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# From Open Educational Resources to Open Educational Practices: The Future of Credentialing Learning Outcomes

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Moscow International Education Fair, 18-21 April 2018, Moscow



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## Открытые образовательные ресурсы

OER refers to any educational resources (including curriculum maps, course materials, textbooks, streaming videos, multimedia applications, podcasts, and any other materials that have been designed for use in teaching and learning) that are openly available for use by educators and students, without an accompanying need to pay royalties or license fees (Butcher, 2011).

OER can exist as smaller, stand-alone resources (reusable learning objects), that can be mixed and combined to form larger pieces of content or as larger course modules or full courses.

OER can also include simulations, labs, collections, journals, and tools. These materials are considered open if they are released under an open license such as a Creative Commons license.



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# Проект ИИТО ЮНЕСКО

## ООР в неанглоязычных странах



OPEN EDUCATIONAL RESOURCES  
IN NON-ENGLISH-SPEAKING COUNTRIES

**Policy Brief**  
January 2011

**OPEN EDUCATIONAL RESOURCES AND INTELLECTUAL PROPERTY RIGHTS**

**CONTENTS:**  
Open Educational Resources  
Intellectual property rights  
Open licensing approaches  
Giving permission  
What does the permission mean?  
Practical Creative Commons  
Types of Creative Commons Licenses  
The impact of openness: OpenLearn case study  
Keeping it simple: Copyright in the Chinese National Excellence Courses  
Recommendations and Conclusions

**OPEN EDUCATIONAL RESOURCES**

Open Educational Resources (OER) are described in detail in the UNESCO brief on OER (Laine, 2010), but it is worth repeating the definition:  
"OER are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tools, software, and any other tools, materials, or techniques used to support access to knowledge" (Atkins, Brown and Hammond, 2007, p. 4).

The key elements to note in the definition are the resources need to "reside in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others". It is tempting to see the solution as to place everything in the public domain, however that option is ill-defined and does not allow different cases to be handled. Adoption of a suitable license gives a way forward for OER and permitting sharing and reuse. To do this needs some understanding of:

- What is meant by intellectual property
- What approach can be used for licensing and release
- How to give the permission you want?

**Policy Brief**  
November 2010

**GLOBAL TRENDS IN THE DEVELOPMENT AND USE OF OPEN EDUCATIONAL RESOURCES TO REFORM EDUCATIONAL PRACTICES**

**CONTENTS:**  
Introduction  
The forces driving publication and use of open educational resources  
From open educational resources to open educational practices  
Impacts on educational systems  
Recommendations

**INTRODUCTION**

Open educational resources (OER) have become a major focus of action within educational circles, particularly those related to higher education. There are a number of names associated with this movement: Open Courseware, Open Courseware Initiative, Names such as open content, open content, open learning resources, open educational technologies, resources and open courseware are variously used in the literature and face-to-face discussions; but it is the term open educational resources that was adopted at a UNESCO meeting in 2002, that is most commonly used. A number of definitions but this modification of the original UNESCO definition is often quoted:

OER are teaching, learning, and research resources that are in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others. Open educational resources include full courses, course materials, modules, streaming videos, text, software, and any other tools, materials, or techniques used to support access to knowledge (Atkins, Hammond, 2007, p. 4).

<sup>1</sup> <http://www.iit.edu/index.htm>

**Policy Brief**  
July 2013

**INTRODUCTION TO MOOCs: AVALANCHE, ILLUSION OR AUGMENTATION?**

**CONTENTS:**  
Context  
Overview: history  
Kinds of MOOC  
MOOC users  
MOOC business models  
Global scope  
Future directions  
Risks and benefits  
Policy implications and recommendations  
References

**CONTEXT**

In recent years, online companies have transformed traditional products and services by providing free access to content which previously had a price: Google for search and software, Spotify for music and Wikipedia for reference, to name but a few. At the same time, access to the Internet and broadband has increased rapidly (as of 2013, 77% of the developed world and 31% of the developing world has Internet access) and huge growth in mobile connectivity particularly in the developing world has brought online content and interaction to a global audience. However, whilst free online content has undoubtedly revolutionised access to, and the sharing of, information there are also a number of risks associated with it: exploitation of the user as the "product", lack of quality control and review, copyright issues, poor protection and/or use of the user's data, and the frequent possibility of overhyping.

It is into this arena that higher education is now stepping with the advent of massive open online courses (MOOCs). Higher Education Institutions (HEIs) are no strangers to the delivery of online content (e.g. Open Educational Resources, Virtual Learning Environments) but MOOCs have captured the press and public's interest in a way that few initiatives have in the past and as such have attracted extremes of both praise and skepticism. It is this paper's aim to provide an overview of the history and types of MOOCs, their global scope, and the associated risks and benefits of their use.

<sup>1</sup> [https://en.wikipedia.org/wiki/Global\\_Jammer\\_campaign](https://en.wikipedia.org/wiki/Global_Jammer_campaign)

Armenia	Latvia
Azerbaijan	Lithuania
Belarus	Moldova
Brazil	Mongolia
China	Poland
France	Russia
Germany	Tajikistan
Japan	Turkey
Kazakhstan	Ukraine
Kenya	Uzbekistan
Kyrgyz Republic	Vietnam



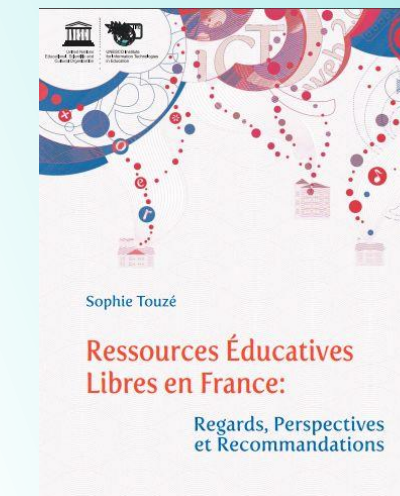
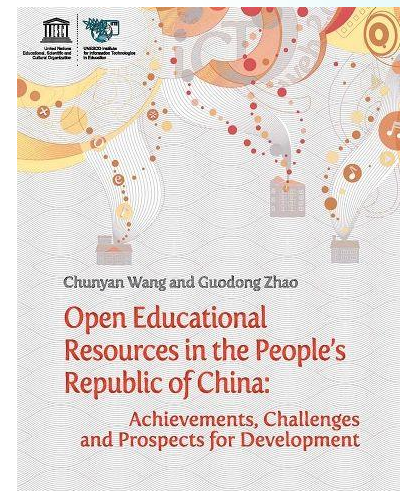
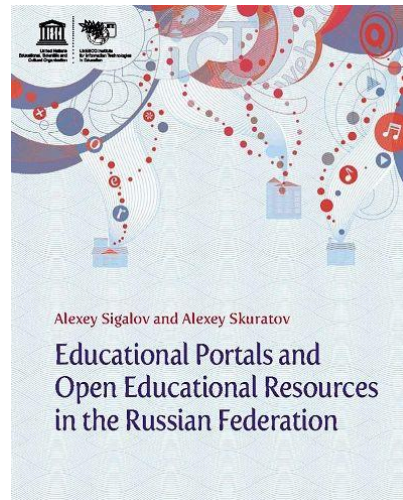
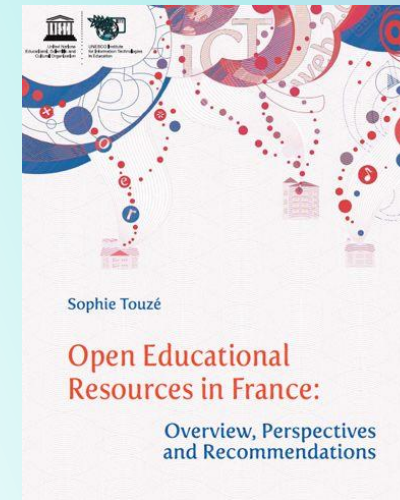
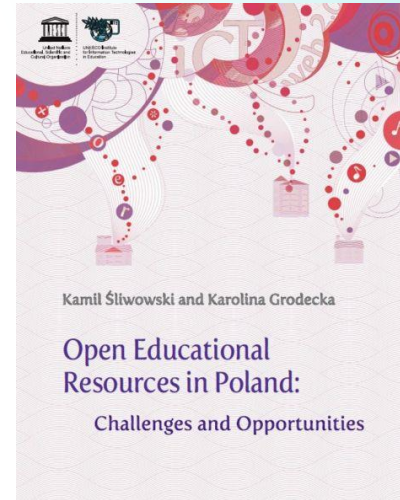
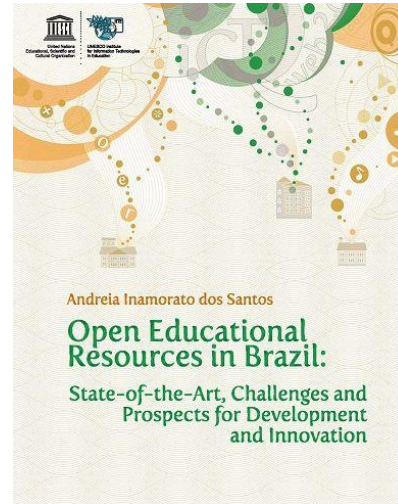
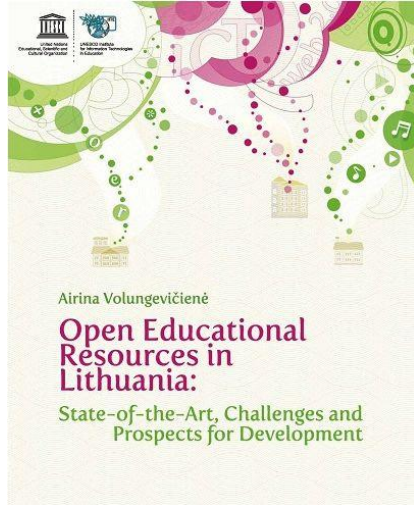
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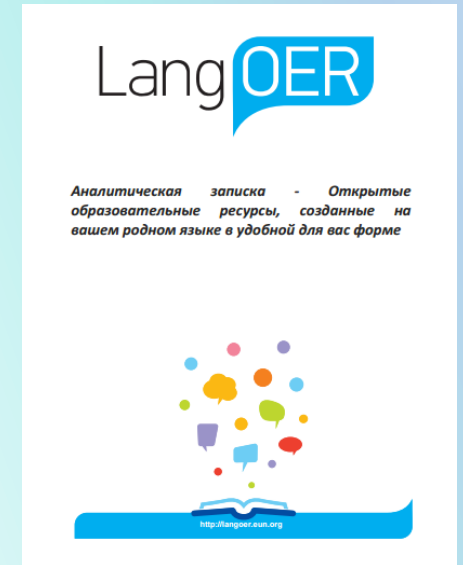
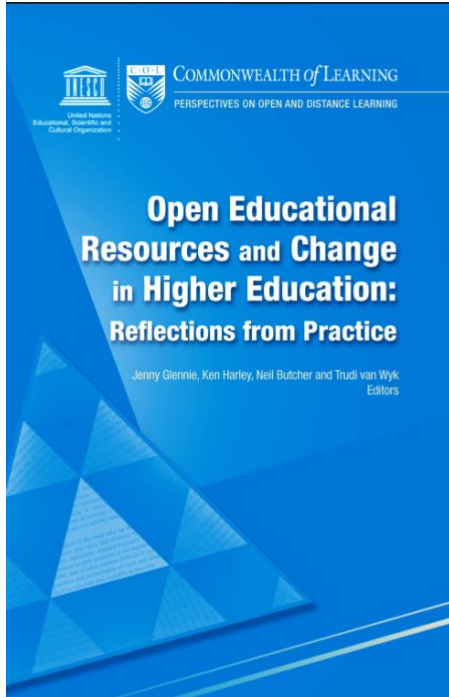


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# UNESCO IITE project “OER in non-English-speaking countries”



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# Foresight project “Access, Equity and Quality: Envisioning the Future of Higher Education in a Digital Age”

The project activities were based on solid base of data and consultation:

- A desk study of the literature about future and foresight reports pertinent to the relationship between higher education (HE) and information and communication technologies;
- An analysis of the trends that might have significant impact on the future of higher education;
- A series of high-level expert workshops organized to design the concept of the project, further elaborate the results of the desk study and trend scan and to determine, test and prove critical topics for the survey;
- An online survey designed for experts in ICT and higher education and high-level decision makers.



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# “Access, Equity and Quality: Envisioning the Future of Higher Education in a Digital Age”

The online survey launched at UNESCO IITE website was focused on the following topics:

- Future learning contexts for open content
- Future curricula
- The future of validation of learning outcomes
- The future role of teachers and faculty
- The changing role of HE institutions



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# New Forms of Content Presentation and Credentialing

## Unbundling of content

In 2003, the iTunes Store unbundled the CD. For the first time, consumers could purchase the songs they wanted rather than the bundle designated by the artist and label. Sales of digital singles soared but overall revenue fell 50 percent in a decade. Prior to this transformation, the business model for the music industry relied on bundling the music that consumers wanted (singles) with the music that they didn't want. That meant the music industry made money it wouldn't have made without the bundle.

- "Unbundling" content is the future of education: Anant Agarwal, CEO, edX

Bundling has been central to the higher education business model for centuries. Colleges and universities combine content and a wide range of products and services into a single package, for which they charge "tuition and fees."





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# New Forms of Content Presentation and Credentialing

## Digital badges and micro-credentials

The latest trend in HE is micro-credentialing, when students gain skill sets in a specific area and receive a credential. This trend is very promising for life-long learning.

Micro-credentials take the form of a digital certificate, which may be a document or image file, or other official evidence that the necessary work has been completed. In 2015, Udacity announced a new nanodegree (nanodegrees are 'curriculums designed to help you become job-ready') — the Android nanodegree in partnership with Google.

[http://bostonbeyond.org/wp-content/uploads/2016/06/Digital\\_Badging\\_Paper\\_NMEF.pdf](http://bostonbeyond.org/wp-content/uploads/2016/06/Digital_Badging_Paper_NMEF.pdf)



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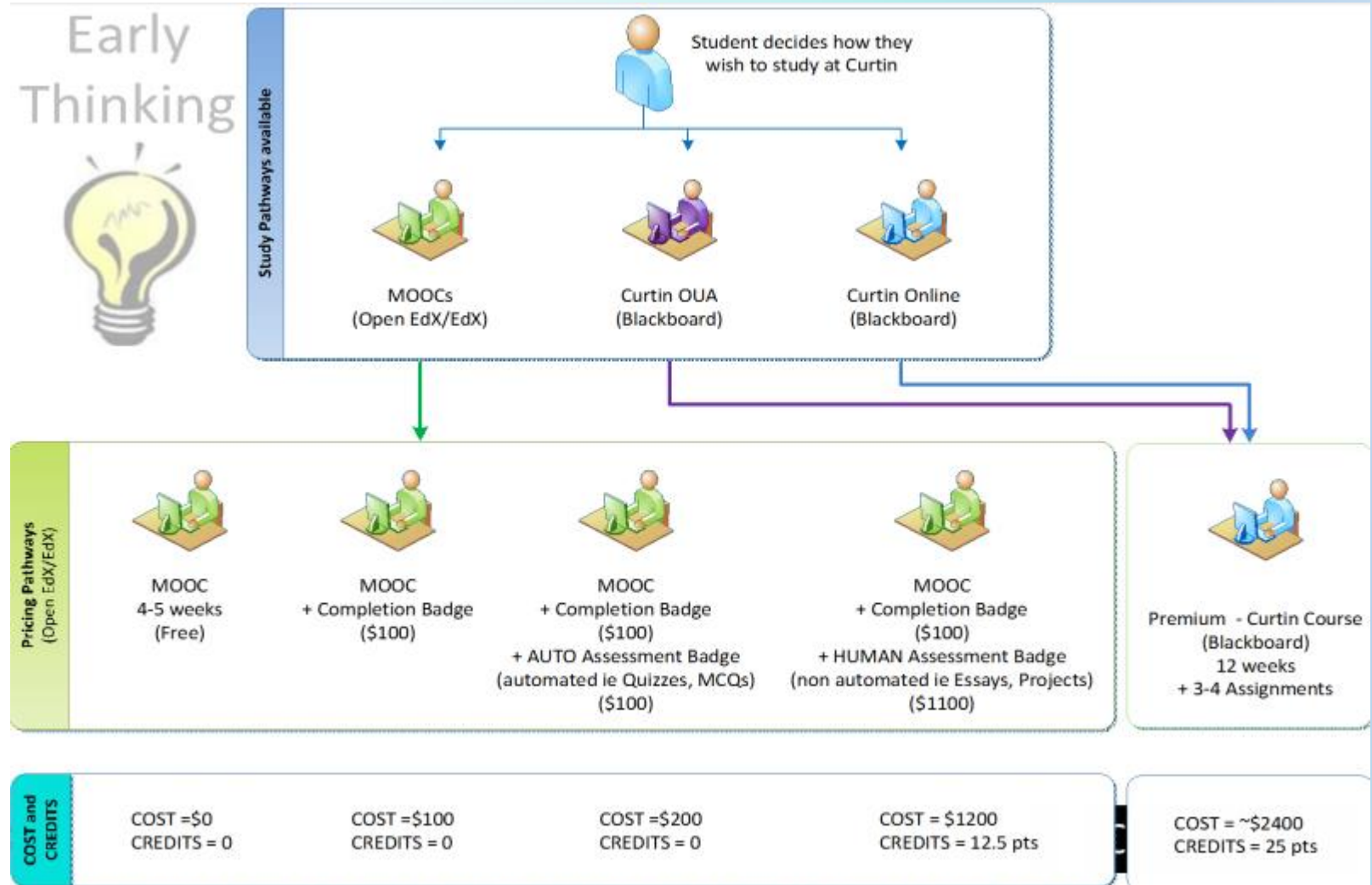


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# New Forms of Credentialling (Curtin University)

Jill Downie (2015).  
Foresight in ICT in Higher  
education. Presentation at  
the expert  
meeting “Access, Equity  
and Quality: Envisioning  
the Future of Higher  
Education in a Digital Age”  
(April, 2015), Paris)

[http://iite.unesco.org/files/news/639201/Jill\\_Downie\\_Australia.pdf](http://iite.unesco.org/files/news/639201/Jill_Downie_Australia.pdf)





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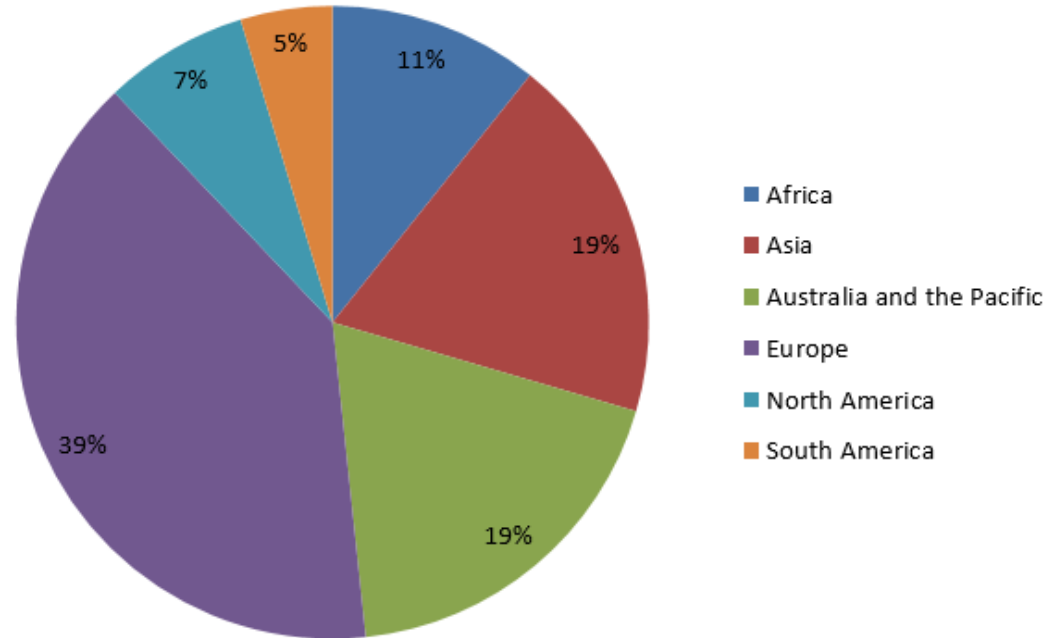


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# Foresight project “Access, Equity and Quality: Envisioning the Future of Higher Education in a Digital Age”

Online survey: 147 respondents from 54 countries: Europe (39%), Asia and the Pacific (19%), Africa (11%), North America (7%) and Latin America (5%)

**Distribution of respondents across continents**





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# “Access, Equity and Quality: Envisioning the Future of Higher Education in a Digital Age”

## Findings

- The need for curriculum reform is due to such changes as the availability and development of OER
- Varying readiness to acceptance, use and recognition of learning outcomes for OER and MOOCs
- The impact of these developments on the change of the roles of teachers and institutions and the urgent need to (re)train teachers
- The consequences of these developments for the way in which informal/ formal learning results are translated into credits and can be transferred and used
- Price and quality expectations vary for the production of resources and delivery of education services, including those for people with disabilities



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# Foresight project “Access, Equity and Quality: Envisioning the Future of Higher Education in a Digital Age”

## Findings

There is a consensus about the fact that future mission of higher education should be revised due to the transition from traditional societies to ICT driven knowledge society and knowledge-based society. The role of higher education institutions is to become knowledge centres for the whole society, open lifelong learning institutes. It is expected that the character of higher education will become less elitist and more open. As to the basic functions, it is suggested that there will be a change from content (knowledge) development/provision to content facilitation and skill development, which might include joint production of knowledge with engagement of students. Universities should fulfil their social contract and have to meet the requirements set by the society and by their students, rather than those set by themselves.



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# Foresight project “Access, Equity and Quality: Envisioning the Future of Higher Education in a Digital Age”

## Findings

As the experts believe that the open content will be an integral part of the teaching and learning processes within the next 15 years, the transfer and recognition, as well as microcredentialing of OER/MOOC-based results should become an important issue.

Other important issues are quality of resources and learning outcomes and assessment. Certification system should be revised and assessment procedures should be harmonized to support a wider use of open content.

The topics related to future curricula in the context of the above changes are also an object of concern for the experts, but their opinions about the necessity, scope and pace of their change vary considerably.



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# Foresight project “Access, Equity and Quality: Envisioning the Future of Higher Education in a Digital Age”

## Findings

The experts repeatedly emphasized the need to nourish personalised learning and learner-centered approaches with due account to the change in the needs of learners and changing labour market request for skills to prepare students for a new world of work where the jobs they were taught to do may not yet exist after their graduation.

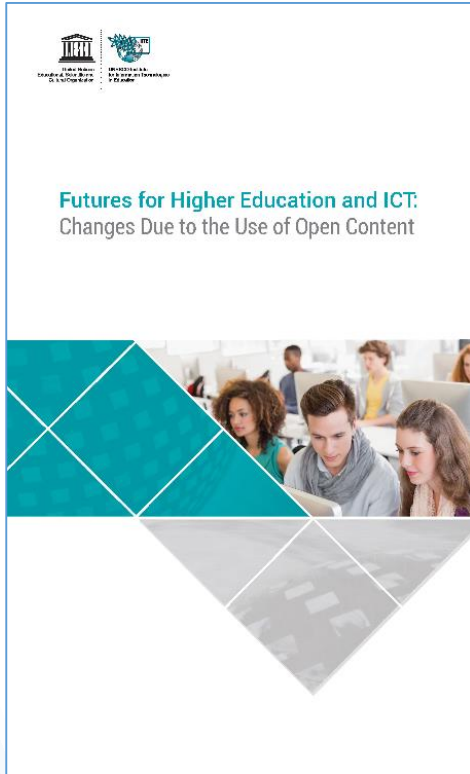
Expectations towards the future delivery and instruction mode are related to blended, project-based and interactive learning, including the use of social networks for educational purposes.



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# THANK YOU!

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