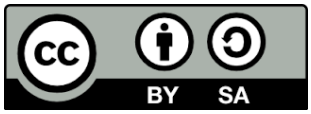

Project Agreement Number: 519138-LLP-1-2011-1-UK-KA3-KA3MP

Project funded by the European Commission

Deliverable D4.2U

Policy Advice for Universities

Document information	
Due date of deliverable	November 2013
Actual submission date (final version)	September 2013 for release 1; June 2014 for final
Organisation name of lead contractor for this deliverable	Sero Consulting
Revision	Version 1.0 – June 2014

Dissemination Level		
PU	Public	☒
PP	Restricted to other programme participants (including the Commission Services)	☐
RE	Restricted to a group specified by the consortium (including the Commission Services)	☐
CO	Confidential, only for members of the consortium (including the Commission Services)	☐

Contents

0. Executive Summary ... 3
1. Introduction ... 5
2. Universities: some background ... 6
3. OER and related policies from other countries ... 9
4. EU policy work on Higher Education ... 9
4.1 Bologna Process ... 9
4.2 Rethinking Education ... 10
4.3 Europe 2020 ... 11
4.4 Recommendation on Recognition and validation of non-formal and informal learning ... 11
4.5 Opening Up Education ... 11
4.6 European higher education in the world ... 14
4.7 "Europe needs modernised universities" ... 15
4.8 The Higher Education Modernisation Agenda ... 15
5. Earlier policy work in OER project and lobbyist circles ... 16
5.1 OPAL ... 16
5.2 UNESCO declaration ... 16
5.3 UNESCO/COL guidelines ... 17
6. Earlier POERUP work specifically on policy formulation ... 18
6.1 UNESCO OER meeting June 2012 ... 19
6.2 Open Education Experts Group July 2012 ... 19
6.3 Online Educa November 2012 ... 20
7. Policy constraints ... 22
7.1 The evidence base for OER ... 22
7.2 The importance of the problems the policy interventions are aimed to alleviate ... 23
7.3 The relative importance of these interventions compared with other interventions ... 23
7.4 The existing policy thicket for education, ICT in education and related issues (e.g. open access) ... 24
7.5 The socio-economic situation – in particular the potential funding available ... 24
8. Policy proposals ... 24
8.1 Innovation – new institutions ... 25
8.2 Accreditation of institutions – new accrediting bodies and mutual recognition ... 25
8.3 Quality agencies ... 26
8.4 Bologna-bis: competence-based not time-based assessment ... 27
8.5 Assessment and accreditation of modules ... 28
8.6 Funding mechanisms for institutions and content ... 30
8.7 IPR issues ... 31
8.8 Training of academics ... 32
8.9 Further research ... 34
9. Recommendations for European Commission and via EU for the Member States ... 35
10. References ... 36

0. Executive Summary

This is Deliverable 4.2U *Policy advice for universities* developed as part of Work Package 4 of POERUP. The report reviews EU policy developments in higher education (ISCED levels 5-8 inclusive) and developments in OER analysed by POERUP and other current OER-related projects. It takes account of information from the Open Education Experts Group and the Open Education 2030 series of workshops at IPTS. It was completed *before* the *Opening Up Education* proposals were released.

The report makes 18 recommendations across nine areas: Innovation – new institutions; Accreditation of institutions – new accrediting bodies and mutual recognition; Quality agencies; Bologna-bis: competence-based assessment; Assessment and accreditation of modules; Funding mechanisms for institutions and content; IPR issues; Training of academics; and: Further research.

Many of these nine areas are similar to those targeted in POERUP recommendations for other subsectors of education, and in *Opening Up Education* – though sometimes different in vocabulary or purpose; but a few, such as Innovation and Bologna-bis, are specific to the universities' subsector.

It had been originally planned that Deliverable 4.2U would be updated into a second edition towards the end of the POERUP project; in the event the recommendations proved stable against the comments received and so there was no need to update the Deliverable.

Detailed recommendations to the Commission(18)

Innovation – new institutions

1. Set up a competitive innovation fund to develop one new "European" university each year with a commitment to low-cost online education around a core proposition of open content.

Accreditation of institutions – new accrediting bodies and mutual recognition

2. Foster the development of transnational accrediting agencies and mutual recognition of accreditations across the EU.
3. Reduce the regulatory barriers against new kinds of HE providers.

Quality agencies

4. Quality agencies in ENQA (the European Association for Quality Assurance in Higher Education) should: Develop their understanding of new modes of learning (including online, distance, OER and MOOCs) and how they impact quality assurance and recognition; Engage in debates on copyright; Consider the effects of these new modes on quality assurance and recognition; and: Ensure that there is no implicit non-evidence-based bias against these new modes when accrediting institutions both public and private including for-profit (if relevant), accrediting programmes (if relevant) and assessing/inspecting institutions/programmes.

Bologna-bis: competence-based not time-based assessment

5. The Commission and related authorities developing the European Higher Education Area (EHEA) should reduce the regulatory barriers against new non-study-time-based modes of provision: in particular by developing a successor to Bologna based primarily on competences gained not duration of study.

Assessment and accreditation of modules

6. Recommend to universities that they should work to improve and proceduralise their activity on APL (Accreditation of Prior Learning) including the ability to accredit knowledge and competences developed through online study and informal learning, including but not restricted to OER and MOOCs, with a focus on admitting students with such accredited studies to the universities' own further courses of study.

7. Recommend to the larger Member States that they should each set up an Open Accreditor to accredit studies which could lead to an undergraduate degree.

Funding mechanisms for institutions and content

8. Foster work into standardised syllabi EU-wide for undergraduate degrees in certain professions (e.g. medicine, nursing, mathematics, IS/IT) where this is appropriate for EU-wide action, and in the light of a successful outcome to such initiatives, foster the developments of common bases of OER material to support these standards, including relevant open repositories and (ideally jointly with publishers) open textbooks.
9. Ensure that any public outputs from its programmes (specifically including Erasmus for All and Framework) are made available as open resources under an appropriate license.
10. Encourage Member States to do likewise for their national research and teaching development programmes, including for the public funding component of university teaching.
11. Encourage Member States to increase their scrutiny of the cost basis for university teaching and consider the benefits of output-based funding for qualifications.

IPR issues

12. Adopt and recommend a standard Creative Commons license for all openly available educational material it is involved in funding. The Commission should also recommend this license to all Member States.
13. Study the issues in the modern European HE system round the “non commercial” restriction and make appropriate recommendations for its own programmes and for member states.
14. Support the development of technological methods to provide more and standardised information on IPR to the users of digital educational content.
15. Mount a campaign both centrally and via the Member States to educate university staff on IPR issues.

Training of academics

16. Support the development of online initial and continuous professional development programmes for teachers, focussing on online learning with specific coverage of distance learning, OER, MOOCs and other forms of open educational practice, and also IPR issues.
17. Encourage Member States to do this also and recommend the use of incentive schemes for teachers engaged in online professional development of their pedagogic skills including online learning.

Further research

18. Fund research into the verifiable benefits of OER, with greater efforts to integrate such analyses with its ongoing research on distance learning, on-campus online learning, and pedagogy; and recommend the same to Member States.

1. Introduction

The brief

This is the first release (release 1) of Deliverable 4.2U, the HE sub-deliverable of Deliverable 4.2 of Work Package 2 of POERUP. The overall Deliverable Title from the proposal is:

> *Policy advice (for universities, schools and "colleges")*

and the sub-deliverable title is

> *Policy advice for universities*

The Work Package title is:

> *The role of National and International Policies and strategy*

The original brief for the Deliverable stated:

> *Policy-makers including regional, national and European decision-makers are the main target group for this Deliverable. We will provide these with valid, in-depth information on policy support of OER for the schools, **the university** and the college/other sectors. This will be based on the inventory, country reports (including mini-reports), the case studies and any existing reports on policy recommendations....*
>
> *The policy advice will provide them with an in-depth understanding as to the importance of, amongst other factors, the policy context. In particular, an analysis of past policy-relevant successes (and any failures we can discover) will make a significant contribution towards better decision-making by this target group.*

This brief is still valid.

Next steps

The deliverable will be elaborated via a "perpetual beta" approach over the period September-December 2013. This release has already benefited from informal discussions of a draft set of recommendations at the ALTC2013 conference[1] (10-12 September 2013) and with colleagues. It will be further refined via an online forum and via participation/presentation of the authoring team at:

1. Microlearning 7.0,[2] Krems, Austria, 26-27 September 2013 –
2. EFQUEL Innovation Forum,[3] Barcelona, Catalonia, Spain, 26-27 September 2013
3. EDEN Synergy Workshop,[4] Budapest, Hungary, 19-21 October 2013
4. Online Educa Berlin,[5] Germany, 4-6 December 2013
5. Media & Learning,[6] Brussels, Belgium, 12-13 December 2013, including at the final meeting of the International Advisory Committee (for EU policy experts) on 12 December.

For release 2 due input will be taken from the just-published BIS report *The Maturing of the MOOC*.[7]

---

[1] See http://altc2013.alt.ac.uk

[2] See http://www.microlearning.org/conference-program

[3] See http://eif.efquel.org

[4] See http://www.eden-online.org/eden-events/upcoming-conference.html – note that EDEN is a partner in POERUP.

[5] See http://www.online-educa.com/

[6] See http://www.media-and-learning.eu/programme

[7] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/240193/13-1173-maturing-of-the-mooc.pdf

2. Universities: some background

We take the construction of higher education in the UNESCO sense of ISCED levels 5 (undergraduate – both 5A and 5B) and 6 (postgraduate). So universities and university-type providers (university colleges, polytechnics, etc) are all included. In other words, the universe of higher education is the universe of the Bologna Process.

Thus university programmes end up offering "degrees" – first an undergraduate degree, then a Masters and finally a PhD or other doctoral-level qualification (EdD etc).

We note that some countries (Finland, Netherlands etc) still have a strict binary divide and others (Sweden etc) have an informal divide between subsectors of higher education. (We cover both ISCED 5A and 5B.)

There are some 3,300 higher education establishments in the European Union and approximately 4,000 in Europe as a whole, including the other countries of western Europe and the EU candidate countries.

Most countries have very few "private" universities (in the sense of universities not in receipt of state funding – directly or indirectly – for teaching) and even fewer have many private for-profit universities. The obsession in England with this sector is far greater than its actual size. Many experts in the EU seem uncomfortable with analysis or discussion of private universities even though Spain, Portugal and East European countries have many. Earlier EU talk about "public-private partnerships" is not a strong theme at present despite the economic situation.

Other similar terms such as "tertiary education" or "post-secondary education" would be wider terms – the non-HE part of that would be the domain of "colleges" – see the companion policy deliverable D4.2C soon to be public.

Participation rates in higher education have grown a lot over the last 20 years in most European countries, yet most of this still is among teenagers and young adults who have the appropriate school leaving qualifications. And most of them are full-time students. Some countries seem to have hardly started on HE-level Lifelong Learning – and seem happy to accept that (e.g. Germany); others have very little CPD (e.g. Sweden). Drop-out is an issue in several countries – not just US – including Sweden, and still in the UK despite much attention.[8]

Cost of university education is surprisingly not very high on European governments' agendas (and even less on university's own agendas) – and if it is not on the agenda it is hard to get commitment to discuss cost-effectiveness, whether produced by ICT or other means. The UK (England) attempt to get universities to charge lower fees than the £9000 so-called "Upper limit" did not work. Attempts within universities to save costs do not seem to impact on fees or government grant income, and usually redirect any savings into research, so the overall "system cost" does not come down.

Universities are still largely locked into a race up the national and global university rankings and it is felt that some neglect investment in teaching.

The various schemes for quality in OER are so far ignored by national HE quality agencies or governments – not surprising when they mostly ignore similar schemes for quality in e-learning,[9] even though e-learning (on- or off-campus) has far greater penetration than OER.

[8] See Bacsich, P. and Bristow, S. F. (2010), Student Retention and the Value of Higher Education: Final Report, Open University (unpublished report) – more usefully for most readers see the overview report at http://www.backoncourse.ac.uk/sites/default/files/files/Annual%20Research%20Report%20Long%20Version.pdf

[9] The most recent example was the Swedish system developed in 2008 for quality in e-learning, but put aside when the new government came in. See http://www.eadtu.nl/e-xcellencelabel/files/0811R.pdf

Few OER or e-learning experts have any dealings with ENQA or the national quality agencies – those that do are much more realistic. In fairness, ENQA has looked at e-learning – but publicly only in one workshop.[10] In any country, OER represents a small fraction of the amount of overseas teaching, distance learning, or HE taught in FE – and quality agencies hardly worry about these either.[11]

So where should one focus policy interventions linked to OER?

Not surely, at OER only – in reality almost no European country other than England (not the rest of the UK) and Netherlands has had a substantial state-funded HE programme of OER – and one of these (UK) it has finished and for the other (Netherlands) the likely end is in sight.

In contrast, open access (simplistically OER for postgraduate students and research staff) is much more embedded.

So we should aim policy intervention at two targets:

- interventions that link OER to open access to research and to standards
- interventions that foster the phenomena (including access, cost and quality; but also others such as development and informed citizenry) that OER is said to facilitate (even if so far without sufficient evidence).

There is a further problem in most European countries. There was a time, up to a few years ago, when it was common for each nation to have a policy for ICT in universities – and often to have an agency (JISC, Surf etc) to foster and part-fund that policy. The policies are now dying away – and in most countries the agencies are shrinking (UK) or have died out (Sweden) or are dying (e.g. Netherlands). Interestingly this move predated the last recession. A few countries (Wales) still have such policies.[12]

Now the policy seems to be "universities are clever, they can sort that out". Also interestingly, this is not correlated with whether or not the universities in a country charge substantial fees. Though note that more and more EU countries charge so-called "real cost" fees to "international" (i.e. non-EU) students.[13]

There are also regulatory barriers to the kinds of things that OER fosters. New kinds of institution (not only private sector) can struggle to get accreditation. The Bologna obsession with study time means that in theory an institution which can deliver a degree more quickly would not have its courses accredited because it would not have "taught enough stuff".[14] So we have a third kind of policy intervention:

- interventions that serve to reduce or dismantle the barriers to creation of innovative institutions and innovative practice (including OER, MOOCs and open educational practices).

There is also a very large "elephant in the room". While earlier suggestions that OER was "an Anglo-Saxon conspiracy" are not borne out by the evidence, it is clear that there is a strong (but not perfect) correlation between autonomous OER activity and the scale of a language (in terms of the

[10] ENQA Workshop on quality assurance of e-Learning, 7-8 October 2009, Sigtuna, Sweden (6 March 2009) – http://www.enqa.eu/eventitem.lasso?id=249

[11] With a few honourable exceptions, including (to general surprise) the UK – http://www.qaa.ac.uk/Publications/InformationAndGuidance/Pages/Code-of-practice-section-2.aspx

[12] See for example http://www.hefcw.ac.uk/documents/publications/circulars/circulars_2008/w08%2012he%20circ.pdf

[13] See for example http://www.mastersportal.eu/articles/335/tuition-fees-and-financial-support-at-european-universities.html

[14] See http://www.scribd.com/doc/96397285/Time-Bacsich-Final-Final-PDF

total number of speakers in the world – a key parameter for Wikipedia too).[15] So English OER is dominant, and not just/only because of the size of the US economy. There is a lot of OER going on in French and Spanish also.[16] The correlation is not perfect – far more is going on in Dutch than expected, and rather less in Portuguese, Russian and Arabic than might be expected. Chinese is a world language but remains a mystery in terms of the amount of OER.[17] That is not to say that there are not active OER movements in many other countries, especially in Asia (Vietnam, Korea, Japan) but often focussed on translation not origination, and overwhelmingly at university level.

So where does this leave things in terms of interventions? My reflections on my work for the POERUP project and on a range of related activities in 2011-13 lead me to foresee a list something like the following. Some are probably *ultra vires* for the EU as such but applicable for other multinational agencies (see note above about Bologna).

1. Reducing the regulatory barriers against new kinds of HE providers (e.g. for-profit, from outside the country, consortial, etc)
2. Reducing the regulatory barriers against new modes of HE provision (distance, OER, MOOCs etc)
3. Fostering the development of transnational accrediting agencies and mutual recognition of accreditations across the EU
4. Reducing the regulatory barriers against new languages of provision (e.g. English in Flanders)
5. Reducing the regulatory barriers against new time durations of provision (i.e. developing a successor to Bologna based on competences gained not duration of study)
6. Fostering economies of scale by standardisation of syllabi, especially in subjects subject to professional recognition (medicine, dentistry, engineering, etc)
7. Increasing the requirements for monitoring and transparent reporting of costs and outcomes for universities Europe-wide
8. Setting up an innovation fund to support one new "European" university each year with a commitment to open education
9. Mandating that any course or content development with support or part-support from EU funds is open to the percentage that the support represents
10. Fostering research into the true benefits of OER
11. Ensuring that lecturers are kept up to date in ICT-based pedagogies relevant to OER

However, the EU administration and national ministries expect policy recommendations from an expert group (POERUP is *not* a lobby group for OER, it is team of analysts looking at OER) to take into account the following factors:

- the strength of the evidence base for the assertions
- the importance of the problems the policy interventions are aimed to alleviate
- the relative importance of these interventions compared with other interventions
- the existing policy thicket for education, ICT in education and related issues (such as open access)
- the socio-economic situation – in particular the potential funding available.

[15] See http://stats.wikimedia.org/EN/Sitemap.htm

[16] Whenever countries are mentioned, the readers are invited to consult the POERUP country pages indexed from http://poerup.referata.com/wiki/Countries

[17] See http://en.wikipedia.org/wiki/World_language

3. OER and related policies from other countries

There are 82 OER policies currently in the OER Policy Registry.[18] However, most concern schools and of the HE ones, most are specific to particular universities or are project planning documents for initiatives that have now concluded. There are only a few for EU countries and they pertain to education more generally.

The ones that are relevant are mostly from the United States. These appear to be mostly concerned with low-cost university textbooks – an issue that does not seem active in Europe.

For the next release a check will be done on all references to "policy" in the country reports commissioned by POERUP and across the other country reports. This is in any case needed to finalise Deliverable 4.1. However an initial check suggested little of interest to the EU level. Thus in this release we focus on the EU level of existing policies, linked to our evidence base and other findings.

4. EU policy work on Higher Education

4.1 Bologna Process

The Bologna Process is a series of ministerial meetings and agreements between European countries designed to ensure comparability in the standards and quality of higher education qualifications. Through the Bologna Accords, the process has created the *European Higher Education Area*, in particular under the Lisbon Recognition Convention. The process is named after the place it was proposed, the University of Bologna, with the signing of the Bologna declaration by Education Ministers from 29 European countries in 1999. It was opened up to other countries signatory to the European Cultural convention, of the Council of Europe; further governmental meetings have been held in Prague (2001), Berlin (2003), Bergen (2005), London (2007), and Leuven (2009).

One year before the Bologna declaration, education ministers from France, Germany, Italy and UK signed the Sorbonne declaration in Paris 1998, committing themselves to "harmonising the architecture of the European Higher Education system". Thus unlike many European treaties, the UK was part of the Bologna Process from the beginning.

A key part of Bologna is the European Credit Transfer and Accumulation System. The introductory document on this states:

European Credit Transfer and Accumulation System (ECTS)

> *ECTS makes teaching and learning in higher education more transparent across Europe and facilitates the recognition of all studies. The system allows for the transfer of learning experiences between different institutions, greater student mobility and more flexible routes to gain degrees. It also aids curriculum design and quality assurance.*
>
> *Institutions which apply ECTS publish their course catalogues on the web, including detailed descriptions of study programmes, units of learning, university regulations and student services.*
>
> *Course descriptions contain 'learning outcomes' (i.e. what students are expected to know, understand and be able to do) and workload (i.e. the time students typically need to achieve these outcomes). Each learning outcome is expressed in terms of credits, with a student workload ranging from 1,500 to 1,800 hours for an academic year, and one credit generally corresponds to 25-30 hours of work.*

[18] See http://wiki.creativecommons.org/OER_Policy_Registry

> *Although ECTS can help recognition of a student's studies between different institutions and national education systems, higher education providers are autonomous institutions. The final decisions are the responsibility of the relevant authorities: professors involved in student exchanges, university admission officers, recognition advisory centres (ENIC-NARIC), ministry officials or employer*

The Bologna Process currently has 47 participating countries. While the European Commission is an important contributor to the Bologna Process, the Lisbon Recognition Convention was prepared by the Council of Europe and members of the Europe Region of UNESCO. Paradoxically, this means that it would be much harder for the EU to bring about an update of Bologna.

4.2 Rethinking Education

In late 2012 the European Commission brought out *Rethinking Education*. Though much of this was about Vocational Education and Training (ISCED 4) and some about schools (ISCED 2 and 3) there are some relevant points for universities. These include (our emphasis in **bold**):

- Foreign language skills are especially important in times of crisis as they can open up new opportunities. That is why we are proposing a new benchmark on foreign language competences.
- We shall also develop guidelines for entrepreneurship education at all levels including schools, universities and vocational education and training. This will encourage education institutions to develop more entrepreneurial approaches in areas including leadership, teacher development as well as curriculum delivery.
- We have to ensure people have the versatility to cope with changing times and labour markets – and this means that education cannot be limited to a few years. Research also foresees that worldwide demand for university studies will greatly exceed the capacity of the existing system in the coming decades.
- It is essential that Member States create **flexible options, such as high quality distance learning**. **Widening access and engagement through Open Education is a necessity**. Technology will play a crucial role in this.
- **We should facilitate the recognition and transparency of all qualifications, including those gained outside formal education**. This will make it easier for individuals to explain their skills and increase mobility in the labour market and across Europe. We shall also talk to employer and workers' organisations about how to improve training opportunities for working adults.
- **Developing the competences of teaching staff** is a continuing and increasingly urgent priority in all Member States. A completely new generation of teachers is ready to take over and a completely new set of skills are required from them.
- In **times of austerity resources must be used very efficiently**. Today's communication and accompanying working document provide examples of where investments in education are likely to yield the highest returns.
- We need strong partnerships between the public and private sectors to ensure the best possible match between training and employment.
- Responsibility to deliver the right skills for the labour market must be shared between businesses, educational providers and other stakeholders, including students.
- We must also ensure that **education and training remain equitable and accessible for those from disadvantaged backgrounds**.

These policies give many hooks to hang OER policies on.

4.3 Europe 2020

The Europe 2020 flagship initiative *An agenda for new skills and jobs*[19] and, more recently, the *Employment Package*,[20] set also a number of EU actions to better anticipate skills needs and promote a better matching between labour market requirements and skills. One of the priorities focuses on the importance of **gaining appropriate ICT skills to overcome the skills mismatches in the ICT sector** and the learning of **digital literacy by all citizens for employability and active citizenship**. This is in line with the Communication *A Digital Agenda for Europe*,[21] which underlines the need for "enhancing digital literacy, skills and inclusion".

4.4 Recommendation on Recognition and validation of non-formal and informal learning

This states that:[22]

> *Member States should have in place, no later than 2018, in accordance with national circumstances and specificities, and as they deem appropriate, arrangements for the validation of non-formal and informal learning which enable individuals to:*
>
> *(a) have knowledge, skills and competences which have been acquired through non-formal and informal learning validated, including, where applicable, through open educational resources;*
>
> *(b) obtain a full qualification, or, where applicable, part qualification, on the basis of validated non-formal and informal learning experiences, without prejudice to other applicable Union law, in particular Directive 2005/36/EC on the recognition of professional qualifications*

This has applicability to universities also. We shall take this one directly on board.

4.5 Opening Up Education

In April 2013, the paper *Opening Up Education*[23] was released after several months of formulation and then consultation. This is much more technology-focussed than the other papers. Paradoxically, this takes the recommendations away from the comfort zone of ministry policy in most countries. Its narrative focuses on problems, not recommendations. We shall adapt the wording.

> ***1. Drivers related to ICT infrastructure***
>
> ***1.2. Uneven availability of ICT infrastructures and tools, including connectivity, across Member States***
>
> *Infrastructures are a precondition for integrating ICT in education and training systems. Studies show that there is greater availability of ICT equipment at schools, although disparities between countries and regions remain.*
>
> *Digital technologies evolve very fast and they require constant efforts to be updated in order to respond to increasing demands. Students expect to have Wifi connections everywhere in their schools or campus, tablets and other mobile devices are replacing traditional desktops,*

[19] See http://ec.europa.eu/social/main.jsp?langId=en&catId=958

[20] See http://ec.europa.eu/social/main.jsp?catId=1039&langId=en

[21] See http://ec.europa.eu/digital-agenda/

[22] See http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2012:398:0001:0005:EN:PDF

[23] See http://ec.europa.eu/governance/impact/planned_ia/docs/2013_eac_003_opening_up_education_en.pdf

software and cloud applications (even course specific) replace traditional materials, etc. Providing such facilities requires huge investments from education and training institutions and public authorities. Heterogeneous availability of infrastructures leads to inequality problems and increases the gap between teaching practices and ICT in society.

1.2. Absence of open interoperability standards

Lack of interoperability standards creates problems related to access to contents, which cannot be accessed from all devices and operating systems. This may create dominant positions in the market of some (not European) companies.

2. Drivers related to digital contents:

3.1. Insufficient supply of quality digital contents across languages, subjects and needs

There is an insufficient collaboration between stakeholders with complementary know-how (e.g. E&T institutions, publishers and ICT companies), at a moment where the traditional model of textbooks production, based on a strong intervention and funding from the State, is challenged by the combination of economic and financial crisis, the appearance of new actors and by emerging phenomena like OER. There are not enough incentives to change models, as it is happening in industries like software (challenged by open source), scientific publishing (with open access) or even music.

The issue of unclear business models is also true for education and training institutions, in particular European universities are lagging behind emerging phenomena like Massive Open Online Courses (MOOC).

3.2. Perceived uncertain legal framework conditions for producing, using, re-using and sharing educational contents

The current copyright framework is considered by stakeholders as difficult to understand and therefore this creates a barrier to develop and implement innovative teaching and learning practices based on collaboration and individualisation, through the re-use and sharing of contents. Users (e.g. teachers) feel that regulations are not transparent enough and are scared about the perceived uncertain legal consequences of re-using and sharing educational materials.

3.3. Difficult access to relevant, quality digital resources, in particular OER

Uncertain quality, adequateness and the fragmented nature of digital resources like OER are obstacles to extend their use. It is difficult to discover and identify quality contents adapted to the own needs.

3. Drivers related to teaching and learning environments:

3.1. Lack of teachers' skills for a real digital pedagogy

Among the key factors for success, the role of teachers and of other trainers is essential to provoke a paradigm shift in the way children and adults are taught. Nevertheless, when a digital native generation is fast emerging, today's educators are not properly trained to embed ICT in their pedagogical practices in order to increase personalisation and collaboration. Previous initiatives to promote ICT in education failed on addressing teachers' and trainers' concerns about the added value of using ICT (and/or OER) in their everyday teaching practices.

3.2. Organisational barriers for developing innovative and personalised pedagogies and assessment practices

Education and training institutions often lack the vision and/or capacities to promote innovative teaching methods and an extensive and integrated use of technologies.

Frameworks (e.g. curricula, assessment, funding) are often too restrictive, especially for schools, and rarely innovation-friendly.

3.3. Lack of validation and recognition mechanisms for online-acquired skills

The validation of skills and competences acquired online or 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. Assessment and accreditation would allow individuals to demonstrate the skills they have acquired through informal or non-formal OER-based training to potential employees. This may constitute a strong incentive to participate in life-long learning and may push for a more effective functioning of the labour market

It then proposes three options. We take option 2 as the natural choice, in line with the normal approach on policy triangulation. (Option 1 is do-nothing; Option 3 is a level of integration and funding implausible in the current economic and political context.)

Option 2: A coherent set of EU incentives to exploit the potential of digital technologies and content for better access and quality of education

This option would imply joint action from Commission, MS and other stakeholders, in line with their respective competences in the field of education. The Commission would devise and implement, with MS, a more coherent strategy for stimulating the integration of digital technologies and content (including OER) in mainstream education and training, to stimulate open educational practices and innovative learning environments.

Supportive actions would be based on incentives financed by the new generation of funds and programmes of the Multiannual Financial Framework (MFF) and on the establishment of reference framework at EU level which should sustain the political guidance provided to MS. The Commission would thus provide a policy impulse to stimulate a coordinated action at MS level through a strategic use of the future Multi-Annual Financial Framework, setting European framework conditions in order to:

(i) Improve and update digital infrastructures for education and training, including connectivity

The Commission would support MS to upgrade ICT infrastructures and high-speed broadband connections through the use of Structural Funds. This would support the development of national digital learning platforms and improve school and educational institutional ICT infrastructures. The Commission would also fund research on and implement open frameworks and standards for systems, services, applications and content operability.

(ii) Up-scale the creation, use, re-use and sharing of quality digital education contents, including OER

In order to incentivise the collaboration between different stakeholders for the production of quality digital educational materials, the Commission would support (public-private) partnerships between creators of educational content (ex: teachers, publishers, ICT companies); it would also ensure the open access to educational materials funded by Erasmus for All. As a follow up the Commission could also promote the open access to publicly –funded educational resources at national level through the adoption of a recommendation to Member States; this would however require further analysis to fully measure the specific impact of such action.

In order to ensure quality of OER produced in Europe, the Commission would support the development of European quality frameworks for OER, support the development of dedicated tools for improving searches and raise awareness and access to recognised quality content by supporting an EU-wide federated OER platform.

Finally, in order to increase transparency and awareness among users of digital resources on the rights and obligations inherent to the copyright or licencing regime applied in each educational resource, the Commission would support the development of technological methods to provide more information on IPR to the users of digital educational content and explore with stakeholders ways of stimulating the use of educational content via internet or other digital solutions in cross-border contexts.

(iii) Modernise learning, teaching and assessment practices through digital technologies.

The Commission would support the development of new business models for education and training institutions through the development of EU consortia for high quality online open course; it would also support schemes for education and training institutions to assess their level of e-maturity and establish educational strategies including digital technologies and content. In order to stimulate cross-border synergies, the Commission would collect best practices of business models developed on the basis of open content (with or without learning services, free or against charges) and provide guidance to institutions on the development of their own business models. The future business models of education and training institutions are yet not fully comprehended given the recent and exponential phenomena of MOOCs and open courses: an important action would therefore entail a better understanding of the impact of MOOCs on the future delivery of education and training.

The Commission would also support the development and uptake of online continuous professional teachers' development programmes and provide incentive schemes for teachers for professional development through digital technologies.

The support to large-scale transnational projects, including experimentations on innovative pedagogical approaches, curriculum development and skills assessment, would also be ensured in order to stimulate innovation in learning. In the same vein, the Commission would explore in more detail the possibility of incentivising the production and use of digital content (including OER) through a recommendation to Member States. However, more detailed analysis and evidence are necessary at this stage to fully assess the impact of such action.

Finally, the Commission would promote the development of open frameworks for validation and recognition of skills acquired informally and online (ex: open badges)

4.6 European higher education in the world

The focus of this document[24] is not on technology but there are a few useful points:

- **Support fair and formal recognition for competences gained abroad for internationally mobile students, researchers and staff, including a better use of transparency and comparability tools and an increased focus on learning outcomes**;
- "internationalisation at home", to ensure that the large majority of learners, the 80-90% who are not internationally mobile for either degree or credit mobility, are nonetheless able to acquire the international skills required in a globalised world
- Tackle the remaining obstacles for the development and implementation of joint and double degree programmes, both at institutional and national level, and **improve provisions for quality assurance and cross-border recognition**;

It also notes, with emphasis:

*New trends in digital education and the emergence of MOOCs should be an **incentive for HEIs to rethink their cost structures** and possibly also their missions, and engage in*

[24] See http://ec.europa.eu/education/higher-education/doc/com499_en.pdf

worldwide partnerships to increase the quality of content and of the learning experience through blended learning.

4.7 "Europe needs modernised universities"

Thus says the European Commission:[25]

> *The European Commission has today taken a position on how best to modernise Europe's universities. This is fundamentally important for them to make their contribution to the EU's objective to become a leading global and knowledge-based economy. European universities have enormous potential, much of which unfortunately goes untapped because of various rigidities and hindrances. Freeing up the substantial reservoir of knowledge, talent and energy requires immediate, in-depth and coordinated change: from the way in which systems are regulated and managed, to the ways in which universities are governed. The Commission's ideas are presented in a Communication adopted today which covers all activities of Europe's universities: their delivery of education, their research activities, and their potential as drivers of innovation....*

Recommendations are:

1. Boost the proportion of graduates spending at least one semester abroad or in industry.
2. Allow students to make use of national loans and grants wherever in the EU they decide to study or do research
3. **Bring procedures for the recognition of academic qualifications in line with those for professional qualifications and make European degrees more easily recognised outside Europe.**
4. Introduce training in intellectual property management, communication, networking, entrepreneurship and team-working as part of a research career
5. Refocus courses to allow greater participation at later stages of the life-cycle, thereby addressing the skills needs of Europe's workforce, and ensuring that universities are able to adapt to Europe's ageing population.
6. Review national student fee and support schemes so that the best students can participate in higher education and further research careers whatever their background.
7. **Review systems for funding universities, to be more focused on outputs** and give universities more responsibility for their own long-term financial sustainability, particularly in research.
8. Allow universities greater autonomy and accountability, so that they can respond quickly to change. This could include revising curricula to adapt to new developments, building closer links between disciplines and focussing on overall research areas domains (e.g. renewable energy, nanotechnology) rather than disciplines. It could also include more autonomy at individual institution level for choosing teaching and research staff.

The Commission stands ready to support the modernisation of EU universities through a process of identifying and sharing good practice, and through its funding programmes for education, research and innovation: the Lifelong Learning Programme, the Seventh Framework Programme for research and development, the Competitiveness and Innovation programme, and the Structural and Cohesion Funds.

4.8 The Higher Education Modernisation Agenda

The main areas for reform identified in the new agenda are:[26]

[25] See http://europa.eu/rapid/press-release_IP-06-592_en.htm?locale=fr

1. **to increase the number of higher education graduates**;
2. to improve the quality and relevance of teaching and researcher training, to equip graduates with the knowledge and core transferable competences they need to succeed in high-skill occupations;
3. to provide more opportunities for students to gain additional skills through study or training abroad, and to encourage cross-border co-operation to boost higher education performance;
4. to strengthen the "knowledge triangle", linking education, research and business
5. to create effective governance and funding mechanisms in support of excellence.

5. Earlier policy work in OER project and lobbyist circles

This chapter surveys work from projects and lobbyists other than POERUP. Most of these are single-issue documents, in that they focus specifically on OER – or slightly wider, looking at MOOCs and open educational practices. That is typically not the way governments prepare policy documents for education – many governments now do *not* have policy documents for ICT in higher education.

5.1 OPAL

The OPAL project (2010-11) produced a set of guidelines.[27] They are not designed for government policy formulation but are useful for policy formulation and monitoring at institution level. See especially the *Open Educational Practice Maturity Matrix* – essentially a benchmarking scheme.

5.2 UNESCO declaration

The UNESCO declaration was finalised during the UNESCO World OER Congress in June 2012 in Paris. Several POERUP staff participated in the Congress. The recommendations are:[28]

a. **Foster awareness and use of OER**. Promote and use OER to widen access to education at all levels, both formal and non-formal, in a perspective of lifelong learning, thus contributing to social inclusion, gender equity and special needs education. Improve both cost-efficiency and quality of teaching and learning outcomes through greater use of OER.
b. **Facilitate enabling environments for use of Information and Communications Technologies (ICT).** Bridge the digital divide by developing adequate infrastructure, in particular, affordable broadband connectivity, widespread mobile technology and reliable electrical power supply. Improve media and information literacy and encourage the development and use of OER in open standard digital formats.
c. **Reinforce the development of strategies and policies on OER.** Promote the development of specific policies for the production and use of OER within wider strategies for advancing education.
d. **Promote the understanding and use of open licensing frameworks.** Facilitate the re-use, revision, remixing and redistribution of educational materials across the world through open licensing, which refers to a range of frameworks that allow different kinds of uses, while respecting the rights of any copyright holder.
e. **Support capacity building for the sustainable development of quality learning materials.** Support institutions, train and motivate teachers and other personnel to produce and share

[26] See http://ec.europa.eu/education/higher-education/agenda_en.htm

[27] See http://www.oer-quality.org/wp-content/uploads/2011/03/OPAL-OEP-guidelines.pdf

[28] http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/Events/Paris%20OER%20Declaration_01.pdf

high-quality, accessible educational resources, taking into account local needs and the full diversity of learners. Promote quality assurance and peer review of OER. Encourage the development of mechanisms for the assessment and certification of learning outcomes achieved through OER.

f. **Foster strategic alliances for OER.** Take advantage of evolving technology to create opportunities for sharing materials which have been released under an open license in diverse media and ensure sustainability through new strategic partnerships within and among the education, industry, library, media and telecommunications sectors.
g. **Encourage the development and adaptation of OER in a variety of languages and cultural contexts.** Favour the production and use of OER in local languages and diverse cultural contexts to ensure their relevance and accessibility. Intergovernmental organisations should encourage the sharing of OER across languages and cultures, respecting indigenous knowledge and rights.
h. **Encourage research on OER.** Foster research on the development, use, evaluation and re-contextualisation of OER as well as on the opportunities and challenges they present, and their impact on the quality and cost-efficiency of teaching and learning in order to strengthen the evidence base for public investment in OER.
i. **Facilitate finding, retrieving and sharing of OER.** Encourage the development of user-friendly tools to locate and retrieve OER that are specific and relevant to particular needs. Adopt appropriate open standards to ensure interoperability and to facilitate the use of OER in diverse media.
j. **Encourage the open licensing of educational materials produced with public funds.** Governments/competent authorities can create substantial benefits for their citizens by ensuring that educational materials developed with public funds be made available under open licenses (with any restrictions they deem necessary) in order to maximize the impact of the investment.

5.3 UNESCO/COL guidelines

In the *Guidelines for Open Educational Resources (OER) in Higher Education*,[29] Section 2.1 *Guidelines for Governments* recommends:

(a) Support the use of OER through their policy-making role in higher education. This could include encouraging and supporting the use of OER in adapting learning experiences to a greater diversity of learners and **supporting national social-inclusion agendas**. In this way, it would be possible to encourage equitable access to higher education and improve learning outcomes for all learners. Sustainability of this endeavour might be encouraged by setting up a government programme of support for OER creation and reuse.[30]
(b) Consider adopting open licensing frameworks. One effective way to accelerate open licensing and the sharing of higher education resources would be to adopt, within policy frameworks, an **appropriate national open licensing framework. This might form part of an overarching policy framework on intellectual property rights (IPR) and copyright in higher education that spans both research and teaching activities**. Such a licensing framework could also cover the copyright and IPR status of educational materials produced by government departments and agencies.
(c) Consider adopting open standards. Linked to the above could be the adoption of appropriate open standards. The purpose would be to ensure full access to and use/sharing of resources in higher education. This could span both research and educational

[29] See http://unesdoc.unesco.org/images/0021/002136/213605e.pdf

[30] This now seems very unlikely in HE in most EU countries.

publications, serving to ensure the perpetuity of editable electronic documents, regardless of changes to software. Such standards could cover educational materials produced by government departments and agencies and by institutions receiving government support for developing educational resources.

(d) Contribute to raising awareness of key OER issues. This could include the development and sharing of case studies of good practice and relevant examples of use to support implementation efforts. **Governments can assist higher education stakeholders to understand issues surrounding IPR, as well as how IPR are being challenged and reshaped by the rapid digitisation and online sharing of information and resources**.

(e) **Promote national ICT/connectivity strategies**. Given the centrality of ICT to accessing and sharing content online, such support could focus on ensuring sustained provision of connectivity and staff/student access to ICT within higher education systems.

(f) **Support the sustainable development and sharing of quality learning materials**. Key to the sustainable development and use of OER will be supporting higher education institutions, individually and collectively, in their efforts to produce and share high quality educational resources. This could include support for national initiatives to develop local content and regional/global efforts to develop OER repositories and directories, as well as fostering mechanisms to promote quality in OER. There is no single strategy that will work for every context, but a coordinated approach would likely yield the best results.

In addition, Section 2.5 *Guidelines for quality assurance/accreditation bodies and academic recognition bodies* recommends:

(a) **Develop their understanding of OER and how it impacts quality assurance and recognition**. This could include ensuring that professionals involved in quality assurance and recognition are aware of the increasing importance of OER in the development and use of educational resources by higher education institutions. Particular attention might be paid to the shifting terrain of IPR and copyright, and to developing an understanding of the range of licensing options available for educational resources.

(b) **Engage in debates on OER, in particular on copyright**. Like all other stakeholders in higher education, quality assurance bodies and recognition bodies will need to influence policy developments around OER, focusing on both the opportunities and challenges that OER create.

(c) **Consider the effects of OER on quality assurance and recognition**. As OER become more common it is increasingly important to ensure that quality assurance and recognition principles and processes support the effective use of OER. In this regard, it will be important to review the role and use of OER in improving the quality of teaching and learning and develop criteria for assessing the effectiveness of the integration of OER into institutional practice.14

(d) **Accept OER as good practice in quality assurance and recognition**. If contributing to OER is accepted as good practice by higher education, then external quality assurance processes may redefine their scope and outreach. This would ensure a shift in focus towards embedding the creation and use of OER in the institutional culture while monitoring their integration into internal quality assurance practices.

6. Earlier POERUP work specifically on policy formulation

The following material is an expansion of that in the *POERUP Progress Report*.[31]

[31] See http://www.poerup.info/resources/2011_4021_PR_POERUP_pub__PDF.pdf

6.1 UNESCO OER meeting June 2012

For various reasons the POERUP project was propelled into the policy area much earlier than originally planned (the second half of the project). First, in April 2012 it became clear that the UNESCO OER meeting in Paris in June 2012 was going ahead and was inviting experts (not only politicians) to attend – and some to speak. Representatives from Sero, Athabasca, Dutch Ou and SCIENTER were approved to attend, taking along and distributing POERUP leaflets, and meeting the other OER analytic projects active round the world, all at minimal cost. The Paris meeting was of course best known for the release of the Declaration – approved on 22 June – and by 6 July a version of this, appropriate for benchmarking countries' progress towards OER, was released on the POERUP wiki – http://poerup.referata.com/wiki/2012_Paris_OER_Declaration_as_benchmark.

6.2 Open Education Experts Group July 2012

There was an ad-hoc seminar on "Open Education" on 13 July 2012 to which I was invited. This was followed by another meeting and a great deal of discussion and interaction went on before and after these. These meetings and discussions were part of the preparation process for the "Opening Up Education" Consultation which took place later.

I prepared a number of submissions, drawing not only on POERUP but on other LLP projects (Re.ViCa and VISCED) and also some non-EU projects and studies. One such is below. Buried in this are some of the earliest policy interventions considered by POERUP.[32]

Suggestions on ten meta-principles for interventions

1. Almost all words and phrases used in our discussions are contestable, even "university" but especially "adult education". *There must be a process of clarifying these and accepting the range of variant meanings across European countries which does not bog us down, today especially. The "boundary approach" to virtual campus used in **Re.ViCa** may be of interest.*[33]
2. Europe (even the EU-27) is no longer monolithic or uniform even if it ever was. Developments regarded as far-off aspirations in some countries are regarded in others as having caused "problems" needing to be "solved". Distance learning provision in Sweden and non-standard accreditation in the UK (and Canada) are examples. *Deeper, more grounded analysis is needed.*
3. Many policy aspects recently regarded as "standard operating procedure" in advanced countries are no longer standard across the EU. Several EU countries have no policy for ICT in education, not even for schools. ***Policy templates** for member states may help.*[34]
4. In many EU countries, ministries are hard-pressed and have few staff to devote to ICT policy issues. Their daughter agencies may now be non-existent (e.g. Becta) or under severe but discreet budget cuts (you know who). ***Good practice templates** for member states may help.*
5. The statist model of education is long gone in Europe. Private providers are active even in the value chain from state to student (Sweden, UK). Fees or pseudo-fees are being charged. Private universities exist, and private schools and colleges. *More analysis of **national approaches** is needed. (As in **POERUP**.) Private partners are needed for public projects (**ODS**).*
6. **The US is not only the enemy and not the only enemy.** Australia, Canada, Brazil, Mexico may have "designs on Europe". US models and approaches have been highly influential in OER. *We must partner with more non-EU countries and companies – project instruments have to adapt.*

[32] This is summarised also in http://www.poerup.info/resources/2011_4021_PR_POERUP_pub__PDF.pdf pp 12-13.

[33] See http://virtualcampuses.eu/index.php/Virtual_campus

[34] This is very much what we hope to achieve in POERUP WP4.

7. Other international agencies are now studying countries in Europe (UNESCO, IIEP, OECD, COL). They can help, not hinder. This is why **POERUP** partnered with Athabasca University. *Wider collaboration is needed at EU level and in projects.*
8. The Europe-wide associations so dominant in EU LLP circles were mainly created 20 years ago. The **VISCED** European Virtual Schools Colloquium in Sheffield brought together 20 of the 50 or so virtual schools in Europe, none ever active in EU project circles. They are routinely delivering services most universities can only dream of. Adult education, VET and staff engaged in campus-based e-learning are not well served currently on an EU-wide basis. Several associations are not very representative of their sectors. *Not an EU issue but for "our" associations to reflect on.*
9. Quality agencies are deliberately set up to be autonomous from both government and universities. ICT-based learning in general and open learning in particular are minority developments in all EU countries; quality agencies focus on the mainstream. (**ENQA** seminar.) Few countries have quality standards for ICT-based learning, fewer still use the ones they have (Sweden, New Zealand). Even fewer staff use them (UK). *We should stop complaining about agencies and trying to work without them, but work with them – they will be interested when open education becomes a significant activity. In the short term we should ensure that the general quality guidelines do not discriminate implicitly against open learning. (As **VISCED** is doing for virtual schools.)*
10. There are still quasi-legal barriers against "home schooling" in most EU countries. Until they are removed the level of innovation in ICT-based out-of-school education seen in US, Canada, Australia will not occur in much of Europe. *Quite simple EU statements asserting "equality of provision" for all school children could have a transformative effect especially in STEM subjects. But funding changes – to per-pupil-course not per-school – are needed too.*

Point 3 in particular had a significant effect on what countries POERUP studied.

6.3 Online Educa November 2012

Coupled with the policy work in VISCED this policy strand led up to a presentation *Enabling legislation to support OEP: a realistic view from POERUP (and informed by VISCED)* to a multi-project workshop on OER at Online Educa.[35]

It was loaded on Slideshare under the title *Enabling legislation to support Open Education in European policy* at http://www.slideshare.net/pbacsich/oeb-oerwspoerupbacsich and has been available since Online Educa Berlin 2012. (Note that the use of alternative titles increases the searchability of the resource on the web.) The slideshare entry also contains a transcript.

The statistics on Slideshare note that it has been viewed over 1200 times. To give a flavour of the presentation, one of the 24 slides is presented overleaf. This makes the point that in addition to a thematic dimension of policy interventions, there is likely to be a subject dimension.

[35] See http://www.slideshare.net/pbacsich/oeb-oerwspoerupbacsich

Rethinking Education (COM 669/2) – 2.1

- Building skills for the 21st century
  - Transversal and basic skills
    - transversal skills
    - particularly entrepreneurial skills
    - demand for STEM related skills is still high
    - foundation or basic skills achieved by all…
    - language learning needs particular attention
    - Vocational skills
    - Increasing the quality of vocational skills requires the development of world-class VET systems…
  - Vocational skills
    - world-class VET systems… (!!)

8

The presentation contended that policy interventions for OER need to be made now at all levels of a 9-tier hierarchy of intervention levels, given an increasingly devolved, fragmented and part-privatised educational scene – the levels being from the top:

1. Global: UNESCO Paris Declaration on OER
2. EU policies, especially now *Rethinking Education*
3. National policies (not many of these yet)
4. Sub-national policies (home nations, Länder, autonomous communities, provinces, states)
5. Municipal/county/regional policies
6. Groupings of institutions
7. "My Institution"
8. "My Department"
9. "My Course"!!

The presentation then went one by one through the recommendations from the VISCED (Virtual Schools/Colleges) project, treating these as 'reusable policy objects' for use in an OER policy framework. For example, VISCED Recommendation 1 that "The Commission should remove any unnecessary bureaucratic impediments which inhibit the development and sustainability of *virtual schools and colleges*" translates rather easily into one on OER when OER replaces the italicised phrase. Only a few do not translate well, which in itself raises questions about some proposals from OER enthusiasts.

VISCED recommendations Group 1

1. The Commission should remove any unnecessary bureaucratic impediments which inhibit the development and sustainability of higher education institutions using OER, MOOCs etc

VISCED Recommendations Group 2

2. The Commission and individual governments should raise awareness as to the value and impact of OER and MOOCs in meeting higher education policy aims.
3. The Commission and individual governments should raise awareness of the potential of OER and MOOCs in helping university students maintain timely progression through the

curriculum and in supporting students who require additional revision, acceleration or have special educational needs.

4. The Commission and individual governments should encourage OER and MOOC options in traditional schools and colleges as a strategy for reducing university drop-out or alleviating its effects.
5. The Commission and individual governments should encourage OER and MOOCs as a means of increasing the uptake of Science, Technology, Engineering and Mathematics subjects (STEM)

VISCED Recommendations Group 3

6. The Commission and individual governments should support schools and teachers to develop the skills essential for the delivery of OER and MOOCs in university education.
7. The Commission and individual governments should encourage and advise universities to exploit Open Educational Resources (OERs) and MOOCs.
8. The Commission and individual governments should exploit the potential for OER and MOOCs to enhance and support 21st century skills and digital literacy

7. Policy constraints

7.1 The evidence base for OER

This is our snapshot of the situation in summer 2013. We focus just on the situation as it is likely to affect policy interventions.

1. Across Europe there is increasing discussion of OER among university academics and many small-scale initiatives. Yet as the POERUP and other projects' OER country reports show, there are still many EU countries where OER is little seen in higher education. There are many advanced non-EU countries where this is also the case.
2. The high-profile MOOC providers globally have a total of under 200 universities involved, and with dominance of the US. Outside the UK, Europe is little involved (one or two institutions per country). Europe alone has over 3000 universities. MOOCs have had little impact on ISCED 5B providers ("polytechnics") or indeed on the mid-range of universities.
3. The HEA/JISC OER Programme shows that with massive amounts of funding a country's universities can be made to engage with OER. Most universities in England were involved one or other way with the Programme. However, this level of funding has not been continued and is not seen as likely to happen in other EU countries.
4. The success of the high-profile MOOC providers is impressive but a sustainable business model is slow to emerge and already there have been discontinuous changes in business plans (e.g. at Coursera). Venture funds focussed on higher education are on the whole investing in campus-based private universities and low-cost online providers oriented to increasing access from less advantaged communities, not in OER providers.
5. There is strong traction of OER in the European and global collection of open universities.
6. The development of Futurelearn (officially launched on 18 September 2013) shows a potentially replicable way forward: with modestly-funded national programmes involving the national open university and/or other centres of expertise. However, its members are high-rank universities – thus it does not address the issue of ISCED 5B providers – and it may be relevant only to those countries operating in an environment of a world language and quasi-privatised higher education.
7. MOOCs have made known the concept of distance education to many in the HE sector who did not know about it or had forgotten. MOOCS are revitalising distance education, which needed it. This is especially true in Europe. They have also made clear the low level of ICT-

based pedagogic knowledge in some universities in US, EU and the world, despite (in some countries) years of training in such matters.

8. MOOCs have also piloted novel forms of assessment (even if less novel in some countries than devotees think) which deserve wider attention by the HE sector.
9. However, there has been no breakthrough in automated teaching which could drastically reduce the cost of teaching to unsophisticated learners.
10. The endless "angels on a pin" debates about licenses make it clear that EU-wide decisions on appropriate licenses for public content would be of great benefit.
11. Little evidence is emerging that consortia are a good model for taking forward OER. It appears that consortia are of little interest to venture funders, unless they are structured in a non-consortial way with a clear "owner" or at least "leader".
12. The impact of OER on teaching outcomes has so far generated very few papers. It should be noted that the equivalent literature on the impact of ICT on teaching outcomes is now very large and at least 20 years in duration, but only recently are meta-level conclusions emerging.
13. There appears to be so far only one consortium (OER u) focussing clearly on reducing the costs of higher education. But progress is slow and it is not clear what the value-add is of the OER as opposed to other aspects of the "stripped down" model. There are developments in US, UK, Norway, Austria and elsewhere indicating that low-cost online higher education can be delivered without mandating use of OER. There still very few cost analyses of the cost of teaching higher education and even fewer of online higher education compared with face to face.
14. There is high activity in quality of OER among some projects and OER enthusiasts but this is not at all integrated with the European-level and member state quality bodies and with existing experts on quality in online learning.
15. The business case for OER repositories in higher education is not proven yet. In part this is due to the difficulties in providing prescriptive solutions for HE.
16. There are apparently sustainable developments in OER in related fields to higher education such as the success of the Khan Academy, ALISON and Wikipedia. (HE should look at these.)
17. There is considerably greater traction of *open access* at EU level and in several member states.
18. It is surprising how little attention governments are paying to the use of OER for overseas development in teaching (and continuing professional development) at university-level in developing countries, especially those with good infrastructure in the cities. Projects like TESSA and TESS-India show a way forward.

7.2 The importance of the problems the policy interventions are aimed to alleviate

See chapter 2.

7.3 The relative importance of these interventions compared with other interventions

This is hard to estimate yet. However, we note that fewer and fewer ministries now have explicit policies for ICT in higher education and fewer and fewer have specific agencies like JISC (now Jisc) and Surf to foster and support such policies. Universities are left more and more to their own devices, within rather general (but implicitly traditional) guidelines.

7.4 The existing policy thicket for education, ICT in education and related issues (e.g. open access)

This is described in chapter 4 – and see also chapter 3.

7.5 The socio-economic situation – in particular the potential funding available

The cessation of the UK JISC/HEA OER Programme and the impending end of the Wikiwijs programme confirm the implications of the overall funding situation, that there is not likely to be many, if any, new EU member state initiatives to fund the development of OER content – not unless there are much clearer justifications, and, one suspects, some change in the behaviour of universities.

8. Policy proposals

It is clear now from the policy work on predecessor projects to POERUP, earlier policy work in POERUP and policies/policy proposals from EU agencies that there is a great deal of commonality of concept and topic. The key issue is to produce acceptable wording in the socio-economic conditions within the EU in 2013.

To start this process it is useful to review the Workpackage narrative's key paragraph:

> *The "magnum opus" overview will then be deconstructed and contextualised to produce policy advice for educational authorities so that they can consider (a) changing the organisation, funding, quality monitoring and other aspects of their networks of educational institutions and (b) providing clearer guidance to institutional leaders, staff associations and student communities as to why and how to use and (where appropriate) create OER. Throughout this work care will be taken* ***not to over-focus on OER as an end*** *but* ***more of a means*** *towards educational transformation to achieve 21st century goals including (in many countries) achieving better results without increased resources.* ***Policy aspects such as risk and ethical/legal considerations will also be considered.***
>
> *In some countries policy has been still significantly characterised by process and initiatives that are essentially prescriptive, funding-driven and top-down, too easily disembodied from the learning process and forcing a reliance on external expertise and input.* ***The policy advice from POERUP will draw on lessons from WP3 on professional communities*** *and student communities while not ignoring top-down approaches including funding (institutions always welcome funding) but* ***also more delicate adjustments, such as to the incentives for collaboration between institutions and the way in which quality could be assessed and encouraged*** *(drawing on lessons from OPAL and US work among others).*

The interventions envisaged in our earlier narrative were as follows.

Initial proposals

1. Reducing the regulatory barriers against new kinds of HE providers (e.g. for-profit, from outside the country, consortial, etc)
2. Reducing the regulatory barriers against new modes of HE provision (distance, OER, MOOCs etc)
3. Fostering the development of transnational accrediting agencies and mutual recognition of accreditations across the EU
4. Reducing the regulatory barriers against new languages of provision (e.g. English in Flanders)

5. Reducing the regulatory barriers against new time durations of provision (i.e. developing a successor to Bologna based on competences gained not duration of study)
6. Fostering economies of scale by standardisation of syllabi, especially in subjects subject to professional recognition (medicine, dentistry, engineering, etc)
7. Increasing the requirements for monitoring and transparent reporting of costs and outcomes for universities Europe-wide
8. Setting up an innovation fund to support one new "European" university each year with a commitment to open education
9. Mandating that any course or content development with support or part-support from EU funds is open to the percentage that the support represents
10. Fostering research into the true benefits of OER
11. Ensuring that lecturers are kept up to date in ICT-based pedagogies relevant to OER

We now correlate them against EU recommendations and related material in the light of the evidence and policy constraints.

8.1 Innovation – new institutions

Initial proposal

- Setting up an innovation fund to support one new "European" university each year with a commitment to open education

This came from discussions at the Open Education 2030 HE workshop.

Existing recommendations

Opening Up Education: Education and training institutions often lack the vision and/or capacities to promote innovative teaching methods and an extensive and integrated use of technologies. Frameworks (e.g. curricula, assessment, funding) are often too restrictive, especially for schools, and rarely innovation-friendly.

Option 2 (iii) there notes: The support to large-scale transnational projects, including experimentations on innovative pedagogical approaches, curriculum development and skills assessment, would also be ensured in order to stimulate innovation in learning. In the same vein, the Commission would explore in more detail the possibility of incentivising the production and use of digital content (including OER) through a recommendation to Member States. However, more detailed analysis and evidence are necessary at this stage to fully assess the impact of such action.

Final proposal

This proposal stands, with some rewording:

- The Commission should set up a competitive innovation fund to develop one new "European" university each year with a commitment to low-cost online education around a core proposition of open content.

8.2 Accreditation of institutions – new accrediting bodies and mutual recognition

Here we are talking about accreditation of *institutions*, not accreditation of programmes or of student effort on a module/course.

Initial proposals

- Fostering the development of transnational accrediting agencies and mutual recognition of accreditations across the EU
- Reducing the regulatory barriers against new kinds of HE providers (e.g. for-profit, from outside the country, consortial, etc)

This is not discussed as such in the EU material.

Final proposals

These proposals stand, with some minor rewording:

- The Commission should foster the development of transnational accrediting agencies and mutual recognition of accreditations across the EU.
- The Commission should reduce the regulatory barriers against new kinds of HE providers (e.g. for-profit, from outside the country, consortial, etc).

8.3 Quality agencies

The various schemes for quality in OER are ignored by national HE quality agencies or governments – not surprising when they mostly ignore similar schemes for quality in e-learning,[36] even though e-learning (on- or off-campus) has far greater penetration than OER. Few OER or e-learning experts have any dealings with ENQA or the national quality agencies – those that do are much more realistic. In fairness, ENQA has looked at e-learning – in one workshop.[37]

Initial proposals

- Reducing the regulatory barriers against new modes of HE provision (distance, OER, MOOCs etc)

Rethinking Education notes:

It is essential that Member States create flexible options, such as high quality distance learning. Widening access and engagement through Open Education is a necessity. Technology will play a crucial role in this

Opening Up Education notes:

In order to ensure quality of OER produced in Europe, the Commission would support the development of European quality frameworks for OER, support the development of dedicated tools for improving searches and raise awareness and access to recognised quality content by supporting an EU-wide federated OER platform.

UNESCO/COL guidelines on quality agencies

Section 2.5 *Guidelines for quality assurance/accreditation bodies and academic recognition bodies* recommends:

(a) **Develop their understanding of OER and how it impacts quality assurance and recognition**. This could include ensuring that professionals involved in quality assurance and recognition are aware of the increasing importance of OER in the development and use of educational

[36] The most recent example was the Swedish system developed in 2008 for quality in e-learning, but put aside when the new government came in. See http://www.eadtu.nl/e-xcellencelabel/files/0811R.pdf

[37] ENQA Workshop on quality assurance of e-Learning, 7-8 October 2009, Sigtuna, Sweden (6 March 2009) – http://www.enqa.eu/eventitem.lasso?id=249

resources by higher education institutions. Particular attention might be paid to the shifting terrain of IPR and copyright, and to developing an understanding of the range of licensing options available for educational resources.

(b) **Engage in debates on OER, in particular on copyright**. Like all other stakeholders in higher education, quality assurance bodies and recognition bodies will need to influence policy developments around OER, focusing on both the opportunities and challenges that OER create.

(c) **Consider the effects of OER on quality assurance and recognition**. As OER become more common it is increasingly important to ensure that quality assurance and recognition principles and processes support the effective use of OER. In this regard, it will be important to review the role and use of OER in improving the quality of teaching and learning and develop criteria for assessing the effectiveness of the integration of OER into institutional practice.

(d) **Accept OER as good practice in quality assurance and recognition**. If contributing to OER is accepted as good practice by higher education, then external quality assurance processes may redefine their scope and outreach. This would ensure a shift in focus towards embedding the creation and use of OER in the institutional culture while monitoring their integration into internal quality assurance practices.

Final proposals

We accept in general terms all of the UNESCO/COL guidelines except for (d) which we regard as premature. However, the scope is too restrictive – the OER should be within the context of online learning including distance learning and in particular the consumption of freely available material which requires registration (as in many MOOCSs) so is not OER.

So we end up with something like:

Final proposals

Guidelines for quality assurance/accreditation bodies and academic recognition bodies

- Quality agencies should:
  (a) Develop their understanding of new modes of learning (including online, distance, OER and MOOCs) and how they impact quality assurance and recognition.
  (b) Engage in debates on copyright
  (c) Consider the effects of these new modes on quality assurance and recognition
  (d) Ensure that there is no implicit non-evidence-based bias against these new modes when accrediting institutions both public and private including for-profit (if relevant), accrediting programmes (if relevant) and assessing/inspecting institutions/programmes.

8.4 Bologna-bis: competence-based not time-based assessment

Initial proposal

- Reducing the regulatory barriers against new time durations of provision: developing a successor to Bologna based on competences gained not duration of study

The case for this has been extensively argued.[38] It was seen as too advanced to be considered. However it becomes that another part of the Commission will require this.

[38] See http://www.scribd.com/doc/144418600/Open-Qualifications-and-Competences-in-Universities-2030 and http://iite.unesco.org/pics/publications/en/files/3214709.pdf which draw on http://www.scribd.com/doc/96397285/Time-Bacsich-Final-Final-PDF – further papers are in preparation.

Recommendation on Recognition and validation of non-formal and informal learning

> *Member States should have in place, no later than 2018, in accordance with national circumstances and specificities, and as they deem appropriate, arrangements for the validation of non-formal and informal learning which enable individuals to:*
>
> *(a) have knowledge, skills and competences which have been acquired through non-formal and informal learning validated, including, where applicable, through open educational resources;*
>
> *(b) obtain a full qualification, or, where applicable, part qualification, on the basis of validated non-formal and informal learning experiences, without prejudice to other applicable Union law, in particular Directive 2005/36/EC on the recognition of professional qualifications*

It would be strange if non- formal learning and informal learning could be validating yet formal learning from a non-Bologna-compliant provider was not.

Opening Up Education observes that:

> ***3.3. Lack of validation and recognition mechanisms for online-acquired skills***
>
> *The validation of skills and competences acquired online or 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. Assessment and accreditation would allow individuals to demonstrate the skills they have acquired through informal or non-formal OER-based training to potential employees. This may constitute a strong incentive to participate in life-long learning and may push for a more effective functioning of the labour market*

and recommends:

> *Finally, the Commission would promote the development of open frameworks for validation and recognition of skills acquired informally and **online** (ex: open badges)*

which indicates a wider scope than just OER.

European higher education in the world notes:

- **Support fair and formal recognition for competences gained abroad for internationally mobile students, researchers and staff, including a better use of transparency and comparability tools and an increased focus on learning outcomes**

Why just from abroad?

Final proposals

This proposal stands.

- The Commission and related authorities developing the European Higher Education Area should reduce the regulatory barriers against new non-study-time-based modes of provision: in particular by developing a successor to Bologna based primarily on competences gained not duration of study.

8.5 Assessment and accreditation of modules

Initial proposal

No specific proposal was made in the original list but it would be better if there was one to give specific guidance to universities.

Opening Up Education notes (but as problems not recommendations):

> ***3.2. Organisational barriers for developing innovative and personalised pedagogies and assessment practices***
>
> *Education and training institutions often lack the vision and/or capacities to promote innovative teaching methods and an extensive and integrated use of technologies. Frameworks (e.g. curricula, assessment, funding) are often too restrictive, especially for schools, and rarely innovation-friendly.*
>
> ***3.3. Lack of validation and recognition mechanisms for online-acquired skills***
>
> *The validation of skills and competences acquired online or 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. Assessment and accreditation would allow individuals to demonstrate the skills they have acquired through informal or non-formal OER-based training to potential employees. This may constitute a strong incentive to participate in life-long learning and may push for a more effective functioning of the labour market*

It later notes, in Option 2:

> *... including experimentations on innovative pedagogical approaches, curriculum development and skills assessment...*

and at the end, but crucially:

> ***Finally, the Commission would promote the development of open frameworks for validation and recognition of skills acquired informally and online (ex: open badges)***

UNESCO declaration notes:

e. ... Encourage the development of mechanisms for the assessment and certification of learning outcomes achieved through OER.

European higher education in the world notes:

- **Support fair and formal recognition for competences gained abroad for internationally mobile students, researchers and staff, including a better use of transparency and comparability tools and an increased focus on learning outcomes**

Interestingly the Commission documents do not suggest awareness of activity in several member states on Accreditation of Prior Learning (APL), a term in the UK, but in the US and Canada often called Recognition of Prior Learning (RPL) or Prior Learning Assessment and Recognition (PLAR).[39] A good example is the APL at the University of London International Programmes (a large distance learning provider and active in MOOCs), but its scope is rather narrowly drawn.[40] See also the thorough report for the EU on APL in Scotland, one of our policy target countries.[41]

Eurocrats will be reassured that it is not just an "Anglo" thing – the University of Rennes has a whole department focussing on this.[42]

We do not have space for a whole analysis of this: it is a well-developed field in some member states but with a number of pitfalls where quality failures have occurred.[43]

---

[39] See http://en.wikipedia.org/wiki/Prior_learning_assessment_and_recognition

[40] See http://www.londoninternational.ac.uk/applications-admissions/accreditation-prior-learning

[41] See http://www.adam-europe.eu/prj/9626/prj/Report-Recognition%20of%20Prior%20Learning%20in%20Scotland.pdf

[42] See http://www.univ-rennes1.fr/english/home/academics/accreditation_of_prior_learning/

[43] We have not embarrassed any universities by listing them here.

The other issue is that in many member states, despite Bologna, credit transfer between institutions is not fully developed – unlike in US, Canada and Sweden. In particular a student cannot always easily take the credits from their studies in a first year at a UK university and put all of them towards completing a degree at another UK university.

Final proposals

In fact two Proposals are needed:

- The Commission should recommend to universities that they should work to improve and proceduralise their activity on APL (Accreditation of Prior Learning) including the ability to accredit knowledge and competences developed through online study and informal learning, including but not restricted to OER and MOOCs, with a focus on admitting students with such accredited studies to the universities' own further courses of study.
- The Commission should recommend to the larger member states that they should each set up an Open Accreditor to accredit a range of studies which could lead to an undergraduate degree. In the first instance the Accreditor should focus on qualifications in the ISCED 5B area as this is most correlated with high-level skills for business and industry.

8.6 Funding mechanisms for institutions and content

Initial proposals

A number of our initial proposals impact on funding mechanisms, in particular:

- Reducing the regulatory barriers against new time durations of provision (i.e. developing a successor to Bologna based on competences gained not duration of study) – covered separately
- Fostering economies of scale by standardisation of syllabi, especially in subjects subject to professional recognition (medicine, dentistry, engineering, etc)
- Increasing the requirements for monitoring and transparent reporting of costs and outcomes for universities Europe-wide
- Mandating that any course or content development with support or part-support from EU funds is open to the percentage that the support represents

"Europe needs modernised universities" states:

- **Review systems for funding universities, to be more focused on outputs** and give universities more responsibility for their own long-term financial sustainability...
- Allow universities greater autonomy and accountability, so that they can respond quickly to change. This could include revising curricula to adapt to new developments, building closer links between disciplines.... It could also include more autonomy at individual institution level for choosing teaching and research staff.

Opening Up Education notes:

> *Education and training institutions often lack the vision and/or capacities to promote innovative teaching methods and an extensive and integrated use of technologies. Frameworks (e.g. curricula, assessment, funding) are often too restrictive, especially for schools, and rarely innovation-friendly.*

The UNESCO declaration notes:

j. **Encourage the open licensing of educational materials produced with public funds.** Governments/competent authorities can create substantial benefits for their citizens by ensuring that educational materials developed with public funds be made available under

open licenses (with any restrictions they deem necessary) in order to maximize the impact of the investment.

Final proposals

- The Commission should foster work into standardised syllabi EU-wide for undergraduate degrees in certain professions (e.g. medicine, nursing, mathematics, IS/IT) where this is appropriate for EU-wide action, and in the light of a successful outcome to such initiatives, foster the developments of common bases of OER material to support these standards, including relevant open repositories and (ideally jointly with publishers) open textbooks.
- The Commission should ensure that any public outputs from its programmes (specifically including Erasmus for All and Framework) are made available as open resources under an appropriate license.
- The Commission should encourage member states to do likewise for their national research and teaching development programmes, including for the public funding component of university teaching.
- The Commission should encourage member states to increase their scrutiny of the cost basis for university teaching and consider the benefits of output-based funding for qualifications.

8.7 IPR issues

There was no initial proposal on this. However, IPR was noted as a research issue:

- The endless "angels on a pin" debates about licenses make it clear that EU-wide decisions on appropriate licenses for public content would be of great benefit.

It is also well known that knowledge of IPR is very limited among teaching staff in universities. *Opening Up Education* observes:

> ***3.2. Perceived uncertain legal framework conditions for producing, using, re-using and sharing educational contents***
>
> *The current copyright framework is considered by stakeholders as difficult to understand and therefore this creates a barrier to develop and implement innovative teaching and learning practices based on collaboration and individualisation, through the re-use and sharing of contents. Users (e.g. teachers) feel that regulations are not transparent enough and are scared about the perceived uncertain legal consequences of re-using and sharing educational materials.*

Its Option 2 recommends:

> *Finally, in order to increase transparency and awareness among users of digital resources on the rights and obligations inherent to the copyright or licencing regime applied in each educational resource, the Commission would support the development of technological methods to provide more information on IPR to the users of digital educational content...*

UNESCO/COL recommends:

- Consider adopting open licensing frameworks. One effective way to accelerate open licensing and the sharing of higher education resources would be to adopt, within policy frameworks, an **appropriate national open licensing framework. This might form part of an overarching policy framework on intellectual property rights (IPR) and copyright in higher education that spans both research and teaching activities**. Such a licensing framework could also cover the copyright and IPR status of educational materials produced by government departments and agencies.

- .... **Governments can assist higher education stakeholders to understand issues surrounding IPR, as well as how IPR are being challenged and reshaped by the rapid digitisation and online sharing of information and resources**.

In those member states (an increasing number) where profit-making companies are part of the delivery chain of education, there have been arguments over a modern interpretation of the "-NC" clause in Creative Commons.

Final proposals

- The Commission should adopt and recommend a standard Creative Commons license for all openly available educational material it is involved in funding. It is suggested that this is Creative Commons 3.0 in unported or relevant national versions,[44] updated from time to time. The Commission should recommend this license to all member states
- The Commission should study the issues in the modern European HE system round the "non commercial" restriction and make appropriate recommendations for its own programmes and for member states.
- The Commission should support the development of technological methods to provide more and standardised information on IPR to the users of digital educational content.
- The Commission should mount a campaign both centrally and via the member states to educate university staff on IPR issues.

8.8 Training of academics

It is never possible to train all academics in ICT as the topic keeps changing and the academics move jobs or retire. However, one has to keep trying. The Commission's role cannot be substantial but it should be central.

Initial proposals

- Ensuring that lecturers are kept up to date in ICT-based pedagogies relevant to OER

Rethinking Education observes:

- **Developing the competences of teaching staff** is a continuing and increasingly urgent priority in all Member States. A completely new generation of teachers is ready to take over and a completely new set of skills are required from them.

Opening Up Education observes:

> ***3.2. Perceived uncertain legal framework conditions for producing, using, re-using and sharing educational contents***
>
> *The current copyright framework is considered by stakeholders as difficult to understand and therefore this creates a barrier to develop and implement innovative teaching and learning practices based on collaboration and individualisation, through the re-use and sharing of contents. Users (e.g. teachers) feel that regulations are not transparent enough and are scared about the perceived uncertain legal consequences of re-using and sharing educational materials.*

[44] See http://creativecommons.org

and later:

> ***3.1. Lack of teachers' skills for a real digital pedagogy***
>
> *Among the key factors for success, the role of teachers and of other trainers is essential to provoke a paradigm shift in the way children and adults are taught. Nevertheless, when a digital native generation is fast emerging, today's educators are not properly trained to embed ICT in their pedagogical practices in order to increase personalisation and collaboration. Previous initiatives to promote ICT in education failed on addressing teachers' and trainers' concerns about the added value of using ICT (and/or OER) in their everyday teaching practices.*

Rubbing it in, and focussing on the senior management level, it goes on:

> ***3.2. Organisational barriers for developing innovative and personalised pedagogies and assessment practices***
>
> *Education and training institutions often lack the vision*[45] *and/or capacities to promote innovative teaching methods and an extensive and integrated use of technologies. Frameworks (e.g. curricula, assessment, funding) are often too restrictive, especially for schools, and rarely innovation-friendly.*

Relevant recommendations in Option 2 are:

> ***(iii) Modernise learning, teaching and assessment practices through digital technologies.***
>
> *...*
>
> ***The Commission would also support the development and uptake of online continuous professional teachers' development programmes and provide incentive schemes for teachers for professional development through digital technologies***

The *Higher Education Modernisation Agenda* recommends:

- to improve the quality and relevance of **teaching and researcher training**, to equip graduates with the knowledge and core transferable competences they need to succeed in high-skill occupations;

The *UNESCO Declaration* recommends:

a. **Support capacity building for the sustainable development of quality learning materials.** Support institutions, train and motivate teachers and other personnel to produce and share high-quality, accessible educational resources, taking into account local needs and the full diversity of learners....

It is clear that there is consensus on the need for staff development. We also make a Recommendation under IPR issues which actually fits better here:

- The Commission should mount a campaign both centrally and via the member states to educate university staff in IPR issues

Final proposals

- The Commission should support the development of online initial and continuous professional development programmes for teachers, focussing on online learning with specific coverage of distance learning, OER, MOOCs and other forms of open educational practice, and also IPR issues.

[45] Institutions are not sentient beings – it is the human managers in them who lack the vision

- The Commission should encourage member states to do this also and recommend their use of incentive schemes for teachers engaged in online professional development of their pedagogic skills including online learning.

8.9 Further research

This is always the easiest one to write.

Initial proposals

- Fostering research into the true benefits of OER

Reflection on the POERUP projects and related OER activities indicate some issues over research topics and their timeliness. When asked about the impact of the French Revolution, Zhou Enlai was alleged to have said "Too early to say". Many commentators now have revealed that he was in fact talking at about the student riots of 1968, not the original revolution of 1789.[46] This makes the story much more apposite for us. The UK Open University has just started being planned in 1968. But it is only in the last 10 years that research in distance learning reached the level of maturity and impact that is changing government's minds and interesting venture capital. So it is perhaps unrealistic to expect too much from early research on OER and MOOCs.

Some date the start of OER from 2001, about the same time as the UK e-University came into existence, the first large-scale attempt in Europe to provide a global university-level education provider. MOOCs are dated from 2008 though it was 2011 before they became a large-scale phenomenon.[47] Thus both educational innovations are quite young.

With these caveats here are a few of main research topics we foresee as being relevant in the next three years are:

- pedagogic issues raised by the large scale of some interventions
- the possibility of more cost-effective education, facilitated by automated assessment, peer assessment or other tools
- the relevance of open learning on the less sophisticated learner (especially non-conventional entrants to universities) – most MOOC students so far are not new to university-level learning
- what effect OER and MOOCs will have on the large "traditional" suppliers of learning management systems
- new funding models for university teaching in a situation of constrained funds for HE in Europe
- usability issues of OER and MOOCs across global populations and cultures
- sustainable business models – so far too early to tell.

It is also important that case studies are looked at over a long period. Initial success, and failure, is not necessarily a good guide to future success of an idea. Sometimes it is the fast followers who win the race, not the early adopters. The UK e-University was a failure but online distance learning is in good shape in the UK. In Canada they have a good track record of reconceptualising and relaunching institutions that got into trouble – see the story of TechBC for one of several examples.[48]

[46] See http://mediamythalert.wordpress.com/2011/06/14/too-early-to-say-zhou-was-speaking-about-1968-not-1789/

[47] Useful history lesson at http://moocnewsandreviews.com/a-short-history-of-moocs-and-distance-learning/

[48] See http://en.wikipedia.org/wiki/Technical_University_of_British_Columbia

Final proposals

- The Commission should fund research into the verifiable benefits of OER, with greater efforts to integrate such analyses with its ongoing research on distance learning, on-campus online learning, and pedagogy; and recommend the same to member states.

9. Recommendations for European Commission and via EU for the Member States

Summarising the last chapter, there are currently eighteen, grouped as noted below.

Innovation – new institutions

19. The Commission should set up a competitive innovation fund to develop one new "European" university each year with a commitment to low-cost online education around a core proposition of open content.

Accreditation of institutions – new accrediting bodies and mutual recognition

20. The Commission should foster the development of transnational accrediting agencies and mutual recognition of accreditations across the EU.
21. The Commission should reduce the regulatory barriers against new kinds of HE providers (e.g. for-profit, from outside the country, consortial, etc).

Quality agencies

22. Quality agencies in ENQA[49] should:
    - Develop their understanding of new modes of learning (including online, distance, OER and MOOCs) and how they impact quality assurance and recognition;
    - Engage in debates on copyright;
    - Consider the effects of these new modes on quality assurance and recognition;
    - Ensure that there is no implicit non-evidence-based bias against these new modes when accrediting institutions both public and private including for-profit (if relevant), accrediting programmes (if relevant) and assessing/inspecting institutions/programmes.

Bologna-bis: competence-based not time-based assessment

23. The Commission and related authorities developing the European Higher Education Area[50] should reduce the regulatory barriers against new non-study-time-based modes of provision: in particular by developing a successor to Bologna based primarily on competences gained not duration of study.[51]

Assessment and accreditation of modules

24. The Commission should recommend to universities that they should work to improve and proceduralise their activity on APL (Accreditation of Prior Learning) including the ability to accredit knowledge and competences developed through online study and informal learning, including but not restricted to OER and MOOCs, with a focus on admitting students with such accredited studies to the universities' own further courses of study.
25. The Commission should recommend to the larger member states that they should each set up an Open Accreditor to accredit a range of studies which could lead to an undergraduate

[49] See http://www.enqa.eu

[50] See http://www.ehea.info

[51] See http://www.scribd.com/doc/144418600/Open-Qualifications-and-Competences-in-Universities-2030

degree. In the first instance the Accreditor should focus on qualifications in the ISCED 5B area as this is most correlated with high-level skills for business and industry.

Funding mechanisms for institutions and content

26. The Commission should foster work into standardised syllabi EU-wide for undergraduate degrees in certain professions (e.g. medicine, nursing, mathematics, IS/IT) where this is appropriate for EU-wide action, and in the light of a successful outcome to such initiatives, foster the developments of common bases of OER material to support these standards, including relevant open repositories and (ideally jointly with publishers) open textbooks.
27. The Commission should ensure that any public outputs from its programmes (specifically including Erasmus for All and Framework) are made available as open resources under an appropriate license.
28. The Commission should encourage member states to do likewise for their national research and teaching development programmes, including for the public funding component of university teaching.
29. The Commission should encourage member states to increase their scrutiny of the cost basis for university teaching and consider the benefits of output-based funding for qualifications.

IPR issues

30. The Commission should adopt and recommend a standard Creative Commons license for all openly available educational material it is involved in funding. This should currently be Creative Commons 3.0 in unported or relevant national versions, updated from time to time. The Commission should also recommend this license to all member states.
31. The Commission should study the issues in the modern European HE system round the “non commercial” restriction and make appropriate recommendations for its own programmes and for member states.
32. The Commission should support the development of technological methods to provide more and standardised information on IPR to the users of digital educational content.
33. The Commission should mount a campaign both centrally and via the member states to educate university staff on IPR issues.

Training of academics

34. The Commission should support the development of online initial and continuous professional development programmes for teachers, focussing on online learning with specific coverage of distance learning, OER, MOOCs and other forms of open educational practice, and also IPR issues.
35. The Commission should encourage member states to do this also and should recommend the use of incentive schemes for teachers engaged in online professional development of their pedagogic skills including online learning.

Further research

36. The Commission should fund research into the verifiable benefits of OER, with greater efforts to integrate such analyses with its ongoing research on distance learning, on-campus online learning, and pedagogy; and recommend the same to member states.

10. References

See the footnotes.