



Open Learning for Smart Education:

Open educational policies,
strategies & access for all

Keynote @ IEEE EDUCON 2016 by
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Open Universiteit
welten-institute.org



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Selected Projects:

Competence and Skills Modelling



SIMBASE

Open Education and Research



Technology-Enhanced Learning at Large Scale

Quality Management and Evaluation

Selected Projects:



www.inclusive-education.net



www.ACT-now.de



www.aristotele-ip.eu



www.opendiscoveryspace.eu



www.ecompetence.eu



www.wacom-project.eu



www.simbase.co



www.mooc-quality.eu



www.agriculture-competences.eu



www.voa3r.eu



www.digifem.eu



www.eMundus-project.eu



www.locloud.eu



www.quality-development.eu



www.learning-standards.eu



www.inspiringscience.eu



Dr. Christian M. Stracke: Open Learning & Education, Innovations, Policies, Quality & Competences, Impact

Open University of the Netherlands



Global cooperation: ECNU & KNOU



Global initiative ICORE for OR & OE



Annual international LINQ Conference



eLC European Institute



Standardization Chair in ISO & CEN

Welten Institute
Research Centre for Learning, Teaching and Technology

Open Universiteit
welten-institute.org



Keynote Overview:

- 1. What is Open Education?**
- 2. Why Change in Education?**
- 3. What is Quality in Education?**
- 4. How to Improve Quality?**
- 5. How to Participate?**

Keynote Overview:

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What is Open Education?

ATTENTION!!!

**What is
Open Education?**

EXAMINATION!!!

Your answers:

**What is
Open Education?**

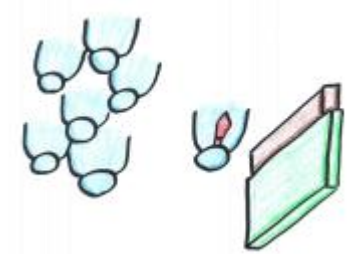


Source: <https://www.flickr.com/photos/opensourceway/>

**Open Education (OE):
Innovations for **changing**
& **opening up** education
to improve the **quality****



Waves of OE



1960s: Open Classrooms

1960s: Open Universities

1990s: Open Educational Resources

2000s: Open Online Collaboration

2010s: Open Educational Practices

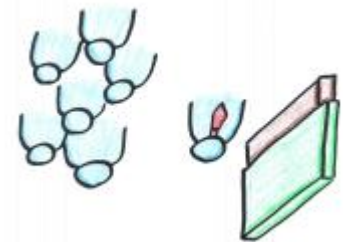
Now: Open Educational Environments



Open Education

1960s: Open Learning

- Progressive education
- Flipped methodologies
- Open Universities

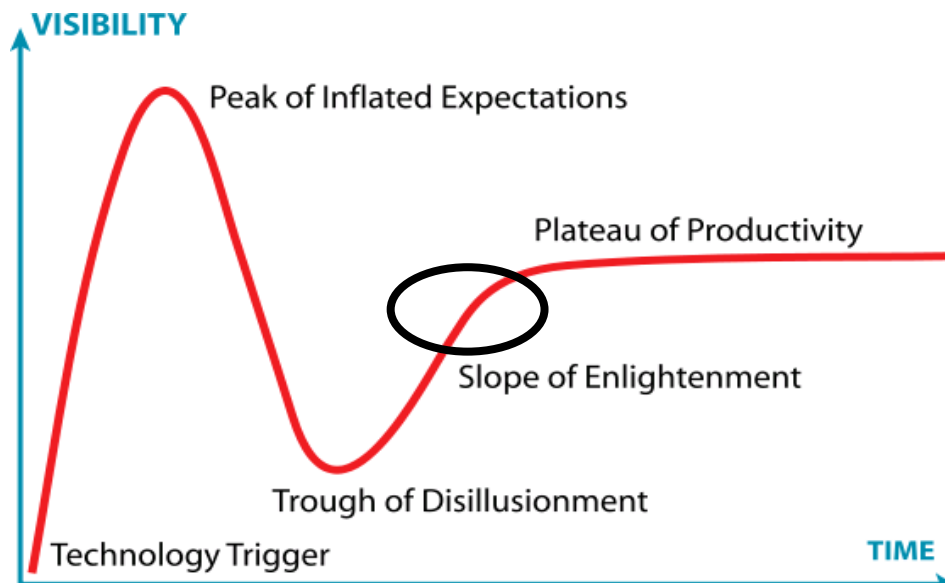


Open Education



1990s: Open Educational Resources

- **Open content**
- **OER portals**
- **E-Learning hype**



Open Education

2000s: Open Online Collaboration

- Open communities
- Web 2.0 & Social media
- MOOCs



Open Education

2010s: Open Educational Practices

- **Open classrooms**
- **Competence focus**
- **OER declaration**



United Nations
Educational, Scientific and
Cultural Organization

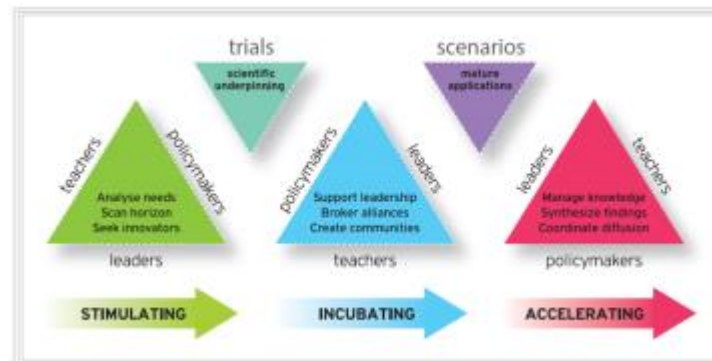


OPEN EDUCATIONAL RESOURCES

Back to Open Learning?

Now: Open Learning Environments

- Open methods
- Open policies
- Learner focus



Open Education

Do not to forget the long-term history:

1000 BCE - : Open Educational Practices

- **Open discourse (Confucius, Socrates)**

1800 CE - : Open Learning

- **Progressive theory (Pestalozzi, Humboldt)**
- **Competence building (Piaget, Vygotsky)**

Open Education (OE)

Macro:

Policies and Curricula

Strategic & organisational

Meso:

Organisation and Design

Micro:

Learner and Course

**Open Education (OE):
Innovations for **changing**
& **opening up** education
to improve the **quality****

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The Digital Age

Two core factors:

- 1. Globalisation &**
- 2. Worldwide Internet**

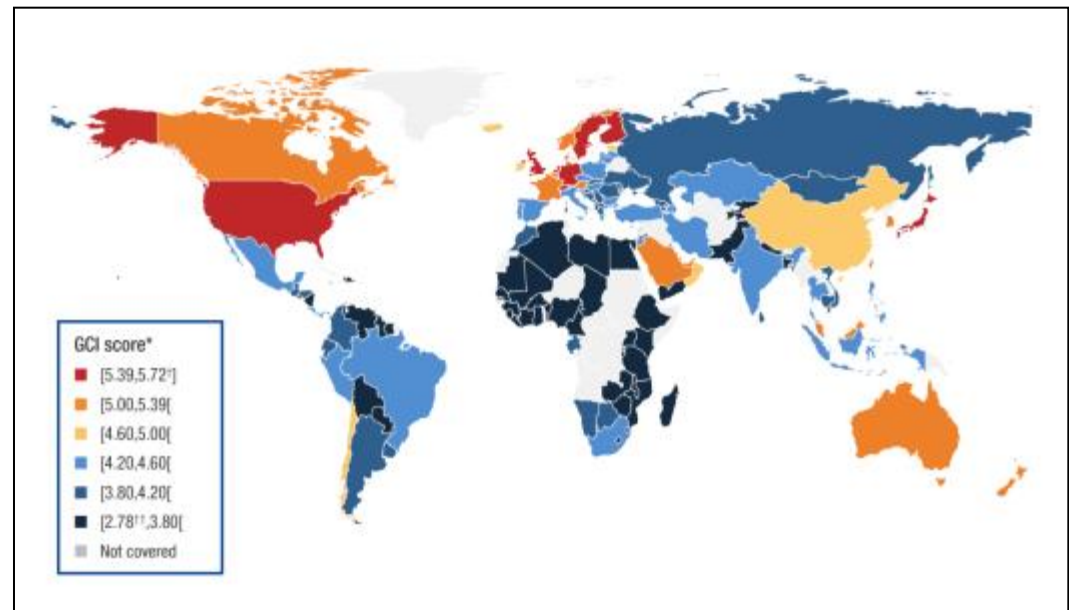


Internationalization

Global Competitions and societal changes

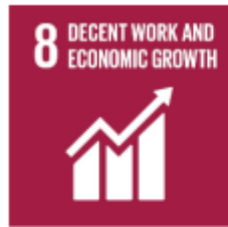
**Close the gaps
& open new
opportunities**

**Challenges:
Learn to Learn**





SUSTAINABLE DEVELOPMENT GOALS



SUSTAINABLE DEVELOPMENT GOALS

Click on goals to show targets and topics related to the Sustainable Development Goals as defined in *Transforming Our World - the 2030 Agenda for Sustainable Development*

- Topics A-Z -



EXPAND ALL GOALS



1 NO POVERTY
End poverty in all its forms everywhere



2 ZERO HUNGER
End hunger, achieve food security and improved nutrition and promote sustainable agriculture



3 GOOD HEALTH AND WELL-BEING
Ensure healthy lives and promote well-being for all at all ages



4 QUALITY EDUCATION
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



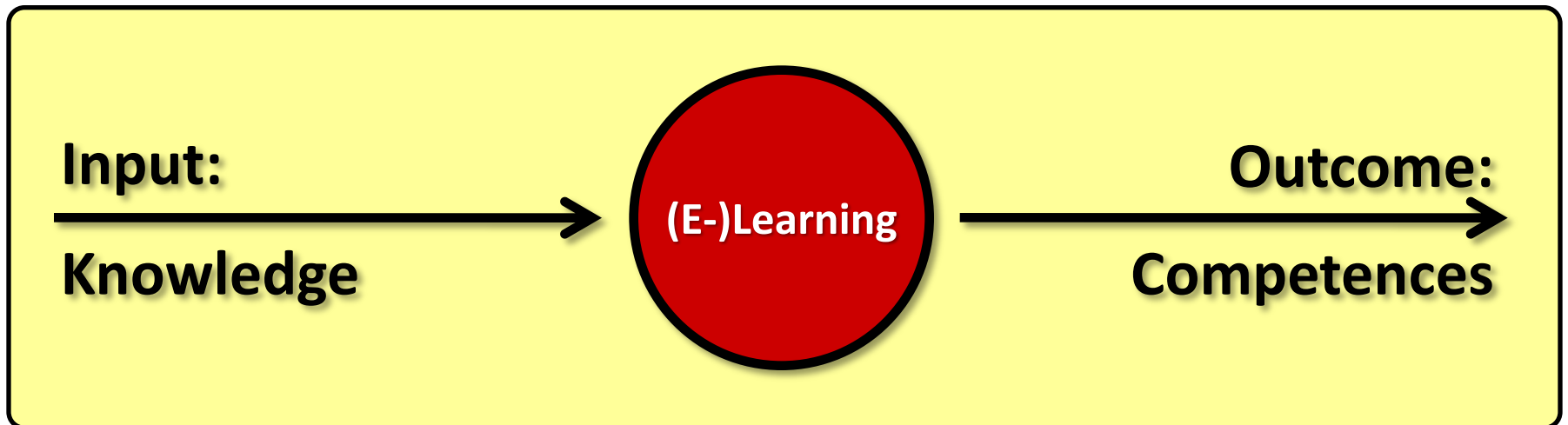
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Inclusive:	How to adapt?	OEP
Equitable:	How to offer?	OER
Quality:	How to improve?	IDEAL
For all:	How to deliver?	OA

Learning cha(lle)nges

Not knowledge but competences are required to meet future jobs and tasks still unknown today

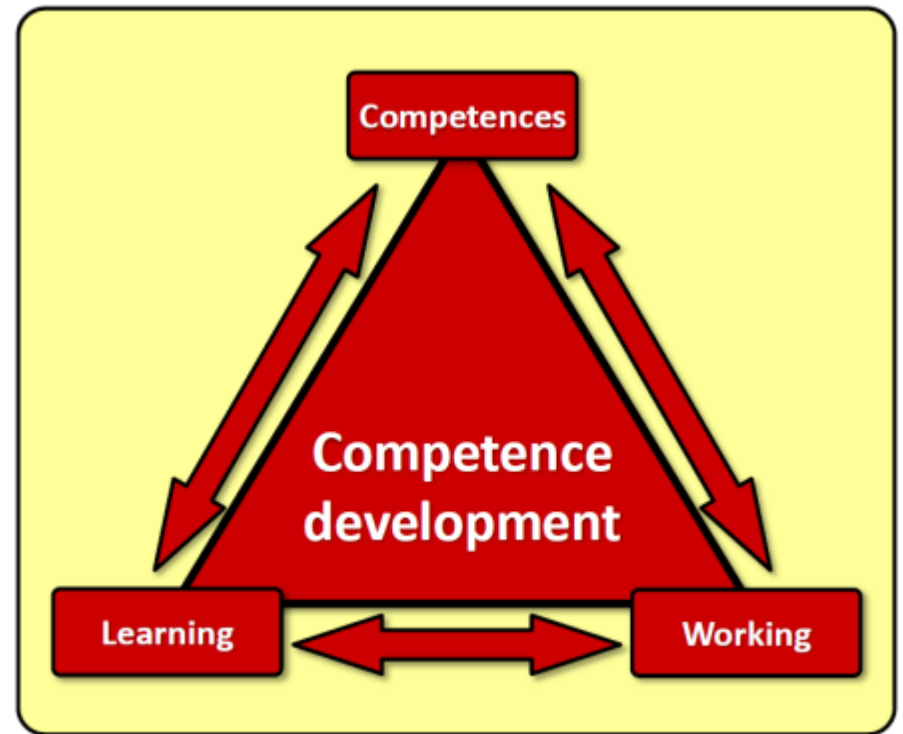
Change from input to outcome orientation



Solutions: Competences

Competence and skills development focuses the new challenge

Learning outcomes for defining learning opportunities and working places



Solutions: Innovations

Tailor-made learning designs to support the learning processes

**Before, during & after the crisis:
Online Communities
& Lifelong (E-)Learning**



Solutions: Quality

**Quality is key for
success and results
of learning processes**

**Learners needs,
Learning objectives,
Learning outcomes
and competences**



Change in Education!

**To improve
Quality
in Education!**

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**What is
Quality in
Education?**

**What is
Quality?**

**A simple
experiment ...**



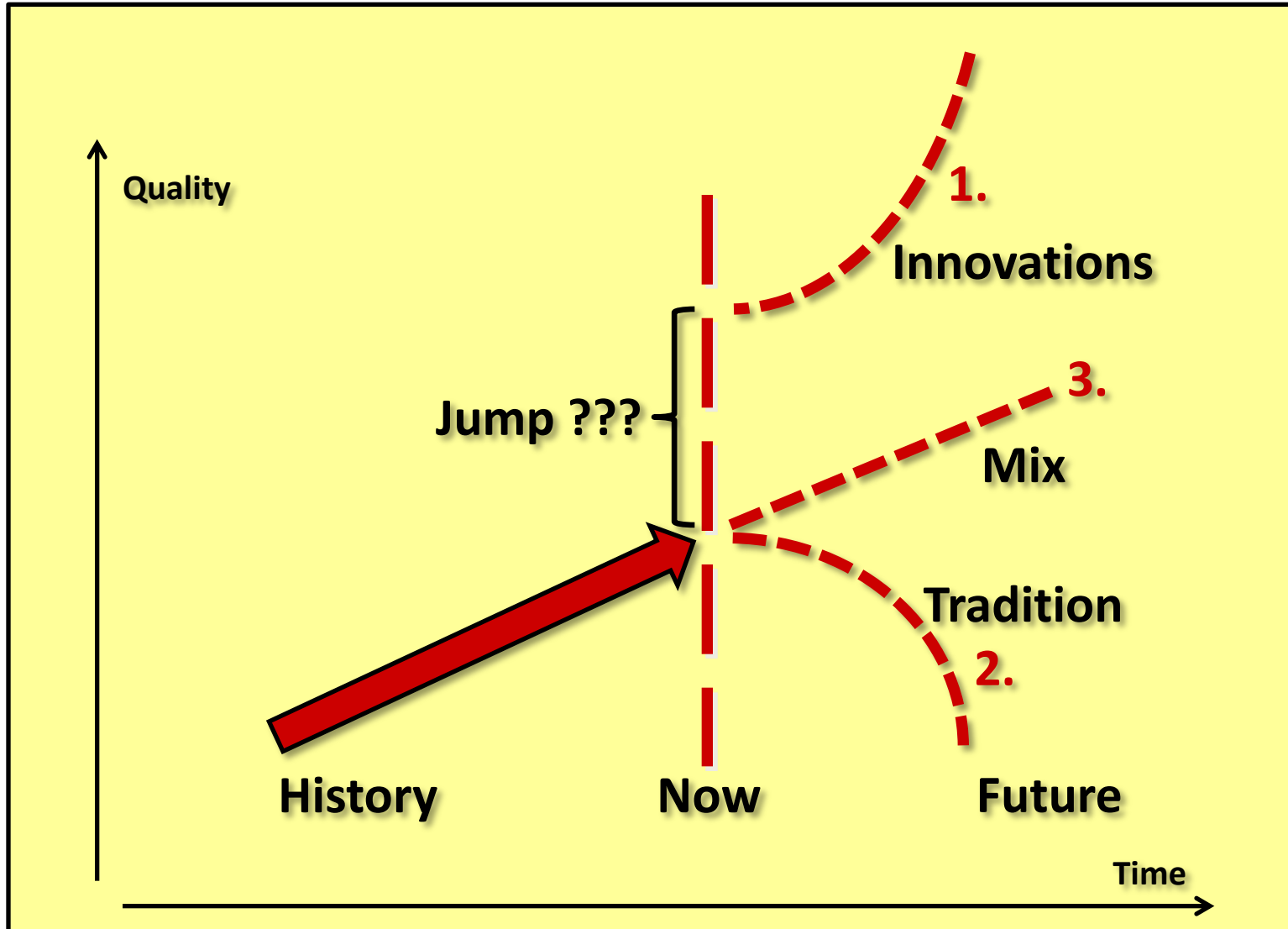
A simple experiment:

**Please imagine and define
the quality of your
favourite jelly bear**

Quality cannot be defined

**... except through adaptation
to your situation and context!**

Innovations vs. Quality



Innovations vs. Quality

- 1. Learning history should not and cannot be ignored.**
- 2. Learning innovations are mainly technology-driven.**
- 3. Learning is not completely changing.**



**What is
Quality?**

Quality

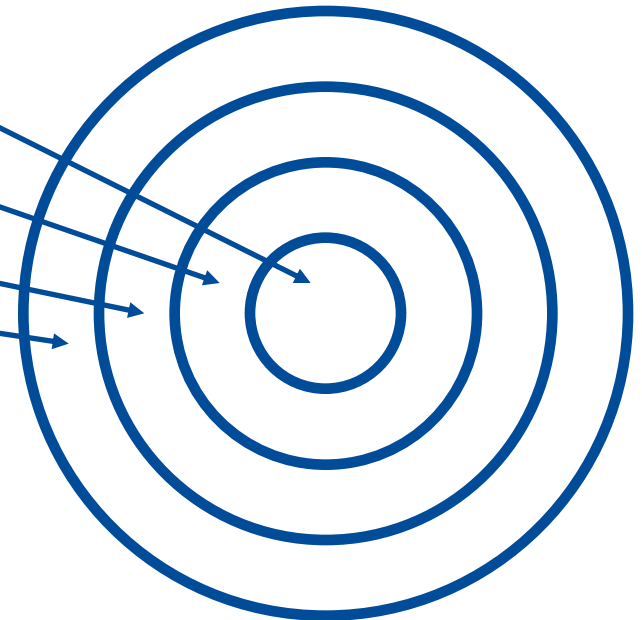
most important

**for Learning, Education
and Training!**

Quality Management

Range and coverage of quality approaches:

1. Failure reduction (QA "ex post")
2. Process accompanying QA
3. Process-oriented QM
4. Holistic QM (TQM/TQC)



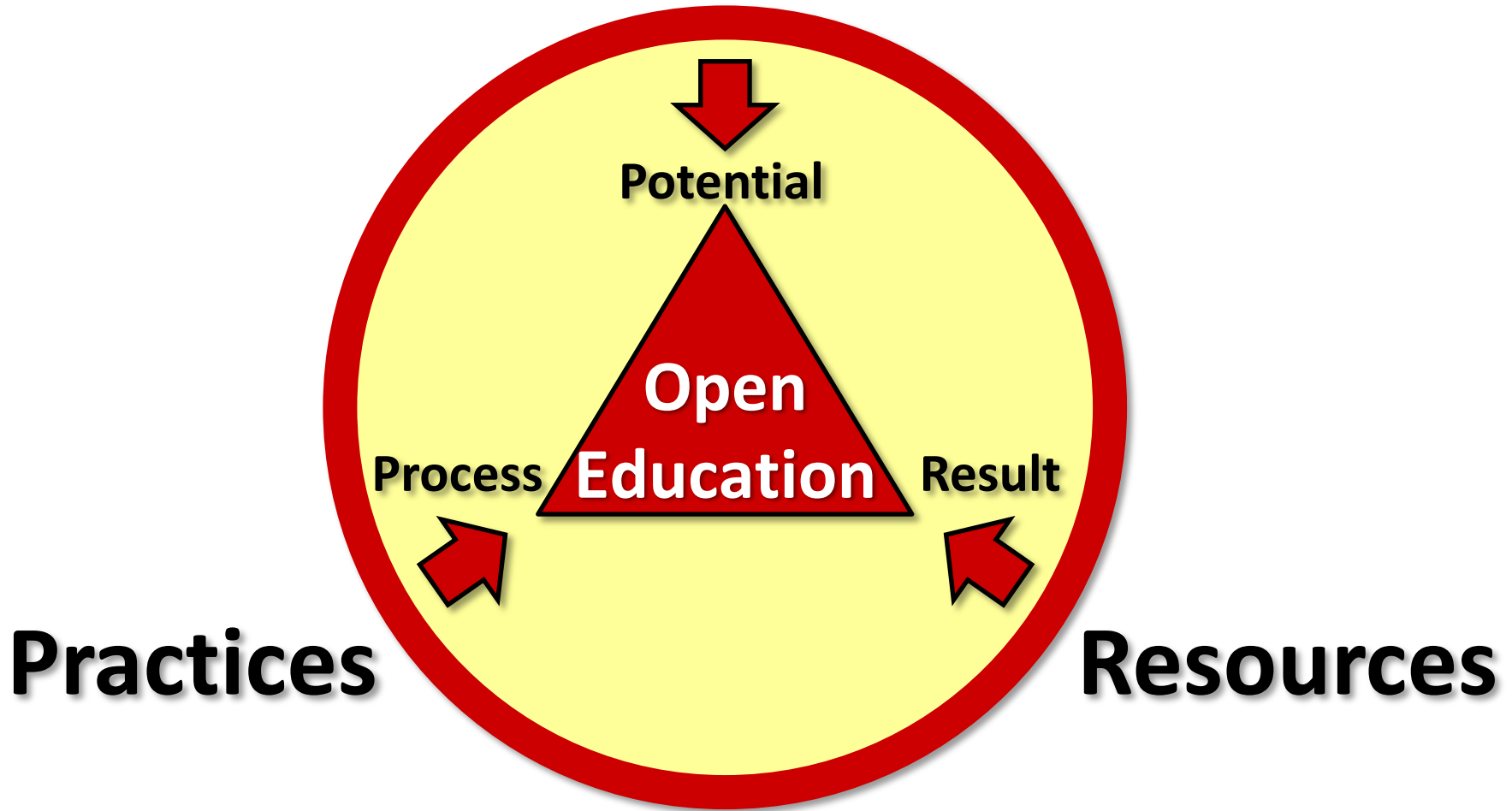
Please note: In Asia the broadest approach of "Quality Management" is normally and mainly called "Quality Assurance"!

Keep in mind while reading international literature to examine which kind of quality assurance is meant!



Source: Stracke, C.M., 2012 (adapted from Donabedian 1980)

Strategy



**Quality: Most important
... and "new pedagogy" is
important just the same!**



Quality in Education!

**Quality in
Smart Education!**

... with fun!

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Open Education (OE)

Macro:

Policies and Curricula

Strategic & organisational

Meso:

Organisation and Design

Micro:

Learner and Course

Quality by OE

Macro:

Movement & Strategies

Strategic & organisational

Meso:

Frameworks & Standards

Micro:

Competence & Community

OUNL Video



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Quality by Open Learning

Macro: Movement & Strategies

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Micro: Competences & Communities

Competences: LELLE

Learning-how-to-Learn

The key competence in 21st century

**Focus on inclusion of learning skills
in (not only Higher
Education) curricula**



Competences: PBL3.0

Problem-based Learning as method for key competences in 21st century

Focus on integrating learning analytics & semantics in problem-based learning

www.PBL3-project.eu



Communities: ODS & ISE

> 10,000 teachers and
> 3,000 schools in 28 countries

Home Project News Dissemination Events Community Consortium Contact

CONTENT PROVIDERS

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POLICY MAKERS

TEACHERS

Welcome to Open Discovery Space

OpenDiscoverySpace: Unique Resources just a click away!

www.opendiscoveryspace.eu

inspiring SCIENCE education

Search... Search

HOME ABOUT PARTNERS NEWS CONTACT

Connecting Formal & Informal Learning Settings

Welcome

In the framework of the Inspiring Science Education project the consolidation of good practice will be achieved by:

- Bringing into the classroom a unique collection of digital resources and tools that are based on real-world problems. The resources will involve students in finding their own problems, testing ideas (from small to big ideas in science), receiving feedback, and working collaboratively with other students or practitioners beyond the school classroom. Advanced eLearning tools will provide scaffolds that enhance learning, support thinking and problem solving, model activities and guide practice, represent data in different ways, and form part of a coherent and systemic educational approach.
- Giving students and teachers more opportunities to evaluate the quality of their own thinking and products for feedback, reflection, and revision.
- Giving students and teachers the opportunity to interact with working scientists, receive feedback from multiple sources.
- Building local and global communities where teachers, teacher trainers, education policy makers, parents, students, practicing scientists and other interested members of society are involved in order to ensure the learning environment beyond the school walls and extend opportunities for teachers' professional

www.inspiring-science.eu & portal.opendiscoveryspace.eu/ise

Quality by Open Learning

Macro: Movement & Strategies

Meso: Frameworks & Standards

Micro: Competences & Communities


Frameworks: MOOQ

**MOOQ for the quality of MOOCs:
“We will make MOOCs better”**

**Quality Reference Framework with
indicators for design & comparison**

www.MOOC-quality.eu



The background features several overlapping, wavy lines in various shades of green, creating a sense of movement and depth. The lines are most prominent on the left and right sides, framing the central text.

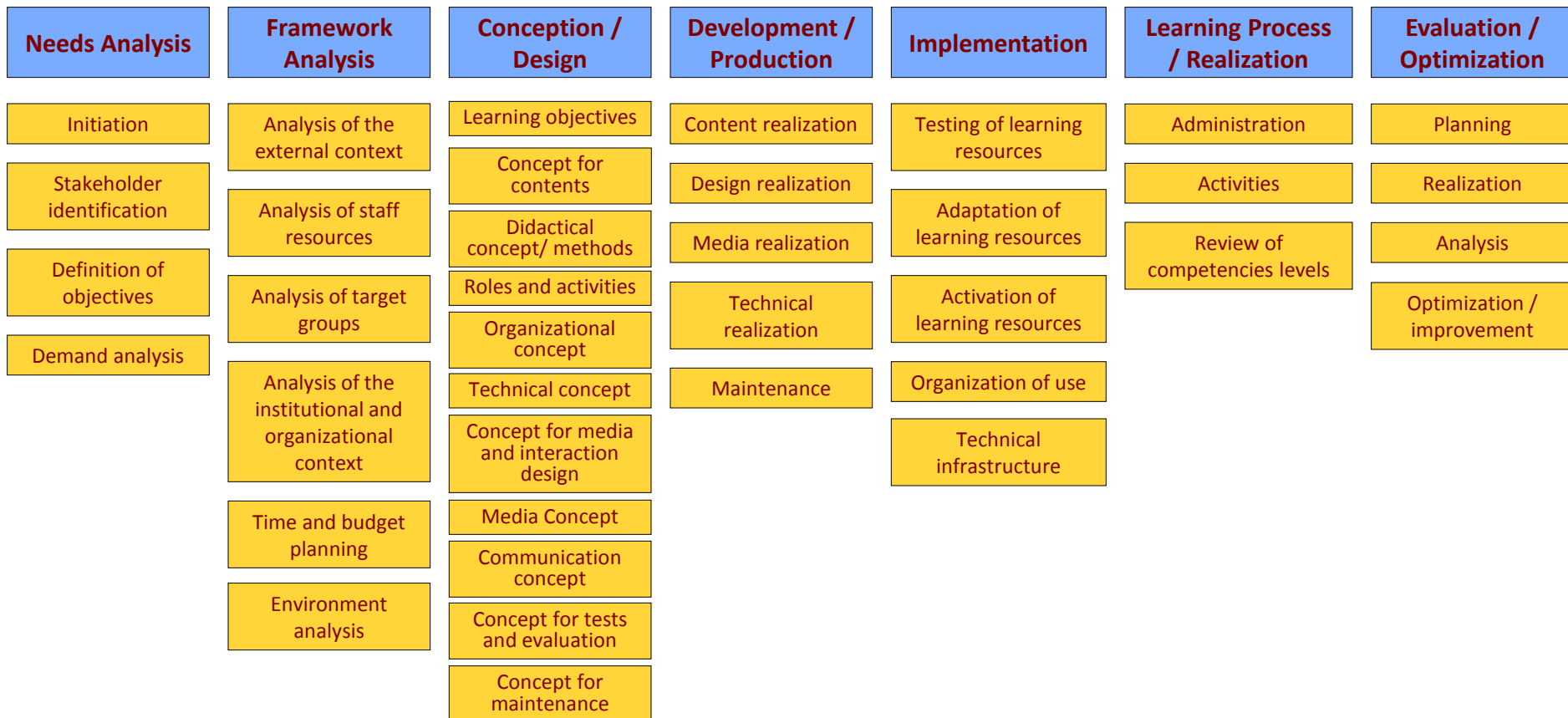
mooq

**WE WILL MAKE
MOOCs BETTER!**

www.mooc-quality.eu

Standard: ISO/IEC 19796-1

The Reference Process Model:



Standard: ISO/IEC 19796-1

Example of required adaptation:

Needs Analysis	Framework Analysis	Conception / Design	Development / Production	Implementation	Learning Process / Realization	Evaluation / Optimization
Initiation	Analysis of the external context	Learning objectives	Content realization	Testing of learning resources	Administration	Planning
Stakeholder identification	Analysis of staff resources	Concept for contents	Design realization	Adaptation of learning resources	Activities	Realization
Definition of objectives	Analysis of target groups	Didactical concept/ methods	Media realization	Activation of learning resources	Review of competencies levels	Analysis
Demand analysis	Analysis of the institutional and organizational context	Roles and activities	Technical realization	Organization of use		Optimization / improvement
	Time and budget planning	Organizational concept	Maintenance	Technical infrastructure		
	Environment analysis	Technical concept				
		Concept for media and interaction design				
		Media Concept				
		Communication concept				
		Concept for tests and evaluation				
		Concept for maintenance				

Quality by Open Learning

Macro: Movement & Strategies

Meso: Frameworks & Standards

Micro: Competences & Communities

International Policies

UNESCO: OER Declaration

<http://www.unesco.org/new/en/communication-and-information/access-to-knowledge/open-educational-resources/what-is-the-paris-oer-declaration>

European Commission: Opening Up Education

http://ec.europa.eu/education/policy/strategic-framework/education-technology_en.htm

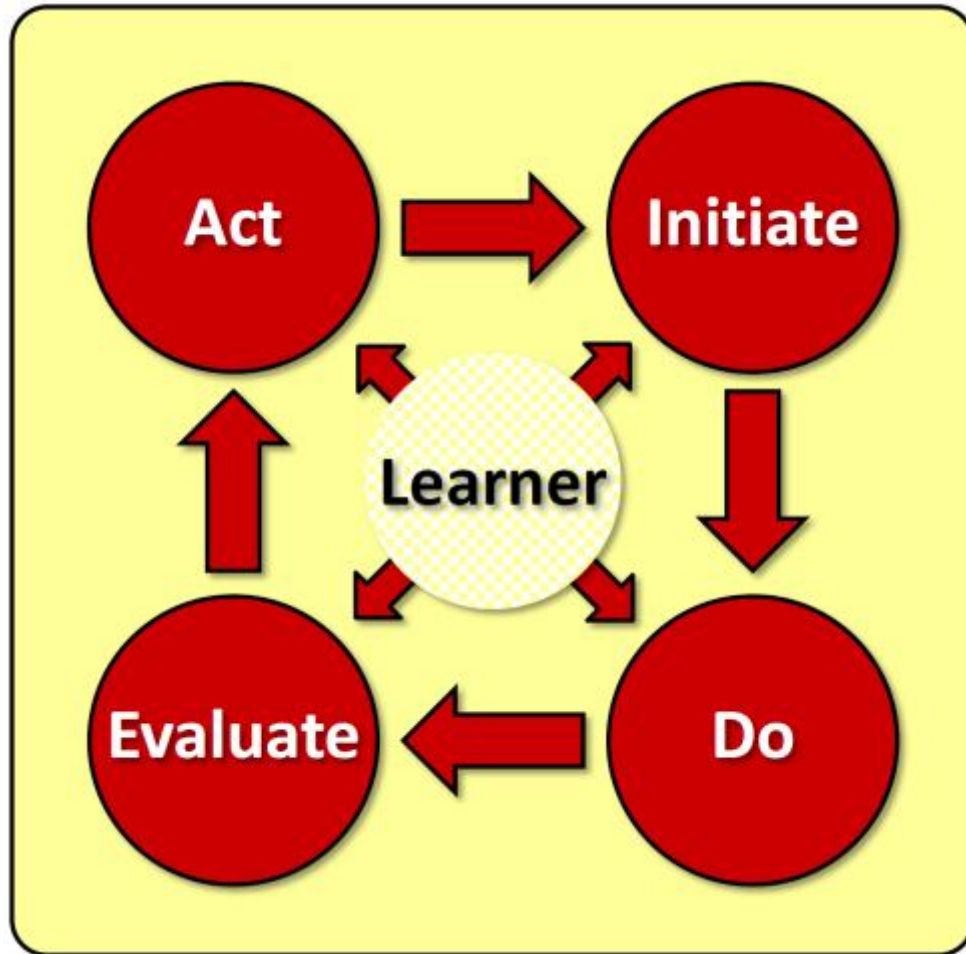
ICORE / OEC: Declaration of Crete

http://wiki.icore-online.org/index.php/ICORE_Declaration_of_Crete

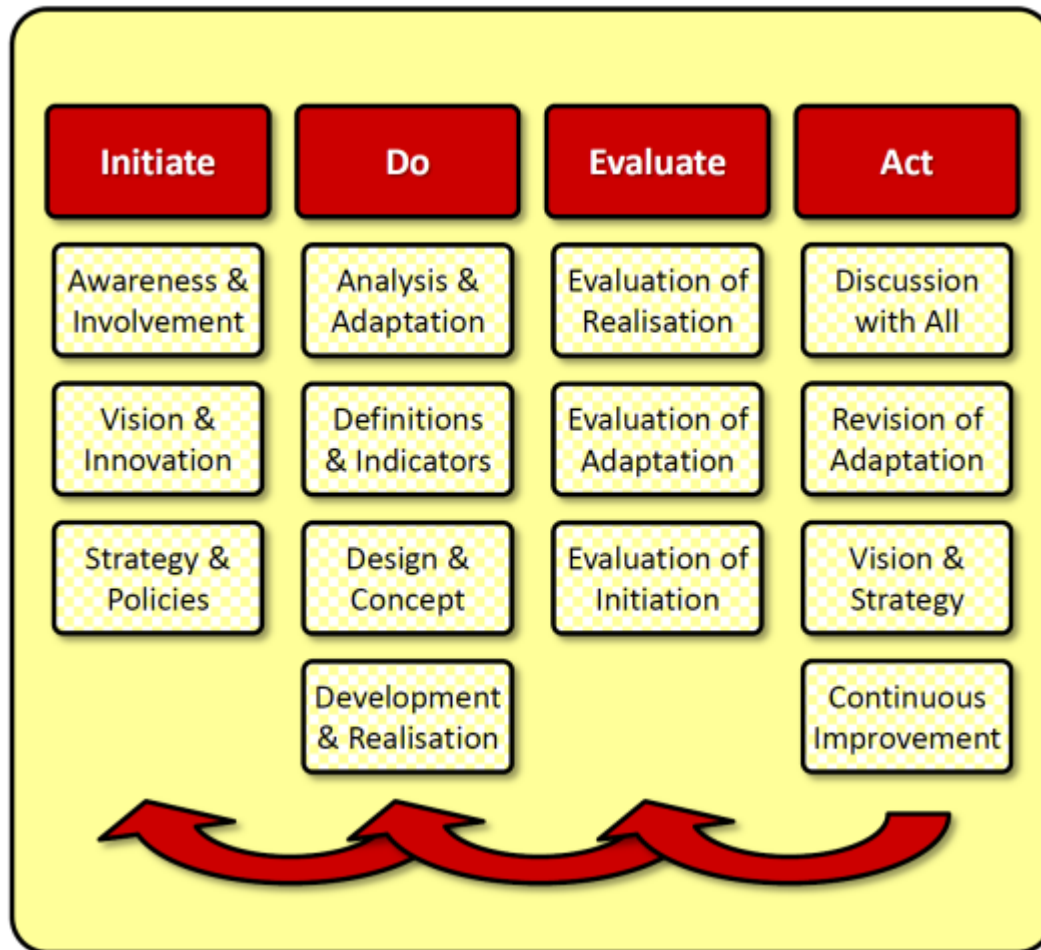
Republic of the Philippines: Open Distance Learning Act

<http://www.gov.ph/2014/12/09/republic-act-no-10650/>

Strategies: IDEAL



Strategies: IDEAL



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5. **How to Participate?**

LINQ

The leading European and
international Conference on
Learning INnovations & Quality

www.learning-innovations.eu

LINQ 2013



Our Vision:

**Open Learning
for best future
Learning Innovation
and Learning Quality!**



Please use: #LINQ2013
Follow: @LINQ_Conference



LINQ 2015



Our Vision:

Openness as Default!

First ICORE Workshops:

Follow up at ICDE 2015

in South Africa and at

OE Global 16 in Poland



Please use: #LINQ2015
Follow: @LINQ_Conference



ICORE

ICORE: International Community for Open Research and Open Education

Launched 15th May 2013 in Rome

Already more than 300 members within one year

First recognition by key stakeholders & EC:

Let us join forces and become ICORE member!

www.ICORE-online.org



ICORE & OEC

Common ICORE & OEC Workshop: Connecting Open Research & Education Declaration of Crete

**Re-establishment of Openness as Default!
Approved 9th May 2014 (ICORE & OCW together with CC)**

http://wiki.icore-online.org/index.php/ICORE_Declaration_of_Crete
www.ICORE-online.org

LINQ 2015



Our Vision:

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First ICORE Workshops:

Follow up at ICDE 2015

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Please use: #LINQ2015
Follow: @LINQ_Conference



ICORE

ICORE: The need for cooperation!

**Series of ICORE Workshops with key organisations
“How to re-establish Openness as default?”
First ICORE Workshops at ICDE Conference
in South Africa & at OE Global 2016 in Poland!
Towards a global joint initiative!**

www.ICORE-online.org



ATTENTION!!!

What is CC?

EXAMINATION!!!

ATTENTION!!!

What is Open Content?

EXAMINATION!!!

How can you participate?

Publish and share your content!

Re-use existing content!



Connect to colleagues!

Conclusions



Source: <https://www.flickr.com/photos/opensourceway/>

Towards Open Learning

**Let us Opening up Learning,
Education and Training for ALL!**





Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Open Education for inclusive & equitable quality education



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Inclusive:	How to adapt?	OEP
Equitable:	How to offer?	OER
Quality:	How to improve?	IDEAL
For all:	How to deliver?	OA

Open Education for high quality education and guarantee:

Inclusion – special needs

Equity – gender (majority?)

Equity – economic

Equity – society as target

**Innovation
and E-Learning
can help ...**

but are only means

Open Education is a **Vision
that is happening!**

Quality is most important
for your situation & learners

**Inclusion and equity for all
for our **Global Society!****

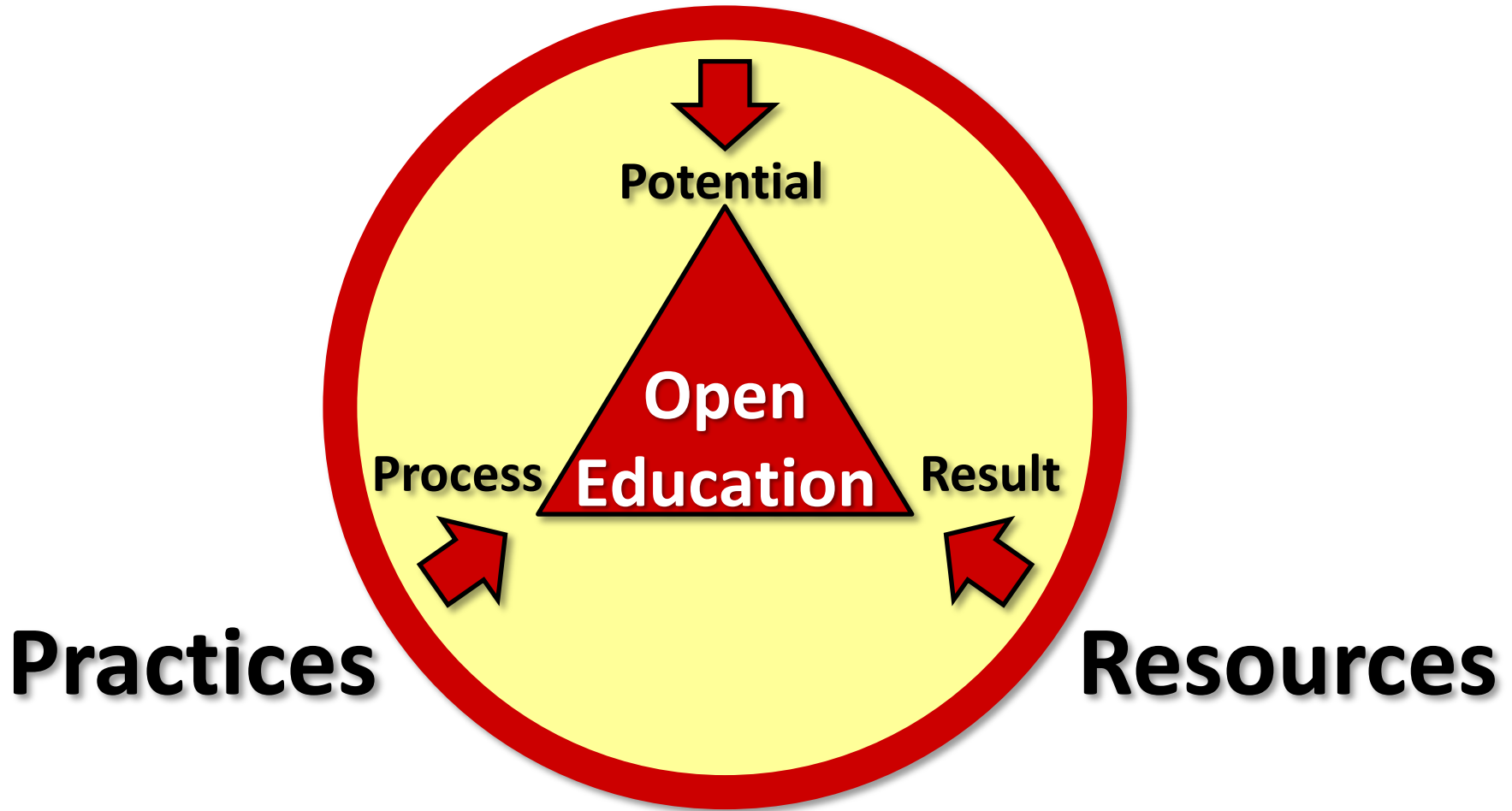
Change in Education!

Quality

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Further References

- Stracke, Christian M. (2014): "How Innovations and Competence Development support Quality in Lifelong Learning"; in: *The International Journal for Quality and Innovation* (INNOQUAL), Vol. 2 (3). p. 35-44.
- Stracke, Christian M. (2014): "Evaluation Framework EFI for Measuring the Impact of Learning, Education and Training"; in: 华东师范大学学报(自然科学版) *Journal of East China Normal University*. Vol. 2014 (2). Shanghai: ECNU. p. 1-12. [DOI: 10.3969/j. ISSN 1000-5641. 2012.02.012]
- Stracke, Christian M. (2014): "The Concept of Open Learning for Opening Up Education"; in: Stracke, Christian M. et al. (Ed.): *Changing the Trajectory: Quality for Opening up Education*. Berlin: Logos. p. 15-24.

All also online available at: <http://www.opening-up.education>

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Stracke, Christian M. (2013): "Open Learning: The Concept for Modernizing School Education and Lifelong Learning through the Combination of Learning Innovations and Quality"; in: Stracke, Christian M. (Ed.): *Learning Innovations and Quality: The Future of Digital Resources*, Berlin: Logos. p. 15-28.

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- Stracke, Christian M. (2011): "Competences and Skills in the Digital Age: Competence Development, Modelling, and Standards for Human Resources Development"; in: *Proceedings of the International Conference on Metadata and Semantics Research Conference (MTR 2011)*, Berlin/ Heidelberg: Springer. p. 34-46.
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All also online available at: <http://www.opening-up.education>

Towards Open Learning

**Let us Opening up Learning,
Education and Training for ALL!**



Let us cooperate!



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www.opening-up.education

Let us connect!



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Thank you! Questions?

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