

Technologies for enhancing participation, quality and efficiency in education

**G-STIC 2018 Thematic Session Education
Brussels, 29th November 2018**

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Membership EADTU

- Open and distance teaching universities
- National associations for digital/distance education
- Frontrunner universities



European MOOC Consortium (EMC)

- Futurelearn (UK)
- France Université Numérique, FUN (FR)
- Miriadax (SP)
- OpenEdu (IT)
- OpenupEd (EADTU)
- ...



Sustainable
development
goals for
education

**4. Ensure inclusive and
equitable quality
education and promote
lifelong learning
opportunities for all by
2030.**

<https://en.unesco.org/sdgs>

Sustainable
development
goals for
education

4.1 Universal primary and secondary education

**4.3 Equal access for all
women and men to
technical/vocational and
higher education.**

<https://en.unesco.org/sdgs>

Sustainable
development
goals for
education

4.a effective learning environments

4.c the substantial
increase the supply of
qualified teachers and
educators.

<https://en.unesco.org/sdgs>

New modes of teaching and learning, based on digital technologies, have already shown promising developments, supporting education in all parts of the world.



GLOBAL NEEDS AND CHALLENGES

Mainstream higher education

- At all levels, there is a lack of supply in education and the growth of demand is dramatic. According to the UNESCO Institute of Statistics, by 2030 there will be an estimated increase of nearly 120 million students participating in higher education.
- **Experts agree that the only response on this challenge is to anticipate on it with developing new modes of education extending learning environments.**

<http://data.uis.unesco.org/>

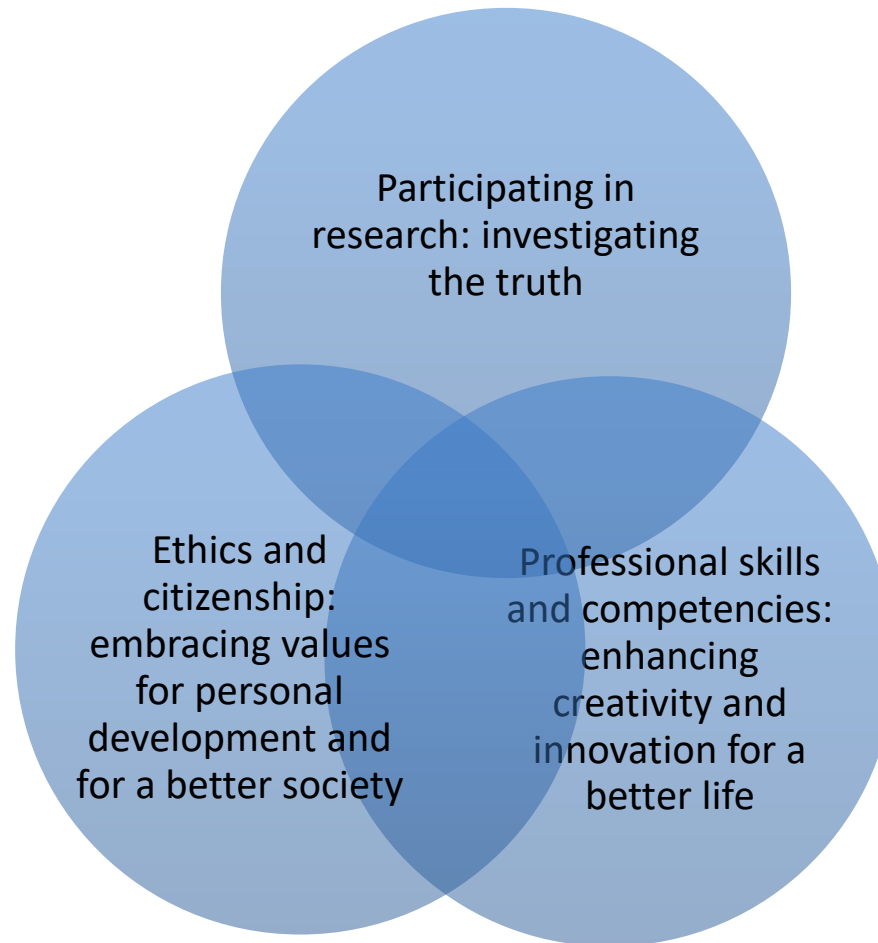
Non-traditional students

- Studyportals estimated that there will be a total of 4.3 million more students **over the age of 24** enrolled in the 15 high-income countries from 2015 to 2030 they examined. **This creates the imperative on higher education to consider creative ways of serving non-traditional students.**
- This is even more the case in developing countries in order to meet for example shortages in qualified teachers in primary and secondary education as well as in qualified people in other public and private sectors.

Choudaha, Rahul & Van Rest, Edwin (2018). Envisioning pathways to 2030: Megatrends shaping the future of global higher education and international student mobility. Studyportals.

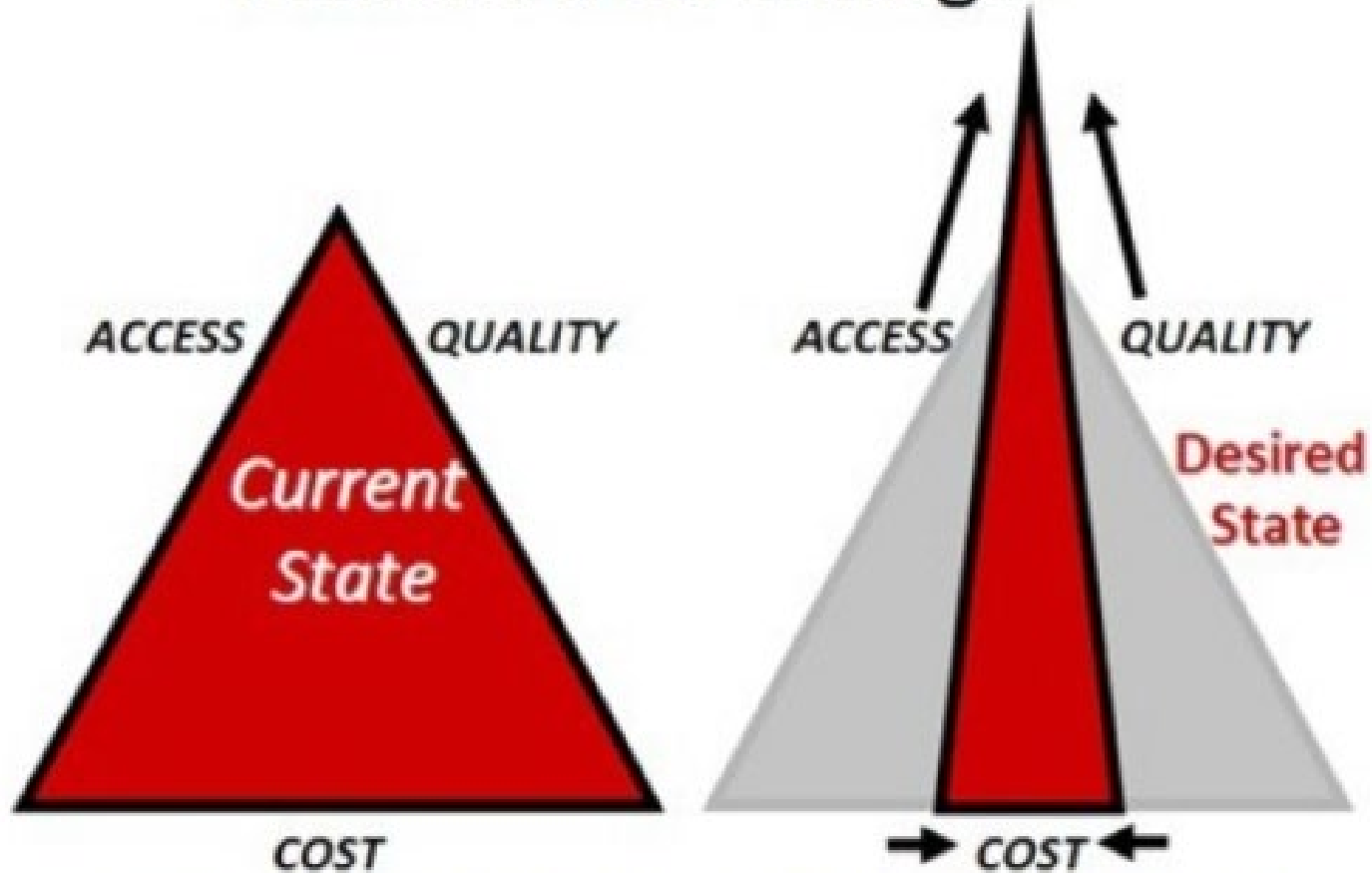
bit.ly/Megatrends2030

Philosophy of higher education



NEW MODES OF TEACHING AND LEARNING: OPPORTUNITIES

Daniel's Iron Triangle



Source: http://www.col.org/SiteCollectionDocuments/Daniel_0411AAQUShanghai.pdf

Good reasons to organise blended/online education

- You want to teach for deep level learning and in a personalized approach,, facing **large numbers of students** in your course
- You want to organize **collaborative learning** in learning communities
- You want to integrate **resources, international research and innovation** on the internet in your course, e.g. open educational resources, open access journals, virtual labs (enriched learning environments)
- You have many part-time students or students at work and you want to **flexibilize** your course in terms of place, time, pace of study
- You want to teach **multi-campus**, synchronously or asynchronously
- You want to deliver **international education** (online masters, blended (joint) doctorates) and networked education
- You want to organize **continuous education/continuous professional development** with a large scale impact
- You want your course to reach out to **massive numbers of students** in open education (MOOCs)



Assets of ICT based learning

- Personalized teaching and learning, putting the students with their ambitions and talents at the centre, with individual learning arrangements. Learning tools and learning analytics with personalized feedback make this possible.
- Small scale and intensive education, looking for a balance between education for qualifications, socialization and personal development. All this together is Bildung. Smaller scale is made possible by learning communities.
- Rich learning environments relating to research, innovation and professional employment, involving the student
- Openness to learners through flexible, inclusive structures and methods that take higher education to students when and where they need it. Education is not exclusive. More than 50 pct. of an age cohort follows a form of higher education
- Networked education and mobility, where students can learn across national, sectoral and institutional boundaries.

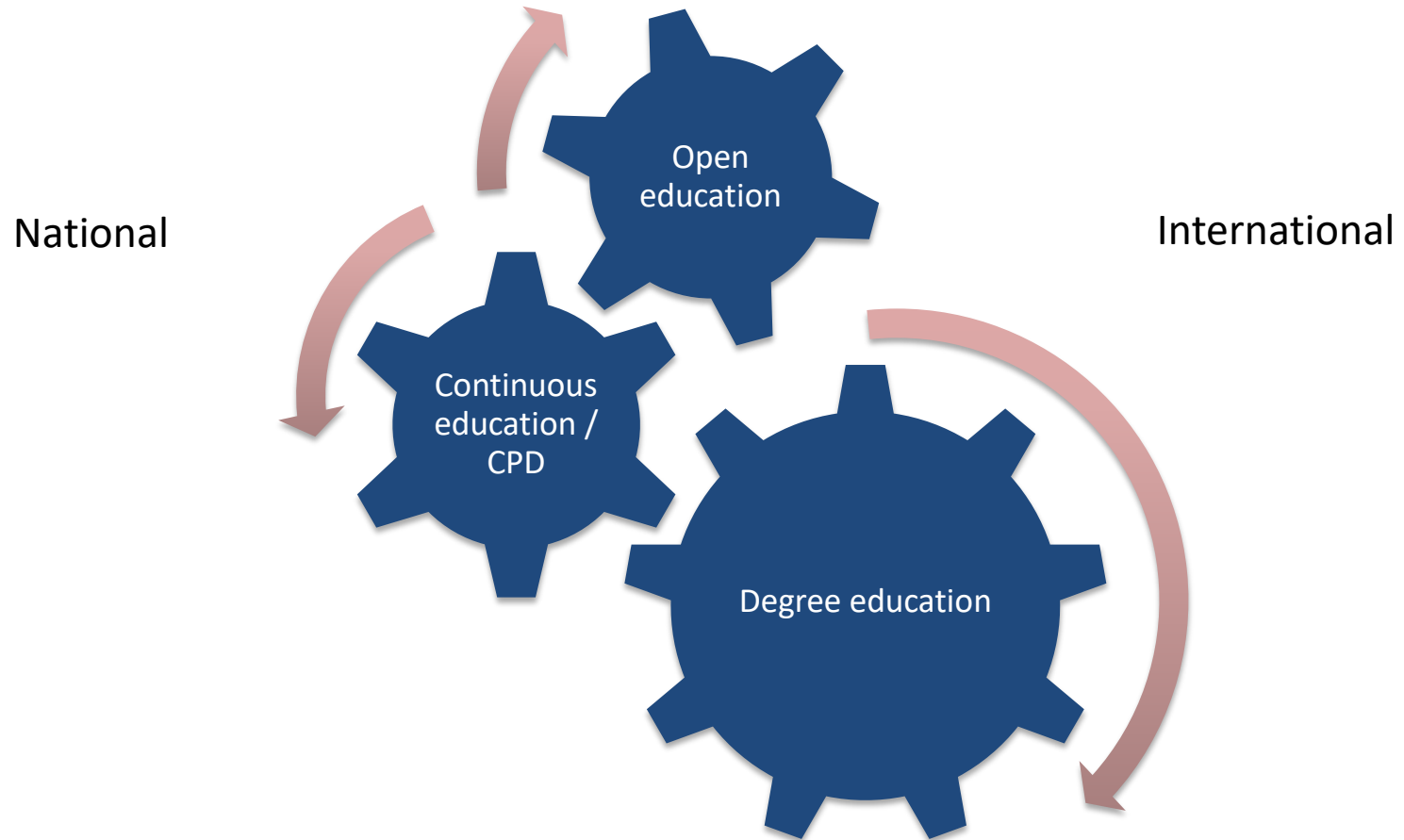


GLOBAL DEVELOPMENTS IN HIGHER EDUCATION: THE NEW PEDAGOGICAL LANDSCAPE

THE CHANGING PEDAGOGICAL LANDSCAPE

Henderikx, P., & Jansen, D. (2018).
The Changing Pedagogical Landscape:
in search of patterns in policies and
practices of new modes of teaching
and learning. Retrieved from
<https://tinyurl.com/CPLreport2018>

Three areas of provision emerging



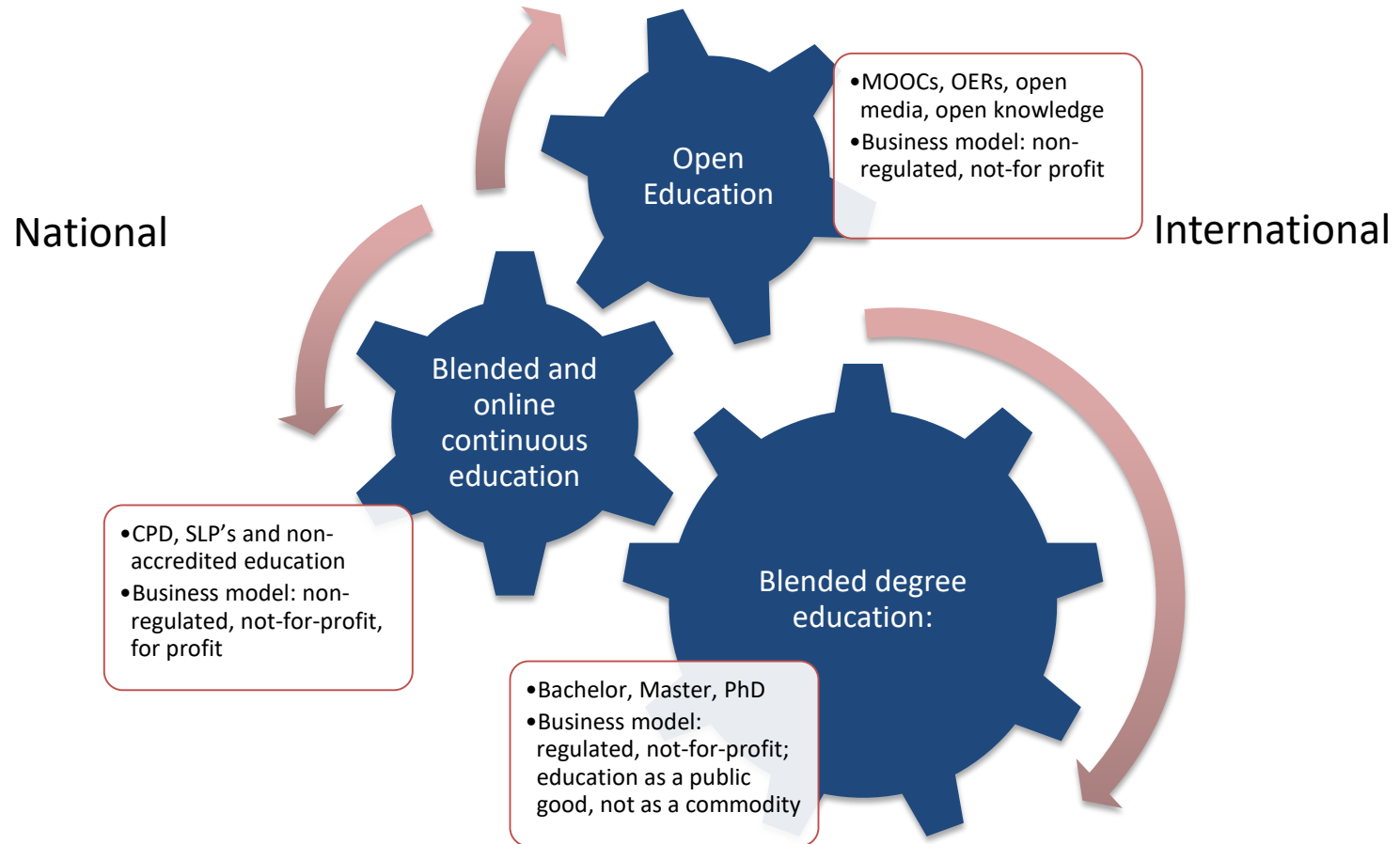
Three areas of provision

Degree education zone: backbone in the education system to develop complex academic and professional competences: bachelor, master, PhD – increasingly blended solutions to raise quality and to face growing student numbers. Online degree programmes provide flexibility and scale for international education and part-time students.

Continuous education and continuous professional development (CPD): knowledge transfer/valorisation of knowledge to support innovation in the public and private sector, based on research and development. Flexibility requires online or blended solutions, such as (virtual) seminars, corporate university initiatives, short learning programmes, master classes, expert schools, etc. It includes knowledge networks for professionals or business sectors.

Open education and knowledge sharing area: pushing knowledge online into the public domain, e.g. OERs, MOOCs, open media, open access/open innovation materials – preferably to be designed and arranged according to the needs of user groups/networks

The complex pedagogical landscape



From traditional classrooms to blended and online education

- In on campus education, face to face classrooms evolve to blended learning environments. Open universities teach basically online.
- In the areas of continuous education and open education, more online education is required in order to be more flexible

An educational portfolio with technology: c2025

On-campus AND off-campus

40,000 students, all with at least one fully online course

Off-campus

10,000 students
100 Masters
10s of PGRs

Open studies Extension

~17,000 learners enrolled

Open

100s MOOCs
1000s OERs
10,000,000 learners since 2012

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North-West University, South Africa

The screenshot shows the top navigation bar of the North-West University website. It features the NWU logo and name on the left, followed by a search bar. Below this is a horizontal menu with items: About Us, Study at NWU, Teaching and Learning, Research, Library, News & Media, Current Students, and Contact Us. A large blue banner below the menu reads "Open Distance Learning". Underneath the banner is a secondary navigation bar with links: Home, About, Programmes, Downloads, Support, Login, Staff, Centres, and Contact Us. At the bottom of this section, a black banner displays the text "Unit for Open Distance Learning - Educational".

EDUCATION PROGRAMMES

Study centres throughout South Africa and Namibia make it possible for in-service teachers to achieve the following qualifications:

- ACT : Advanced Certificate in Teaching
- ACFPT : Advanced Certificate in Foundation Phase Teaching
- ACIPT : Advanced Certificate in Intermediate Phase Teaching
- ACSPT : Advanced Certificate in Senior Phase Teaching
- ADE : Advanced Diploma in Education
- ADT : Advance Diploma in Teaching
- BEd : Foundation Phase
- BEd : Intermediate Phase
- BEd : Senior & FET Phase
- BEd : Honours
- Diploma : Grade R

PRODUCTS

OpenCourseWare

- Course Materials
- Free
- Big Exposure, Worldwide audience
- Both Bachelor and Master level
- No interaction with faculty
- No accredited certificate

MOOCs

- Learning Activities & Course Materials
- Free
- Enrolled students only, massive numbers
- Bachelor level
- Certificate of Completion

ProfEds

- Learning Activities & Course Materials
- Paid enrollment
- Enrolled students only, moderate numbers
- Course Certificate
- Continuous Education Units

Online Courses

- Learning Activities & Course Materials
- Paid enrollment
- Enrolled students only, limited numbers
- Accredited Course Certificate
- Full Master Degree

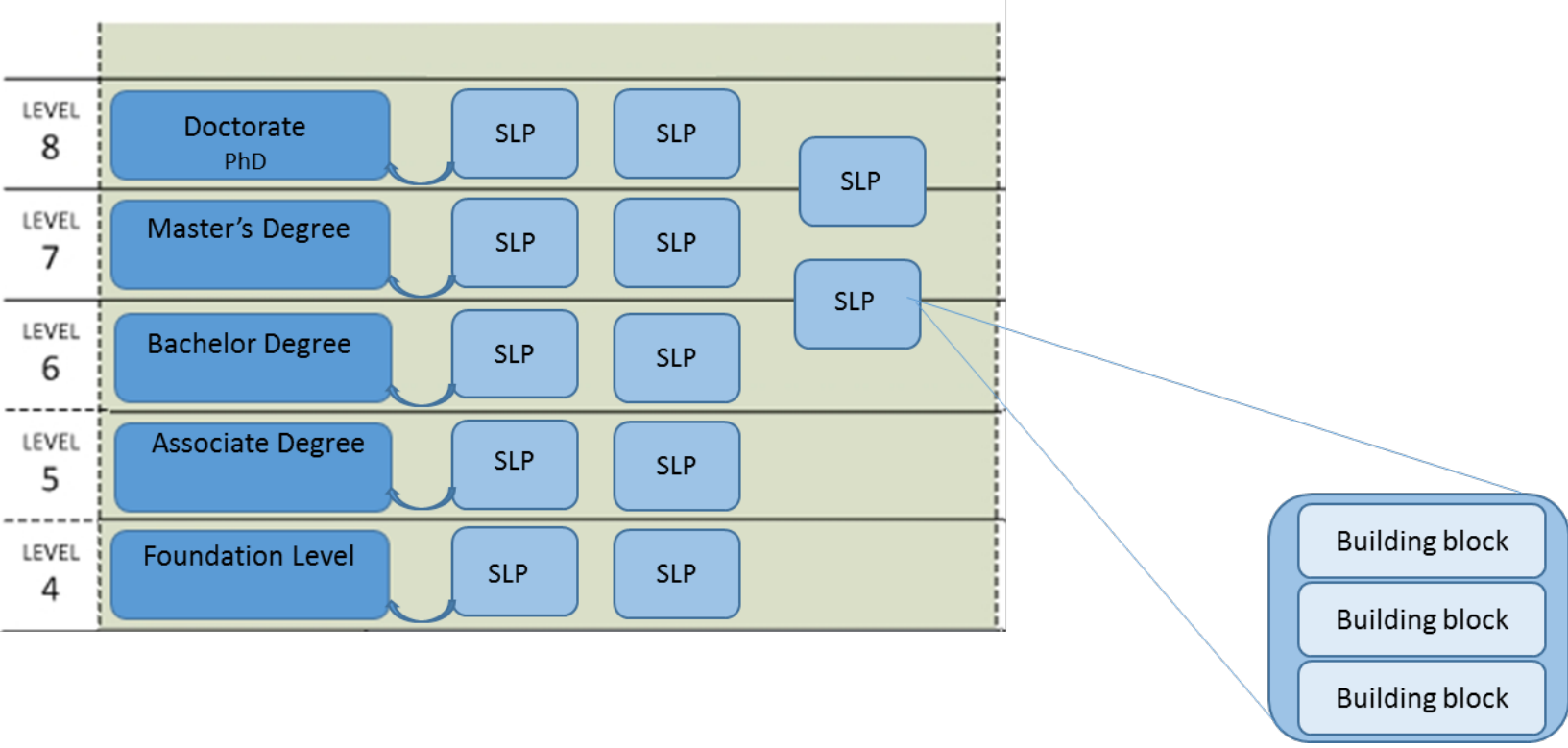
Blended Education

Short Learning Programmes

Short Learning Programmes (SLPs): certified CE/CPD programs, responding to the needs on the EU labour market, innovative knowledge and competence development for innovation, employability, career development and entrepreneurship. Sectoral and transversal. Hence, SLPs are entirely part of the Modernisation Agenda and the Digital Education Action Plan of the European Commission.

SLPs also respond to the demand and life conditions of large numbers of students aged 25+ for a short study period in order to obtain an award, a certificate or a diploma at diverse qualification levels (EQF from 4 to 8: foundation, bachelor, master and doctoral level).

Short learning programs e-SLP



OPEN EDUCATION (MOOCs)

MOOCs

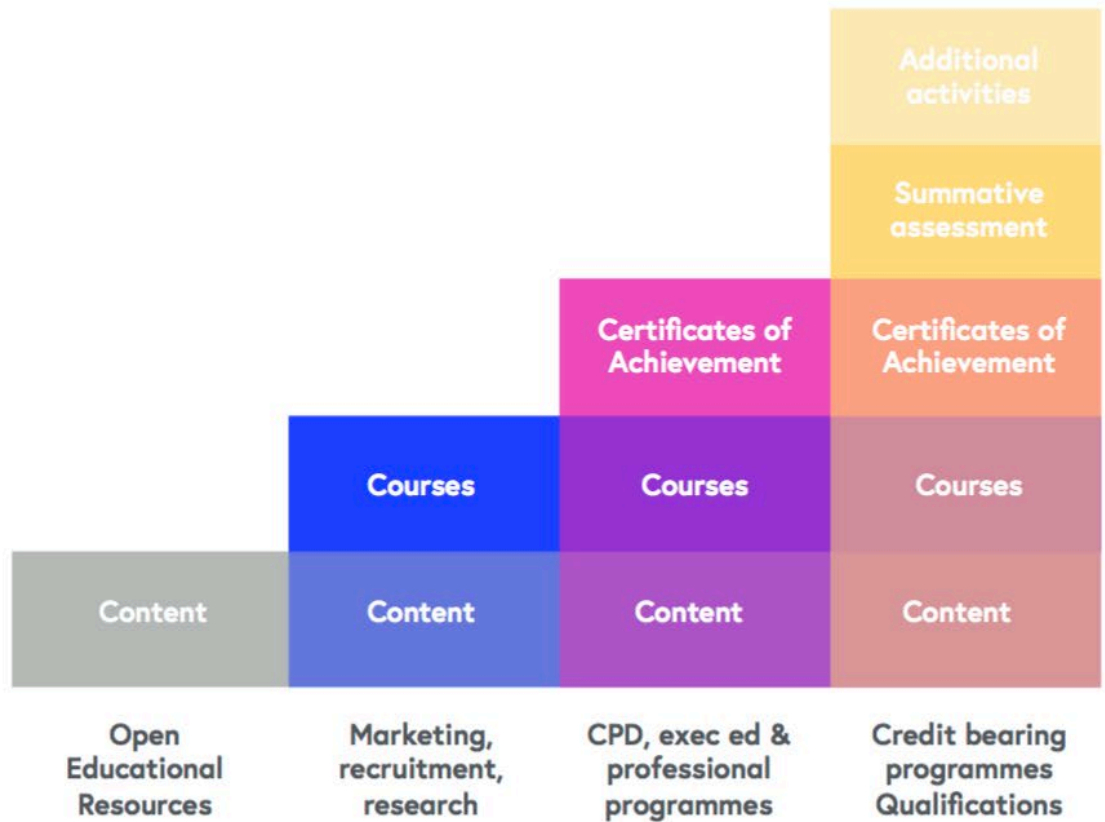
MOOCs are an educational spin-off product of research, innovation and education in universities, from which they are derived.

They contribute to the core mission of universities, sharing education with all citizens by open accessibility (**open education**), transferring and valorising innovative knowledge to enterprises (**continuing education, CPD**), and formally or informally integrating MOOCs as an enriching learning experience in blended degree education (**bachelor, master, doctorate**).



SUPPORT STRATEGIES THAT PROVIDE FLEXIBLE PROGRAMMES FOR MULTIPLE AUDIENCES

We can support a digital strategy based on re-using digital assets for multiple opportunities



A double challenge

Also in other parts of the world, these three areas will be developed at scale. However, the challenge is many times as large.

Not only the mainstream student population has to be served, but also the many millions over the age of 24 who didn't reach higher education levels so far and urgently need (short) qualifications, not only for themselves but also for the economy of their countries. Hence, this is a double challenge.



INTERNATIONAL COLLABORATION AND MOBILITY

By digital (blended and online) courses and curricula, international collaboration can become as well more scalable, better quality and cost-effective.



Digital international collaborations are relatively new for most universities, but patterns of good practice occur from which all can learn.

They embrace small initiatives like virtual seminars and projects, and furthermore networked or joint courses and programs and related blended or online mobility.



Scalable collaborations in partnerships

New types of partnerships are organised reaching out to hundred thousands of students, e.g in teacher education project for Sub-Sahara Africa (TESSA) and for India (TESS-India).



Transnational education



By Western universities, transnational open and distance education is provided. The historical example of this scheme is the University of London, with about 60.000 international students, mostly in partnership with universities in the world.

<https://london.ac.uk/>

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(International) education is a design science

This requires as well the further development of international course and curriculum design, making optimal use of digital technologies and **taking into account different cultural, social and economic contexts.**



OPEN AND DISTANCE UNIVERSITIES

In many countries in the world, open and distance teaching universities serve students who can't attend mainstream universities. Often, they have become mega-universities, many times they are organised as distance education schemes by traditional universities.



Good practices

- The European Virtual Seminar. See: <https://www.ou.nl/eCache/DEF/90/085.html>
- The KU Leuven-Stellenbosch Think Tank. <https://www.kuleuven.be/english/international/thinkthank/index>
- P.Henderikx & G. Ubachs, General models for collaborative curricula and mobility. In: G. Ubachs (Ed.), Netcu. Handbook for organizing networked curricula, 2012. See: http://www.networkedcurricula.eu/sites/default/files/handbook/NetCu_Handbook_Final.pdf
- The virtual exchange scheme. <https://www.tudelft.nl/studenten/onderwijs/virtual-exchange/>
- The living experience of climate change. <http://www.leche.open.ac.uk>
- The Global Health TropEd Master. <https://www.uib.no/en/cih/114159/virtual-mobility>
- Distance education at North-West University, teacher education. <http://distance.nwu.ac.za/Education>
- TESSA. <http://www.tessafrica.net/>
- TESS India. <http://www.tess-india.edu.in/>

Thank you!

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