education shows that in 2006 there were more than 3000 open access courses (Open Course Ware (OCW)) available from over 300 universities:

- In the United States, 1700 courses were available via university-based projects such as the Massachusetts Institute of Technology (MIT).
- In China, 750 courses were available from 222 university members of the China Open Resources for Education (CORE) consortium.
- In Japan, more than 400 courses were available via the Japanese OCW Consortium.
- In France, 800 educational resources from around 100 teaching units were made available by 11 member universities of the ParisTech OCW project.

More recent data (2010) from MIT indicates an large increase in the availability and use of OER. The 2300 courses available generated 17.5 million visits from 9.6 million visitors, who downloaded 1.9 million zipfiles, 11.3 million iTunesU files and 7.3 million YouTube videos.

The OpenCourseWare Consortium reports a total of 21506 courses available from its members in October 2011, a significant increase from only 550³ ten years before.

¹ Open Education Resources (OER), as defined by UNESCO in 2002, are "teaching, learning or research materials that are in the public domain or released with an intellectual property license that allows for free use, adaptation, and distribution". Open Education (OE) is a wider concept that refers to practices and organisations aiming at removing barriers to entry to education. OER are a part of OE, which has received a strong push through the use of ICT. For further information please consult the UNESCO website on OER: <http://www.unesco.org/new/en/communication-and-information/access-to-knowledge/open-educational-resources>

² OECD (2007) *Giving education for free. The emergence of open educational resources*. Paris, OECD: <http://www.oecd.org/edu/cei/38654317.pdf>

³ www.ocwconsortium.org. Figures refers to original (17432) and translated (3624) courses

OER and Open Education offer unprecedented opportunities to improve quality, access and equity in education and training. Individuals can learn anywhere, at any time, following very flexible and individualised pathways without depending at all times on time constraints or on the availability of printed material. OER can help design and implement policies focussing on equity, for instance re-attracting early school leavers to non-formal or even formal education and training or facilitating wider access to lifelong learning via flexible learning routes. In terms of quality and efficiency, OER and the extended and embedded use of ICT in education and training can improve digital literacy, facilitate dissemination of best practices, help the modernisation of teaching methods and reduce costs for learners and institutions.

OER and Open Education nonetheless bring important challenges. The panoply of sources for learning materials means that clear quality standards are necessary, so that individuals are not left alone to the task of assessing the quality and appropriateness of the materials available. The validation of skills and competences acquired through OER also needs to be stepped up since learning normally takes place in an informal setting and is seldom accompanied by any assessment or certification. Traditional education and training institutions who do not integrate OER and ICT, are also pushed to seek cooperation with newer and more open educational providers. This is vital for them to meet the expectations of born-digital learners and to avoid losing their reputation or the attractiveness of their educational offer.

OER and Open Education also put educational publishers and the learning industry as a whole to the test. The growing number of bottom-up, out-of-market OER and new players entering the market, as well as technical advances such as open access, internet file-sharing or open source, are important factors. These call for publishers and the industry to revise their business models in order to profit from the new business opportunities.

While OER and the use of ICT in education are high on the agenda of policy makers in the educational sphere, OER and ICT have not yet reached a critical threshold to be fully exploited across all education and training sectors. Several actions have been undertaken over the years by the EU and Member States, but in a fragmented, short-term manner, without prospects for long-term sustainability. A comprehensive initiative at EU level could match the scope, size and complexity of the challenges, and respond to the increasing demand to tap into the potential of OER and ICT to modernize education. Such a strategy could provide a significant push to improve the way educational content is produced, accessed and used to teach, learn or connect with peers.

In this vein, the Commission plans to launch a new EU Initiative on "Opening up Education" by mid-2013: a proposal to exploit the potential contribution of ICTs and Open Educational Resources (OER) to education and skills development. The initiative will be centred around three main goals:

- ***Opening up content:*** Digitised content materials offered openly for learners to use and reuse are increasing the opportunities for informal learning, whether those resources are free of charge or not. Having open access to quality content, alongside support and assessment services, will reshape the educational paradigm by revisiting fundamental issues such as access to education, supply of quality content or certification of informal learning.

- ***Opening up learning:*** The increasing use of open resources will allow the individual to decide on a personalised way of learning, blending different forms and places 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 demands, and become dynamic creative and innovative learning settings. The assessment of skills and competences acquired using OER will also be addressed, aiming at fully exploiting the potential without endangering the absolute need for quality assurance in assessments. This transformation will only be possible if pedagogical and assessment approaches fully take on board the possibilities offered by modern technologies. The roles of teachers and learners will also be reshaped.
- ***Opening up to collaboration:*** Learning networks and communities of practices are becoming an increasingly common way to learn. For teachers and learners alike, communities of practice can be an ideal platform for collaborative peer learning, exchange of exchanging good practices and even the development of joint teaching activities between schools.

This challenge is cross-cutting and has significant implications, firstly for education and training institutions and systems, but secondly in many policy spheres such as technological infrastructure, intellectual property, copyright and research.

By building a supportive Europe-wide policy environment, the EU could leverage national efforts and build the necessary critical mass to bring about the modernisation of education and training systems. Open 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 create transparent and organised 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) to bring about long-term and sustainable policies in this domain;

Promote the European Union as an international leader in innovative practices for education and training;

Develop an EU knowledge base and foster evidence-based policy making through networking and the sharing of best practice, successful implementation strategies and critical success factors,

Reduce costs in education by incentivising the use of cost-free educational materials

2. FOCUS OF “OPENING UP EDUCATION” AND POSSIBLE ACTIONS

The "Opening up Education" initiative will integrate existing and new actions to promote the use of ICT and open educational resources in education and training. It will be a collaborative exercise between relevant Commission services (i.e. INFSO, RTD, MARKT, ENTR, JRC).

"Opening up Education" will also be designed to address common challenges faced by several education sectors (schools, vocational and education training, higher education, adult education) and to support sectors as they address their own specific needs.

The following four areas will be prioritised:

1. Access, inclusion and equity

The Initiative will aim to upscale the access and use of open educational resources to reach a more diversified base of learners. Issues related to infrastructure, licensing and transparent access will require particular attention.

Possible EU actions:

- Establish an EU-wide platform facilitating access to all OER portals for citizens and institutions.
- Establish, if appropriate, an EU clear legal framework for OER (IPR, open access, licensing and publishing).
- Establish an open access requirement for educational resources developed with public funding, in line with UNESCO's Paris Declaration on OER.
- Establish, if appropriate, a requirement for digitised free versions of school books after an initial period following the first edition.
- Support the development of IT infrastructure (ex: clouding services) to widen access to digital learning in primary and secondary education.

2. Quality, efficiency and internationalisation

Open access must not be achieved at the expense of quality. Developing quality assurance methods and frames for OER are essential to boost levels of uptake and innovation. The "Opening up Education" Initiative will aim at establishing quality parameters for OER as well as assessment and certification processes, leading to the validation of skills acquired through open education. The forthcoming Commission proposal for a Council Recommendation for validation of non-formal and informal learning will highlight the importance of giving citizens the opportunity to validate skills acquired in non-formal and informal settings, including via open educational resources.

OER can also increase the efficiency of education and training institutions by reducing duplication and promoting inter-institutional collaboration and sharing. It can also reduce the cost of accessing learning resources for both learners and teachers.

Possible EU actions:

- Develop European quality standards for OER.
- Incentivise new innovation models based on OER.
- Explore possible ways of exchanging high quality OER with other parts of the world.

3. Teaching, educational practices and assessment

OER and ICT as means of modern learning can radically change teaching and assessment practices. Several pilot projects have been undertaken to explore and develop new learning environments, but the sustainability of these initiatives is a serious challenge. With teaching practices fundamentally changing, teacher education and professional development also have to be adapted.

Possible EU actions:

- Launch trans-national, large-scale policy experiments to explore pedagogical approaches, curriculum and assessment practices (e.g. creative classrooms).
- Support teacher education and professional development on ICT didactics and use of OER, and increase access to communities of practice to develop transnational collaborative models.
- Support to joint transnational curricula blending formal and informal learning.
- Develop assessment methodologies and models for assessing learning outcomes in non-formal and informal learning.

4. Policy development

The Open Education Initiative will build a supportive European policy environment in education and support EU Member States to mainstream the use of OER and ICT in their educational policies and practices.

Possible EU actions:

- Promote exchange of best practices and peer learning among Member States.
- Establish partnerships with UNESCO, ICDE and OECD.
- Establish a broad multi-stakeholder platform for a strong stakeholder involvement.
- Policy discussions on adapting funding and quality frameworks to incentivize engagement in open education.

Proposed actions would generally be supported by the future European programme for cooperation and mobility in education and training for the period 2014-2020 ('Erasmus for all').