



# *The impact of OER and MOOCs on ODL: an international perspective*

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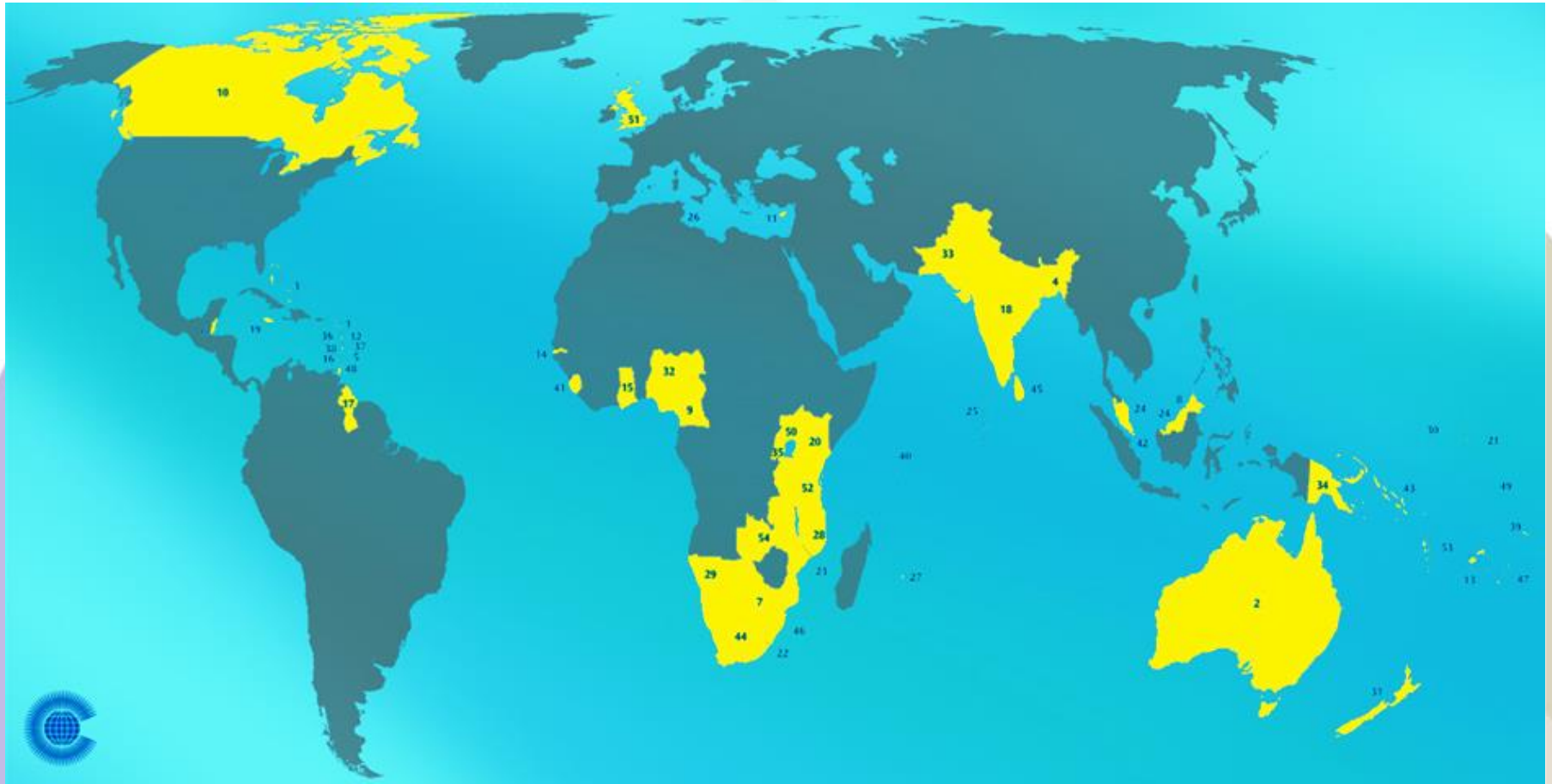
Copyright Commonwealth Secretariat

# *Commonwealth Heads of Government Meeting*

Vancouver, 1987



# The Commonwealth



The Commonwealth comprises *53 developed and developing* nations around the world.



# The Commonwealth of Learning

*What is it for?*



To help Commonwealth governments and institutions use various technologies to improve and expand education, and learning in support of development.



# *Plan*

The Global Context

The Fifth Decade of ODL

Rise of OER

The MOOC Phenomenon

Implications for ODL





*The Global  
Context*

# *The youth 'bulge'*

- In 2013, 74.5 million young people aged 5–24 were unemployed



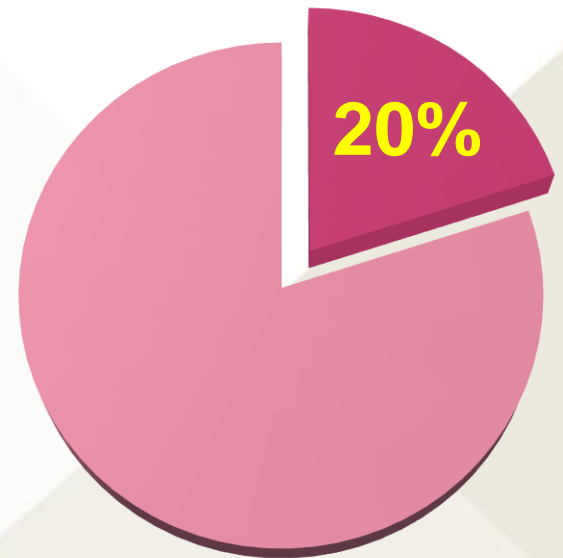
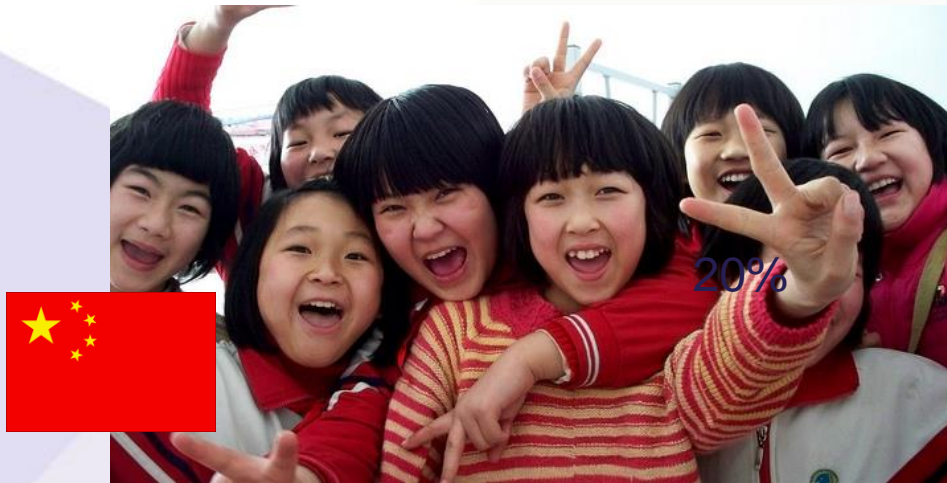
*1.2 billion youth*

*17% of the worlds  
population*

*74.5 million  
unemployed youth*

# *Population of Youth in China*

278.6 million young people



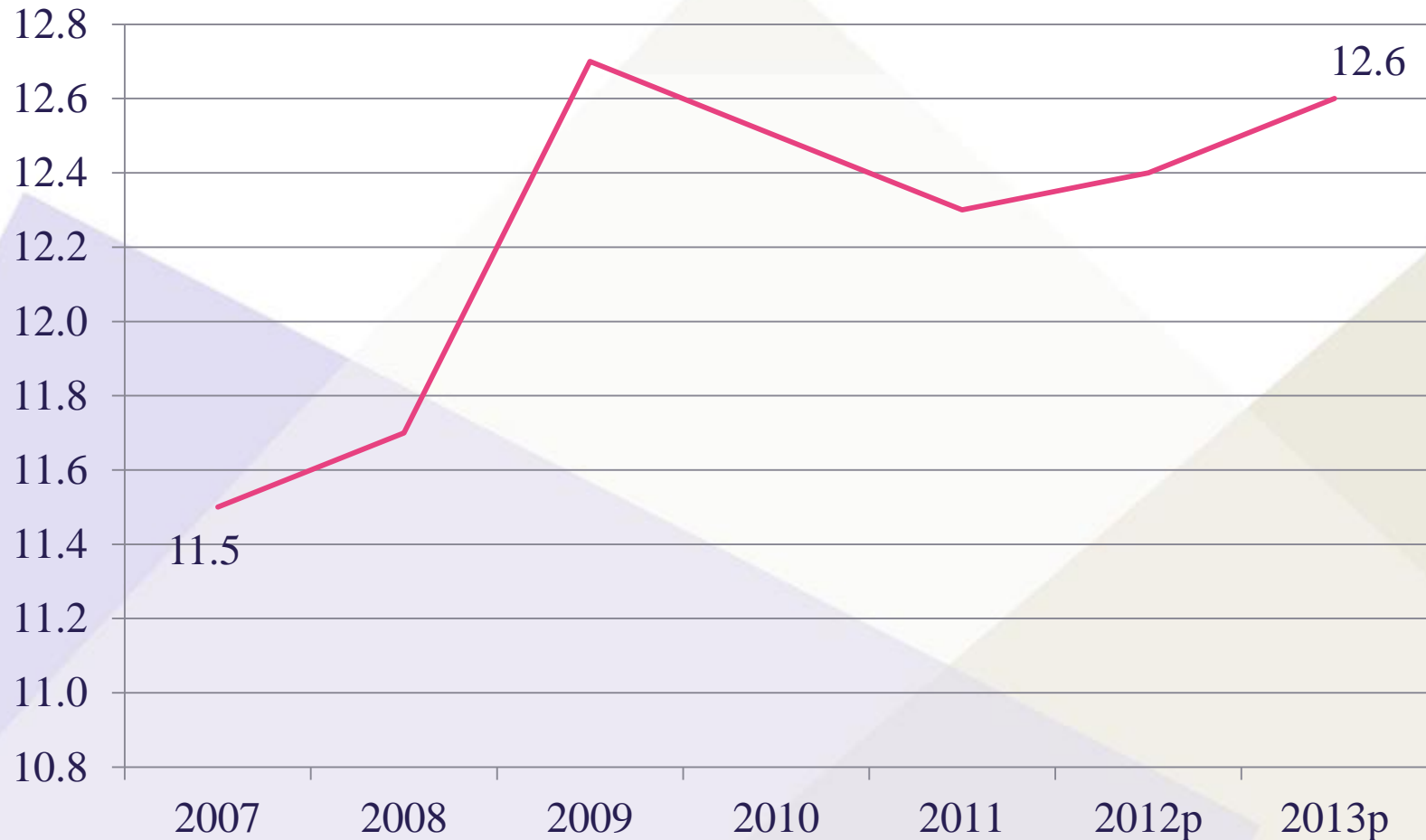
China has which is equivalent to of its population in 2014.

Source: UNFPA report: *State of World Population 2014*





# Global Youth Unemployment Rate

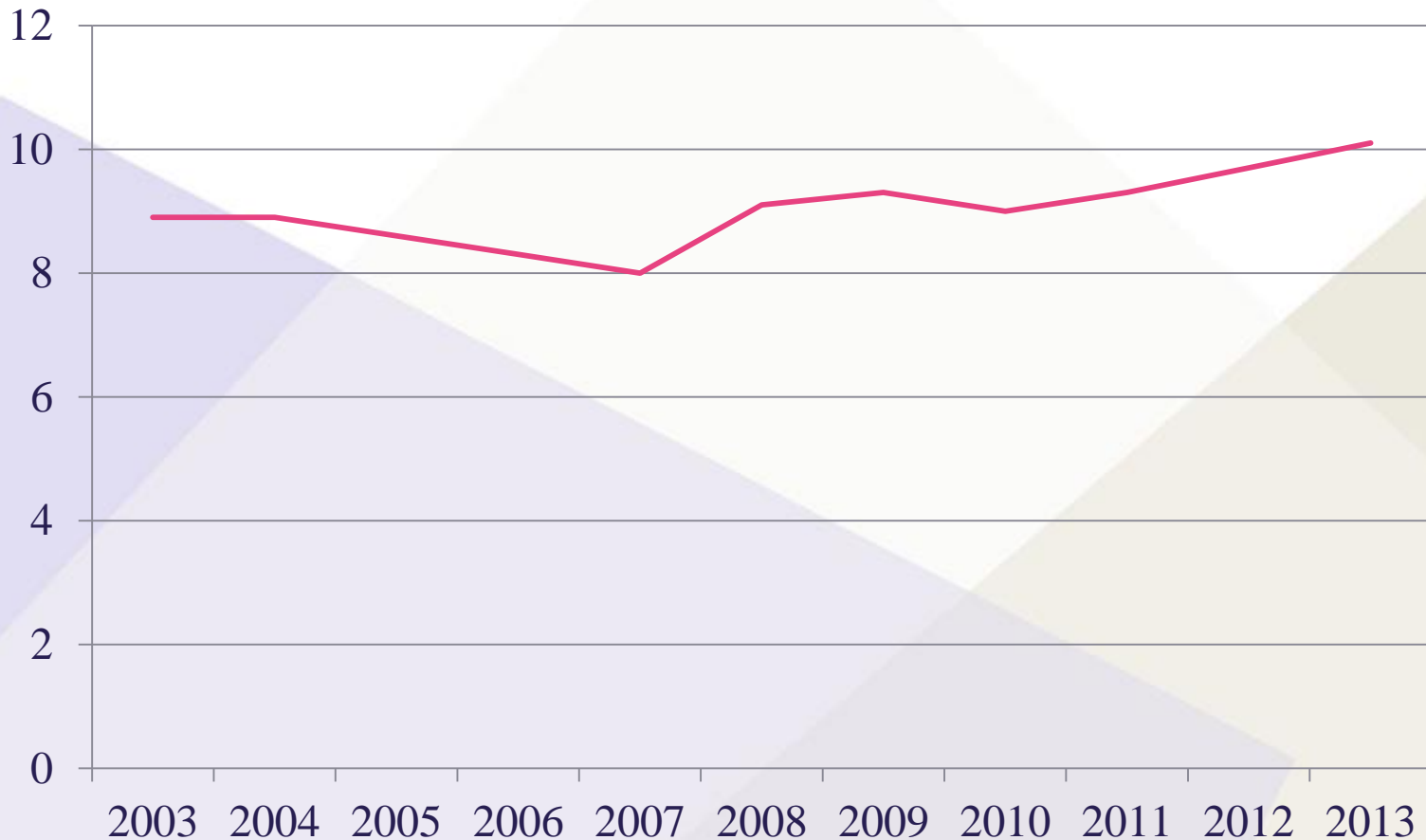


Source: ILO - Global Employment Trends for Youth 2013



# Youth Unemployment

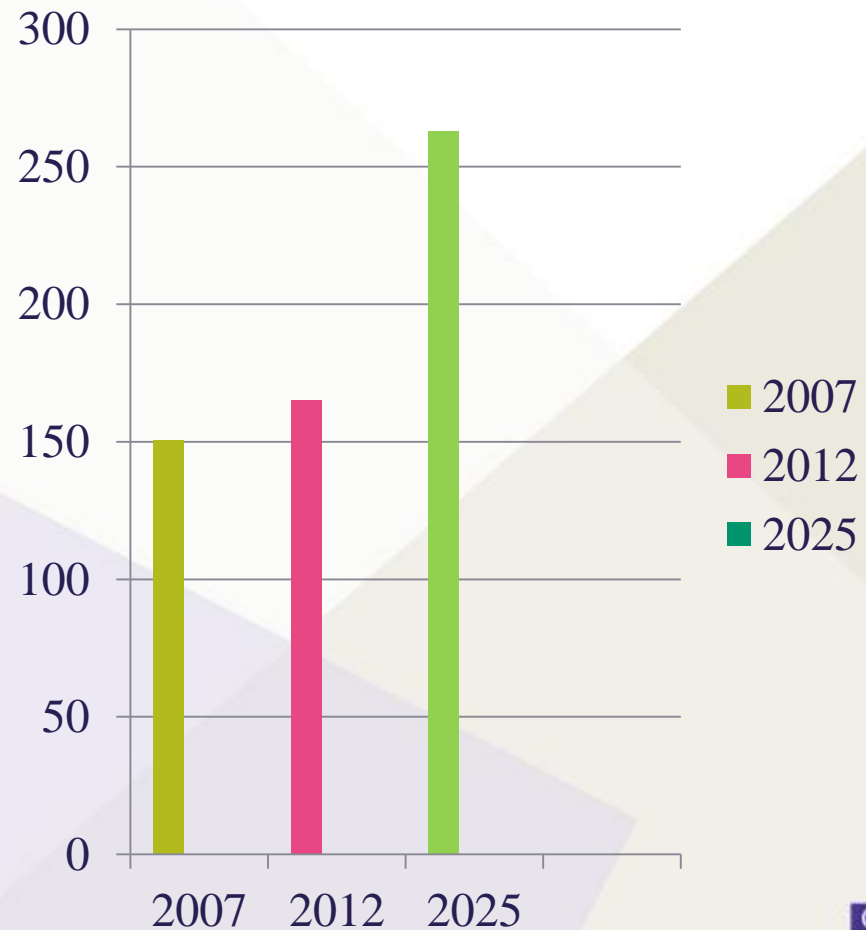
(% of total labor forces ages 15-24) in China 2003 – 2013



Source: The World Bank [Open Data](#), Retrieved on September 28, 2015.

# *Exploding demand for HE*

- **2007**  
*150.6 million tertiary students globally*
- **2012**  
*165 million*
- **2025**  
*263 million*



# *The Demand*



4 new universities to cater to  
30,000 needed each week to  
accommodate children who will reach  
enrolment age by 2025

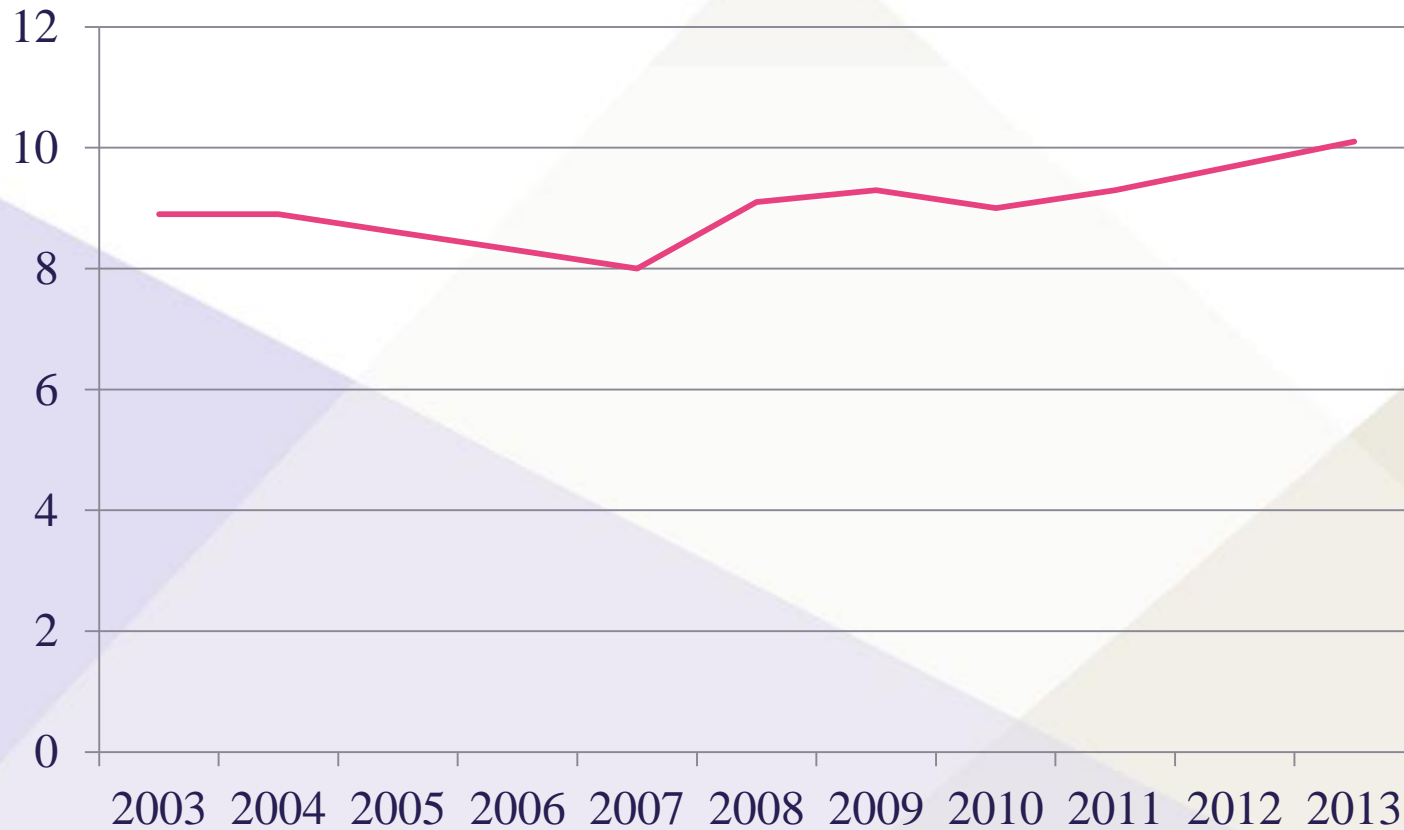
Everitt in Liyanagunawardena et al, 2013





# *Tertiary Gross Enrolment Ratio in China*

## *2003 – 2013*



Source: The World Bank [Open Data](#), Retrieved on September 28, 2015.

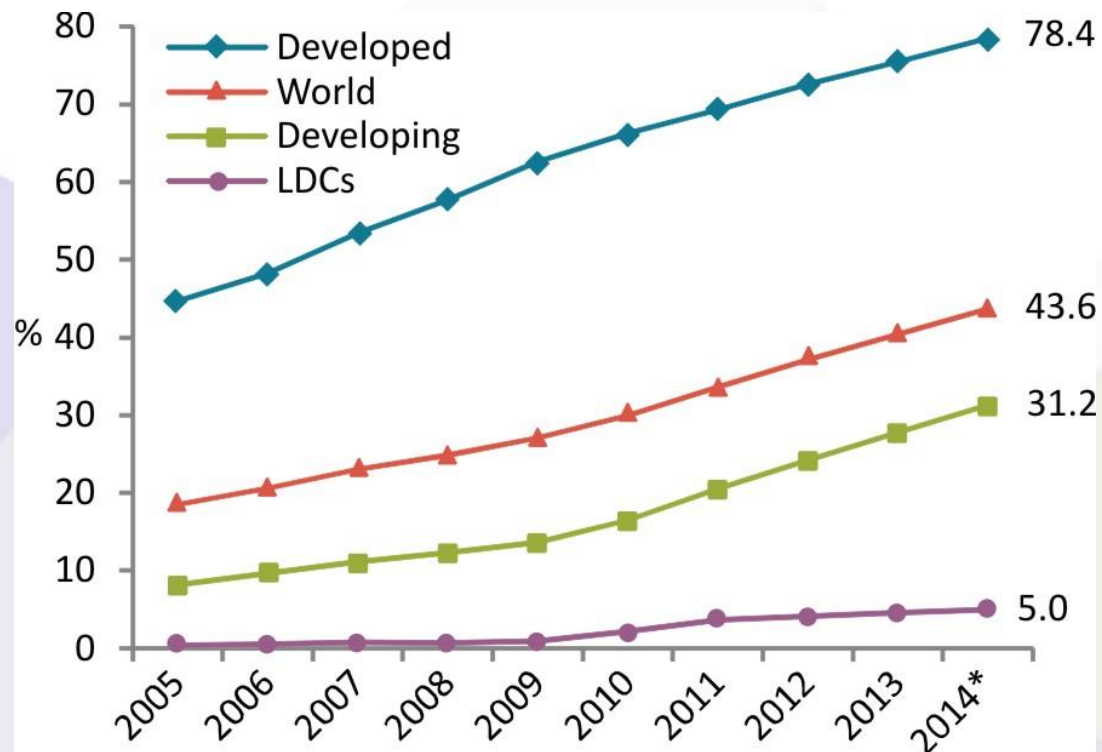




*Can the phenomenal growth in ICTs help?*



# Percentage of households with Internet access, by level of development, 2005-2014

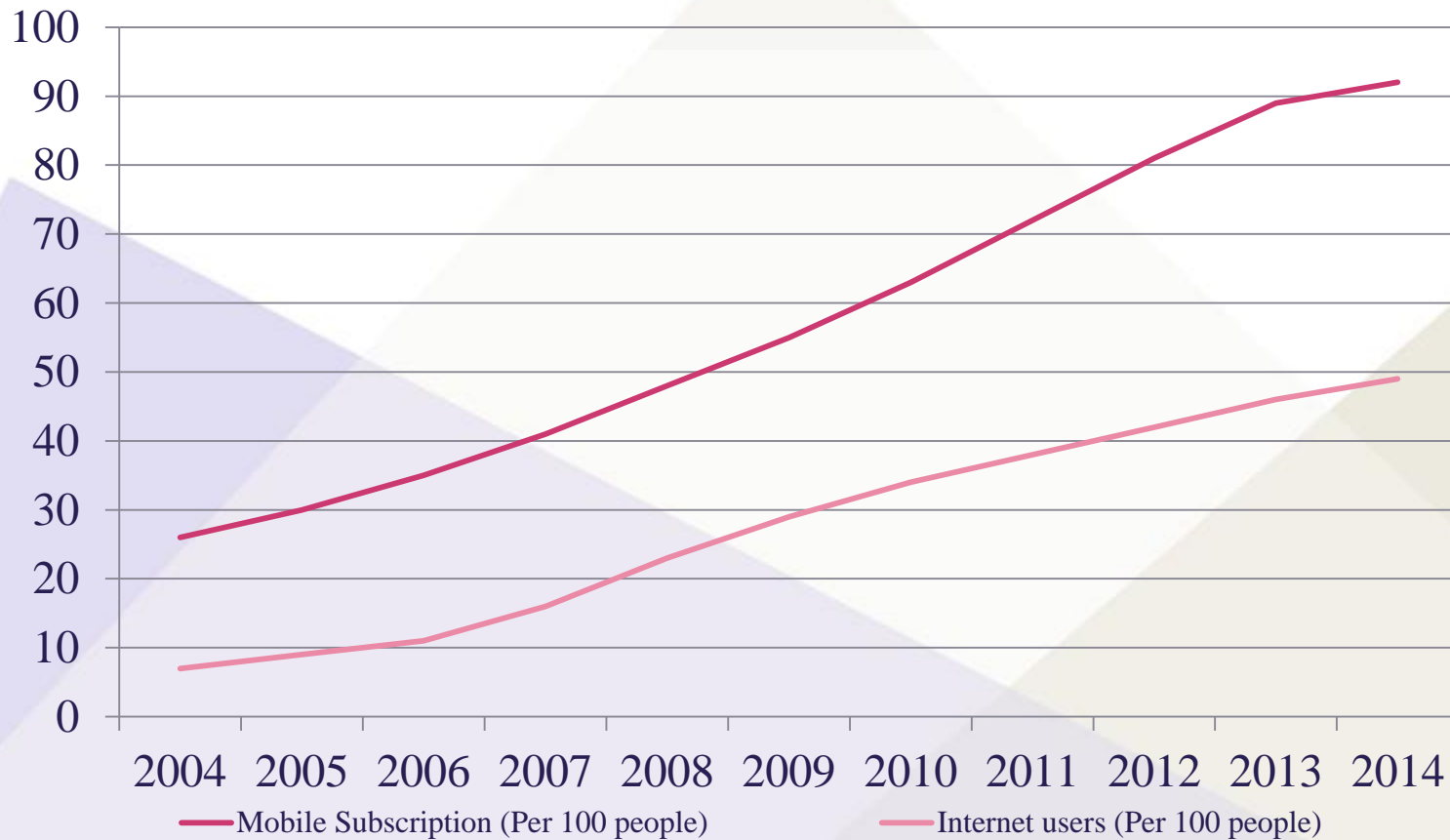


Source: ITU, MIS Reports, 2014.

<http://www.itu.int/en/newsroom/Pages/wtis14-mis-images.aspx>



# ICT in China 2004 - 2014



Source: *The World Bank DataBank*, Retrieved on September 28, 2015





# *ICT Trends: Horizon Report 2015*

## TRENDS

### SHORT-TERM

- > Increasing Use of Blended Learning
- > Redesigning Learning Spaces

1-2 years in each direction

### MID-TERM

- > Growing Focus on Measuring Learning
- > Proliferation of Open Educational Resources

3-4 years in each direction

### LONG-TERM

- > Advancing Cultures of Change and Innovation
- > Increasing Cross-Institution Collaboration

5+ years in each direction



*The Fifth  
Decade of  
ODL*

# *1. The Rise of Open Universities*

UNISA



The Open  
University

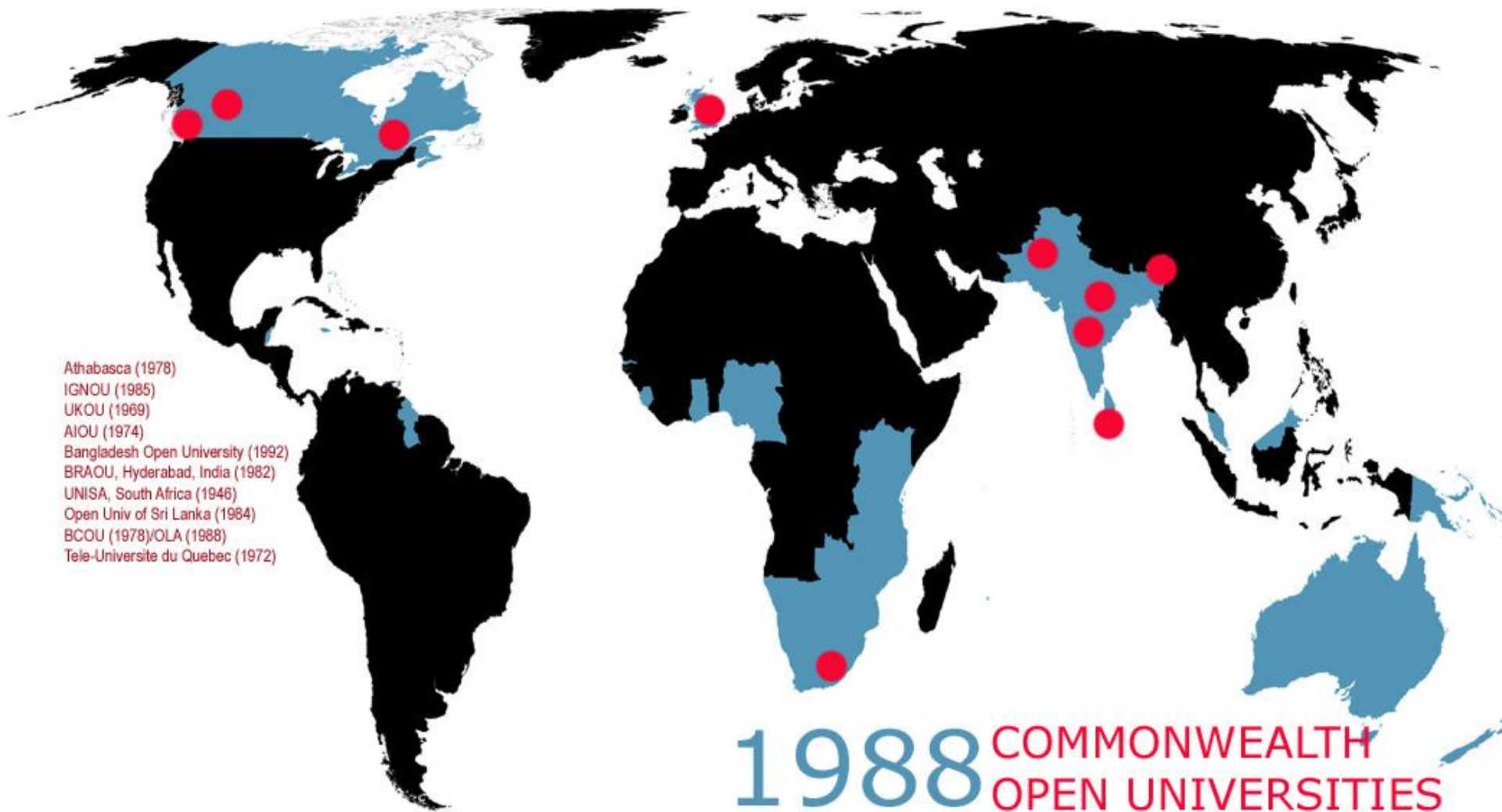


Athabasca  
University



**ignou**  
THE PEOPLE'S  
UNIVERSITY



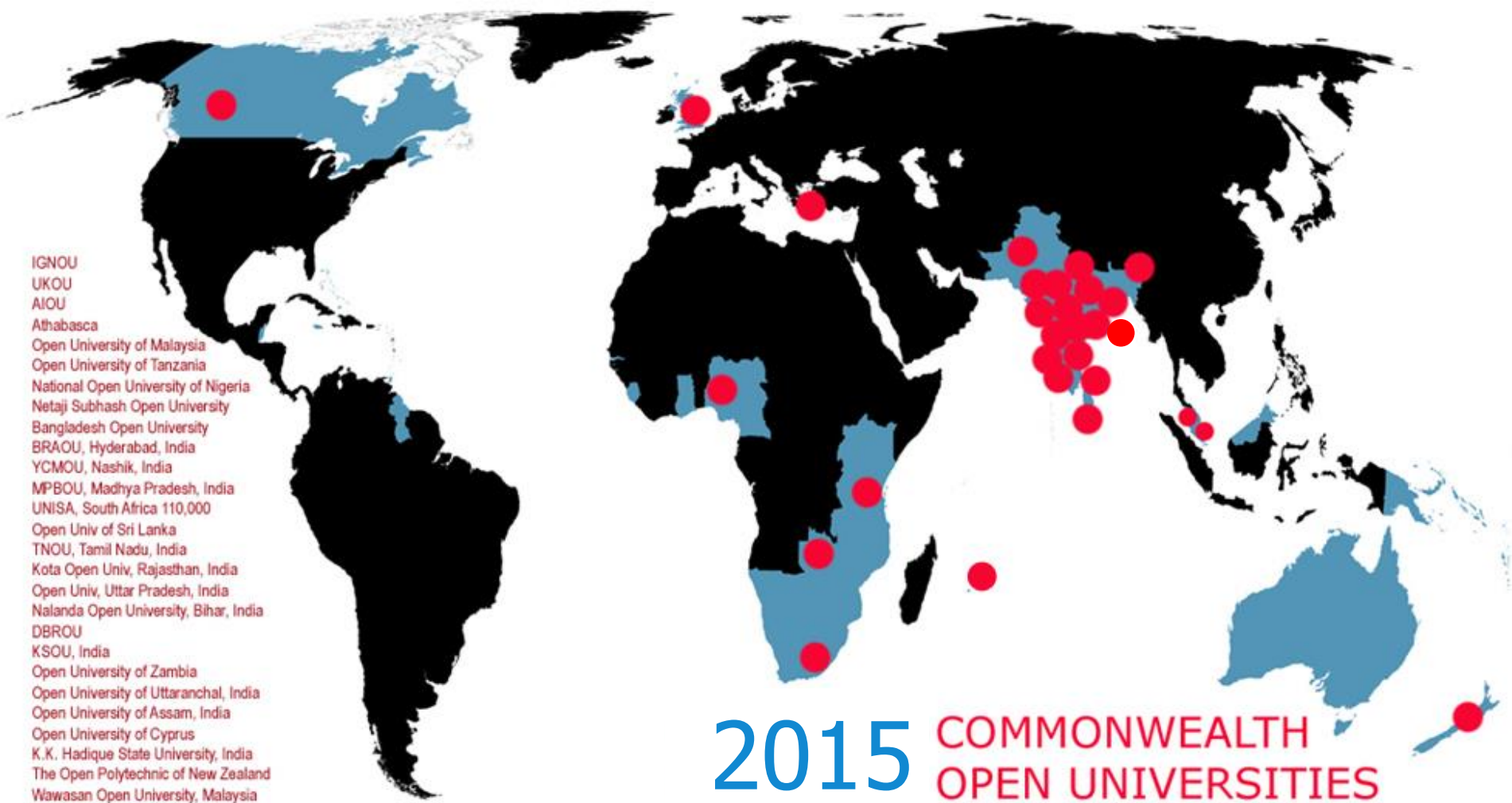


- Athabasca (1978)
- IGNOU (1985)
- UKOU (1969)
- AIOU (1974)
- Bangladesh Open University (1992)
- BRAOU, Hyderabad, India (1982)
- UNISA, South Africa (1946)
- Open Univ of Sri Lanka (1984)
- BCOU (1978)/OLA (1988)
- Tele-Universite du Quebec (1972)

# 1988 COMMONWEALTH OPEN UNIVERSITIES







- IGNOU
- UKOU
- AIOU
- Althabasca
- Open University of Malaysia
- Open University of Tanzania
- National Open University of Nigeria
- Netaji Subhash Open University
- Bangladesh Open University
- BRAOU, Hyderabad, India
- YCMOU, Nashik, India
- MPBOU, Madhya Pradesh, India
- UNISA, South Africa 110,000
- Open Univ of Sri Lanka
- TNOU, Tamil Nadu, India
- Kota Open Univ, Rajasthan, India
- Open Univ, Uttar Pradesh, India
- Nalanda Open University, Bihar, India
- DBROU
- KSOU, India
- Open University of Zambia
- Open University of Uttaranchal, India
- Open University of Assam, India
- Open University of Cyprus
- K.K. Hadique State University, India
- The Open Polytechnic of New Zealand
- Wawasan Open University, Malaysia
- Open University of Mauritius

# 2015 COMMONWEALTH OPEN UNIVERSITIES



# *Implications for Pedagogy*

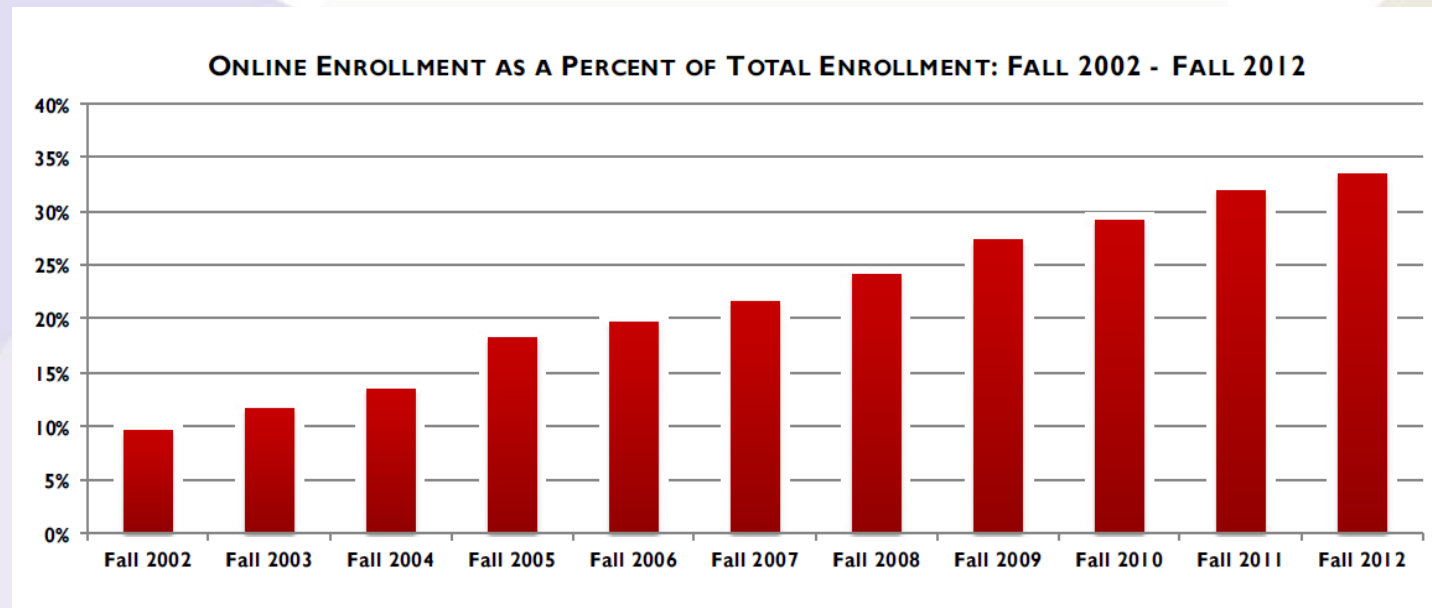
- Self-instructional Materials
- Extensive use of Media
- Flexibility and modularity



## 2. Online learning: Increasing Access

The proportion of higher education students taking at least one online course now stands at 33.5 percent for a total of

*7.1 million*



# *Ambient Insight:*

## *The 2015-2020 China Self-paced eLearning Market*

*China* is the *second largest* self-paced eLearning market in the world after the US.

There are *two* significant trends in China's *eLearning* market:

- the proliferation of online education startups (and a spike in funding deals made with them)
- and the growing number of large Internet companies entering the market.





# *Implications for Pedagogy*

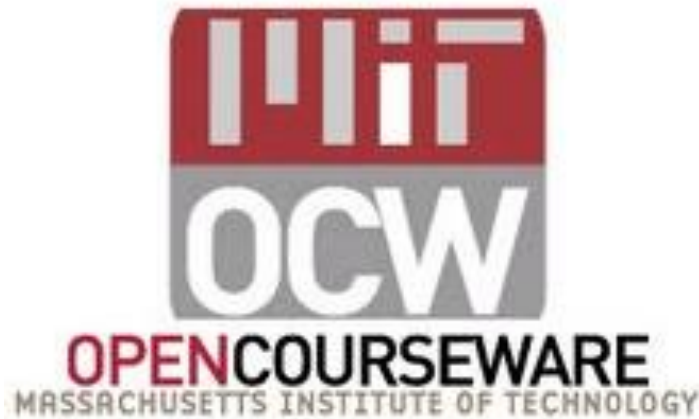
- Learning Management Systems
- Wider use of web resources
- Interactivity





*The Rise of  
OER*

# *Open Education Resources*



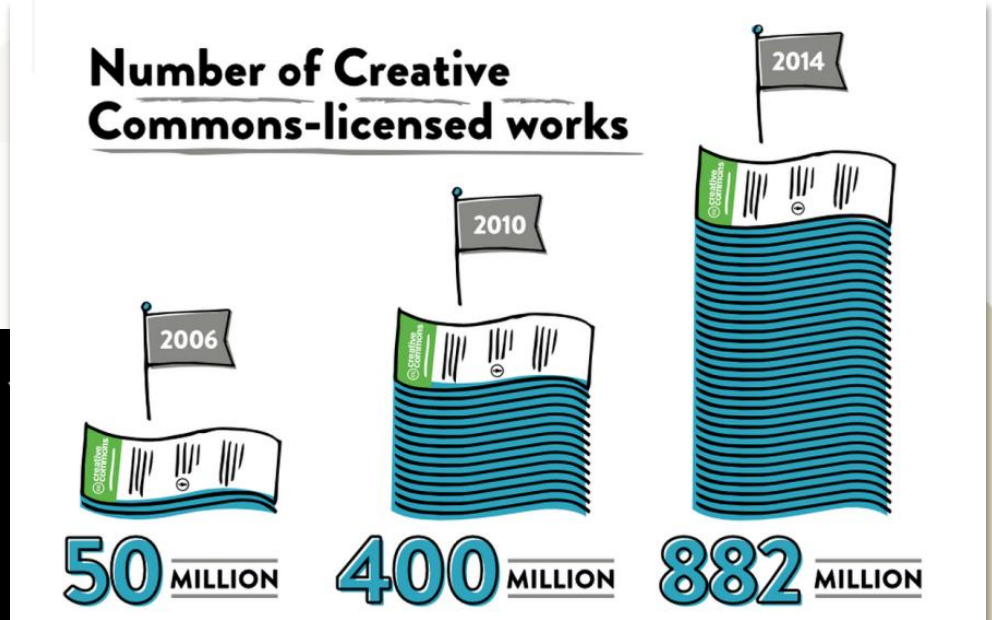
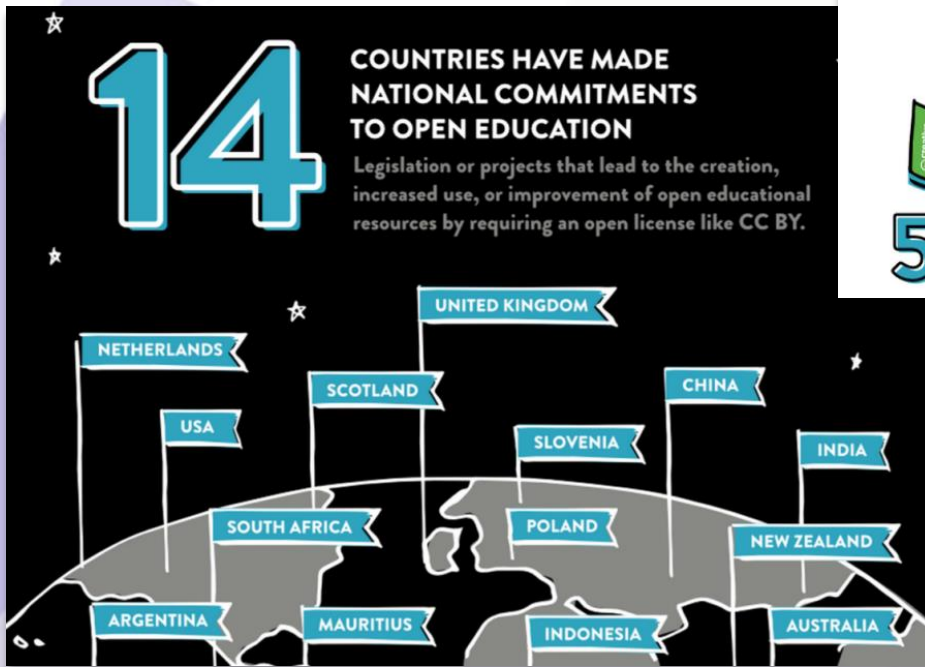
# *What are Open Education Resources (OERs)?*

Materials that are

- Free and freely available
- Suitable for all levels
- Reusable



# Rise of OER



Source: <https://stateof.creativecommons.org/report>





# *OER Policies in the Commonwealth*



## *South Africa: Draft Policy Framework for the Provision of Distance Education in South African Universities*

(Page 28, MHET will establish a Task Team that will play an awareness-raising and advocacy role around the use of OER)



## *Mauritius: Education and Human Resources Strategy Plan 2008-2020*

(page 119, 1.3 promote e-learning and Open Educational Resources)



## *India: Open Licensing Policy Guidelines for NMEICT, 2014*



## UNISA developed an OER Strategy

- Unisa Institutional Operational Plan 2014
- Promote the use of OER:

*College:*  
develop OER  
material

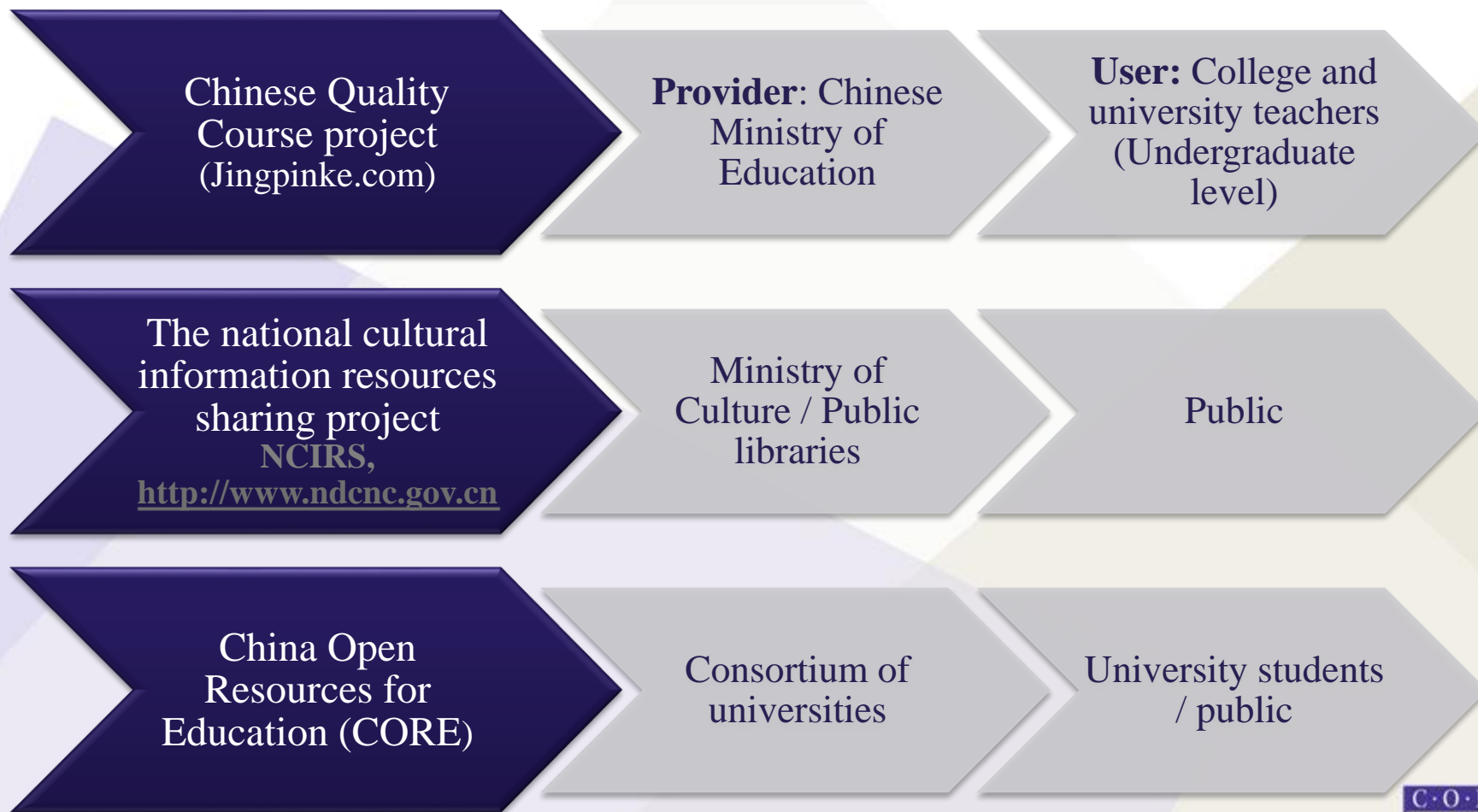
*Library:*  
Provide access  
to library OER  
repository

*ICT:*  
provide  
system and  
infrastructure  
to support  
OER

*DISA:*  
Tracking of  
OER update  
by academics

*Legal  
Services:*  
Creative  
Commons  
license

# *Prominent OER initiatives and providers/ users*



Source: UNESCO report, *Open Educational Resources in the People's Republic of China (2011)*



# *OER Survey, Asia, 2011*

*(WOU, IDRC)*

***Teachers:***  
difficult to locate, adapt,  
and re-purpose OER  
material relevant to  
their work.

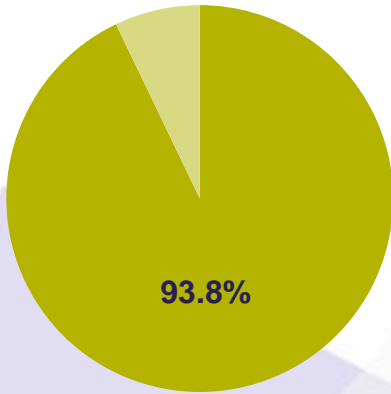
***Learners:***  
OER should be more  
open and  
multi-modal.

***Technical Support:***  
lack of standard practices in  
the packaging and re-use of  
OER.

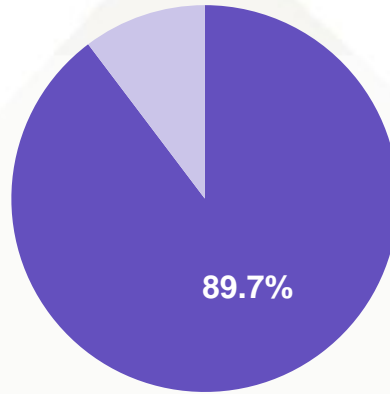
***Management:***  
concerns regarding  
intellectual property;  
copyright issues and  
competition.



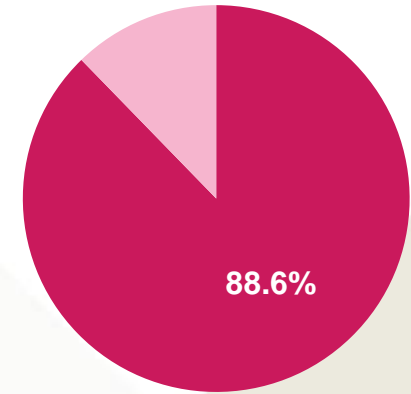
# OER Impact on Teachers



**93.8%** of K12 teachers agree or strongly agree that they used a **broader range of teaching and learning methods** due to use of OER



**89.7%** agree or strongly agree that they make use of a **wider range of multimedia**



**88.6%** agree or strongly agree that they **reflect more** on the way that they teach.

Source: De Los Arcos, B. (2014) 'Flipped Learning and OER: Survey Results'.  
<https://oscailte.wordpress.com/2014/03/13/research-findings-on-flipped-learning-and-oer/>  
[Accessed 31 August 2015]





# Impact of OER on Teaching

## Impact of OER use on teaching

To what extent do you agree with the following statements about the impact on your teaching practice of your using OER? N=977

Strongly agree Agree Neither/nor Disagree Strongly disagree

I have broadened my coverage of the curriculum



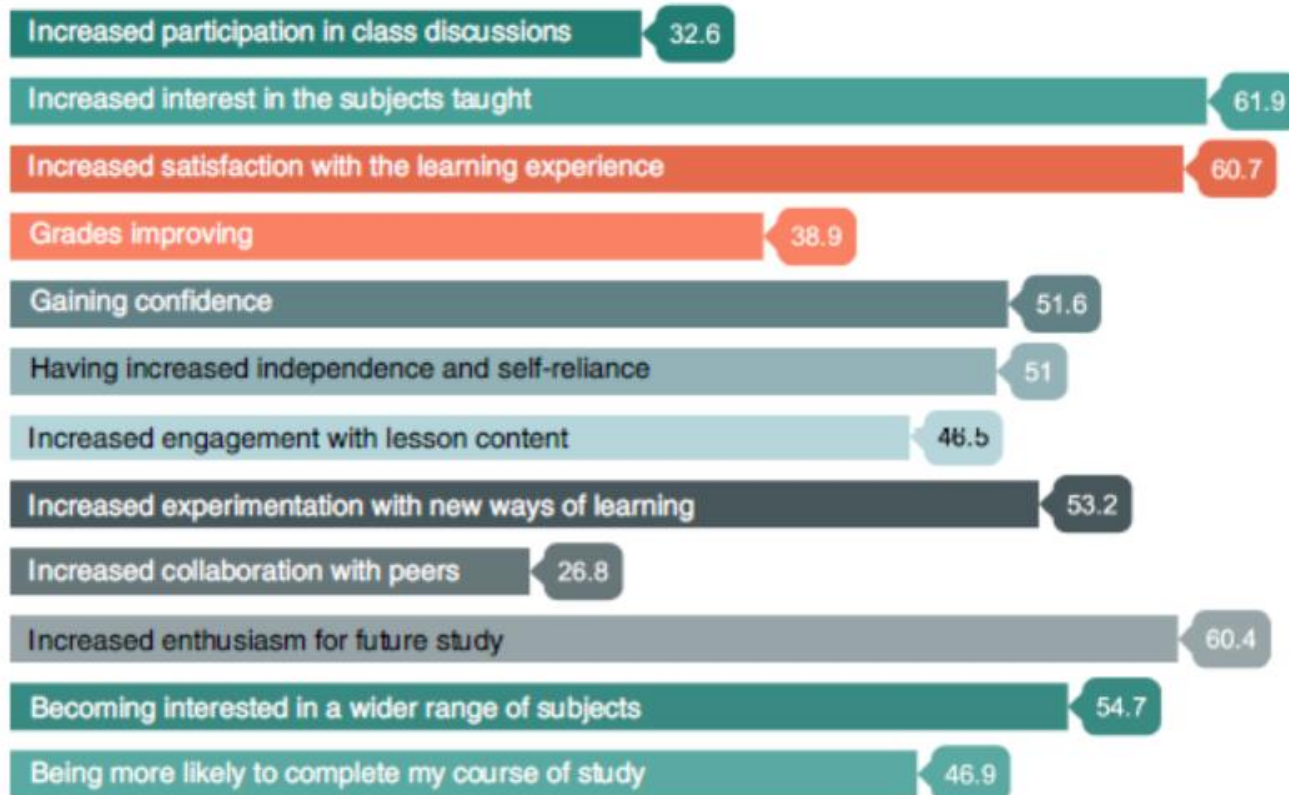
I use a broader range of teaching and learning methods



# Impact on Students

## Impact of OER use

In which of these ways has your use of OER made an impact on your formal studies? N=1167



# *Impact on Learning*

Students who used open textbooks scored

**.65 points higher**

on end-of-year state standardized science tests  
than students using traditional textbooks.



# Cost Savings: OER Textbooks



**31%** students in the US don't register for a course due to textbook costs.

*Source: Thanos & Wiley, 2014*



Utah Open Textbooks project:  
**\$5 per printed** and **zero for online content**



# *Implications for Pedagogy*

- Connectivism: student-content (T. Anderson, 2010)
- Learner not just a consumer but also a producer
- Collaboration rather than competition



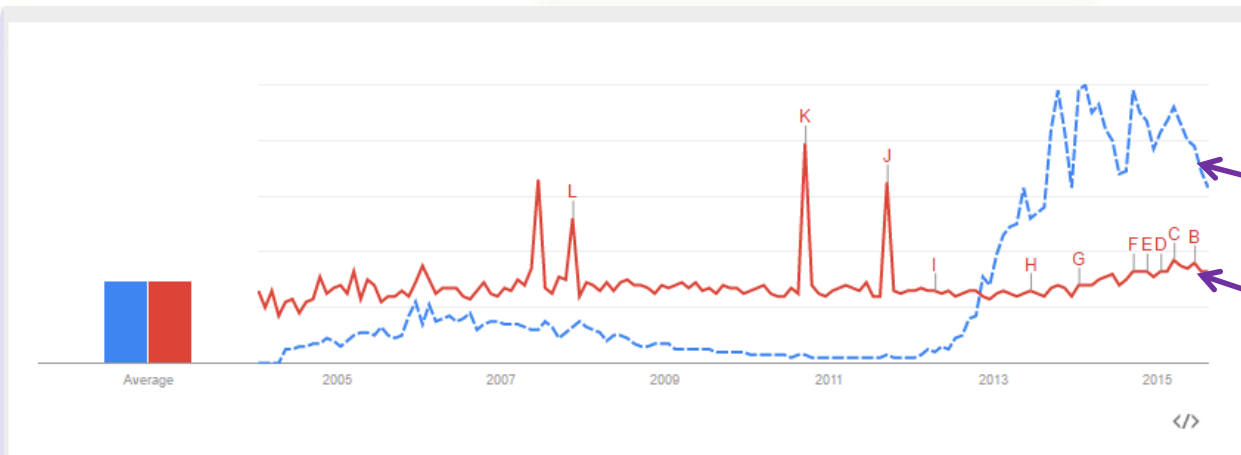


# *Qingdao Declaration 2015*

We commit to develop sector-wide strategies and capacity building programmes to fully realize the potential of **OER** to expand access to lifelong *learning opportunities*, and to achieve *quality education*.



# *The MOOC phenomenon*



**MOOCs**

**OER**

# *Massive Open Online Course*



*“... a **MOOC** is a type of online course aimed at large scale participation ....**MOOCs** are a recent development in the area of distance education...”*

# *Massive Open Online Courses*

**coursera**

 **Future  
Learn**

**U**  
UDACITY

**edX**



# *Features of MOOCs*

- Massive enrolments  
*(Over 25 million since 2012)*
- Open to *anyone* without restrictions
- Online without *face-to-face* contact
- Courses offered by *top* institutions and professors





# MOOC Participants



Most MOOC learners are having a first degree (about 70%)

Gender participation rate is a function of the subject matter of the MOOC

MOOC learners are serial MOOC takers

# Prominent MOOC initiatives and providers/ users

**Chinese MOOCs**  
([www.chinesemooc.org](http://www.chinesemooc.org))  
华文慕课

- Provider: Peking University, Alibaba
- User: University students, high school students and Public.

**XuetangX.com 学堂在线**

- Provider: Tsinghua University, Ministry of Education Research Centre for Online education and Beijing Muhua Information Inc.
- User: University students, high school students and Public.
- More than 1 million registered users as of September 23<sup>rd</sup>, 2015.

**CN MOOC**  
(<http://www.cnmooc.org>)  
好大学在线

- Provider: Shanghai Jiaotong University, Baidu
- User: University students, high school students and Public.



# Impact on Learners

Learners motivated by career or educational advancement even more likely to report benefits



## The Career Builders

52% of learners surveyed took online courses to advance their careers. These learners reported the following benefits.

87%

Reported  
Career Benefits

33%

Reported  
Tangible Career  
Benefits<sup>1</sup>

<sup>1</sup>Tangible career benefits include receiving a pay raise, a promotion, a new job, or starting a new business.



## The Education Seekers

28% of survey respondents came to Coursera to pursue academic goals. These learners reported the following benefits.

88%

Reported  
Educational  
Benefits

18%

Reported Tangible  
Educational  
Benefits<sup>2</sup>

<sup>2</sup>Tangible educational benefits include gaining credit towards an academic degree or completing prerequisites for an academic program.

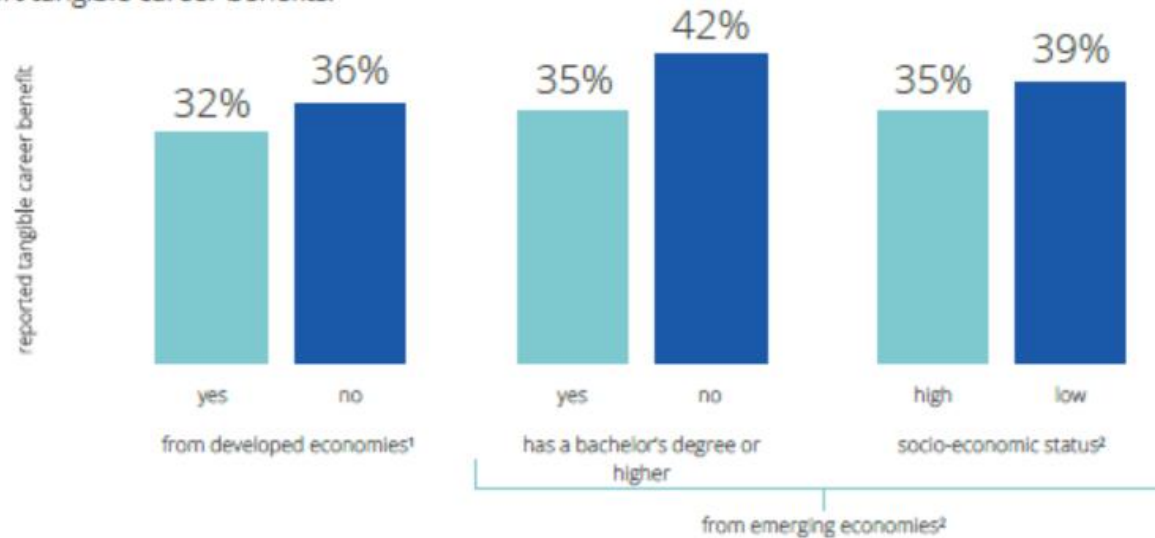
Source: Koller, D., Eriksson, N., & Zhenghao, C. (2015).  
*Learner Outcomes in Open Online Courses, 2015*



# Impact on Learners

## Online learners from less educated and less affluent backgrounds more likely to report tangible career benefits

Career builders with no bachelor's degree, from low SES brackets, and from emerging economies are more likely to report tangible career benefits.



¹Developed and emerging economies are evaluated using indicators from the Organisation for Economic Co-operation and Development (OECD).

²SES, or socioeconomic status, is evaluated as a combination of factors including income, level of education, and occupation. SES was self-reported by respondents.

Source: Koller, D., Eriksson, N., & Zhenghao, C. (2015). *Learner Outcomes in Open Online Courses, 2015*



# *Impact on Teachers*

In 2012,  
**Duke University**  
began using MOOCs to  
promote innovation in  
teaching and learning  
within the campus  
community, with the  
goal of importing  
successful new  
pedagogical ideas into  
Duke classrooms.

Since that time,  
**30 instructors**  
from **28 departments**  
have developed  
**31 MOOCs** on  
Coursera, attracting  
**2.8 million** enrollments  
and issuing more than  
**72,000**  
**certificates.**

Instructors changed their  
teaching approach in both  
MOOCs and traditional  
courses, including by  
**improving classroom  
materials and activities,**  
crafting **better measures  
of student learning,** and  
experimenting with **new  
pedagogies** to increase  
engagement and learning.

Source: <http://er.educause.edu/articles/2015/8/on-campus-impacts-of-moocs-at-duke-university>





# Cost Of MOOCs

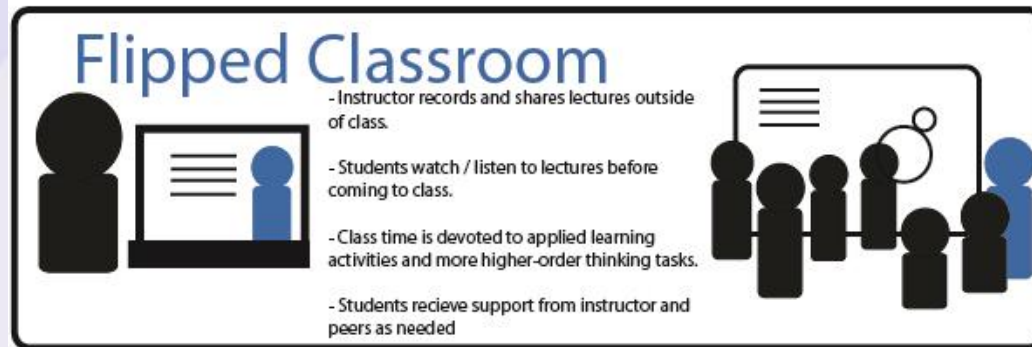
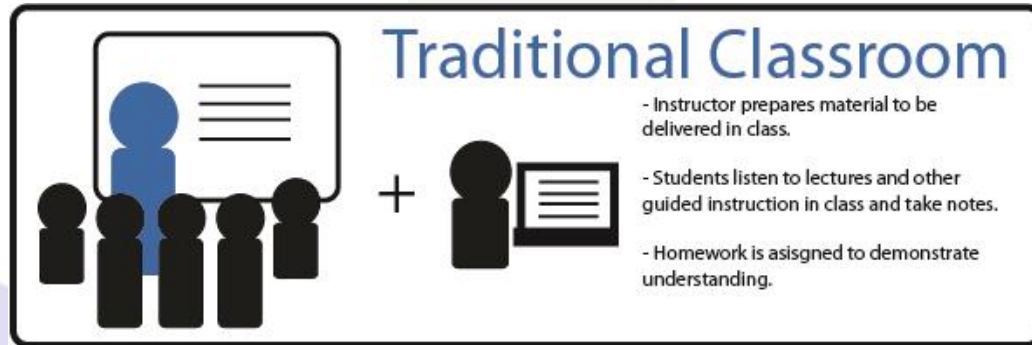
Table ES 2: Estimated Costs of MOOC Production and Delivery at Four Institutions

Institution	Type of MOOC	Length of MOOC (weeks)	Total estimated costs per MOOC	Costs per completer
Teachers College, Columbia University	xMOOC	8	\$38,980	\$74
University of Manitoba	cMOOC	12	\$65,800 - \$71,800	*
American Museum of Natural History	xMOOC	4	\$104,620	\$272
Large Midwestern University	xMOOC	5-8	\$203,770 - \$325,330	*

\* Completion data were not available for these MOOCs. See Cases 10, 11, 12, and 13 for sources.



# How learning takes place is changing



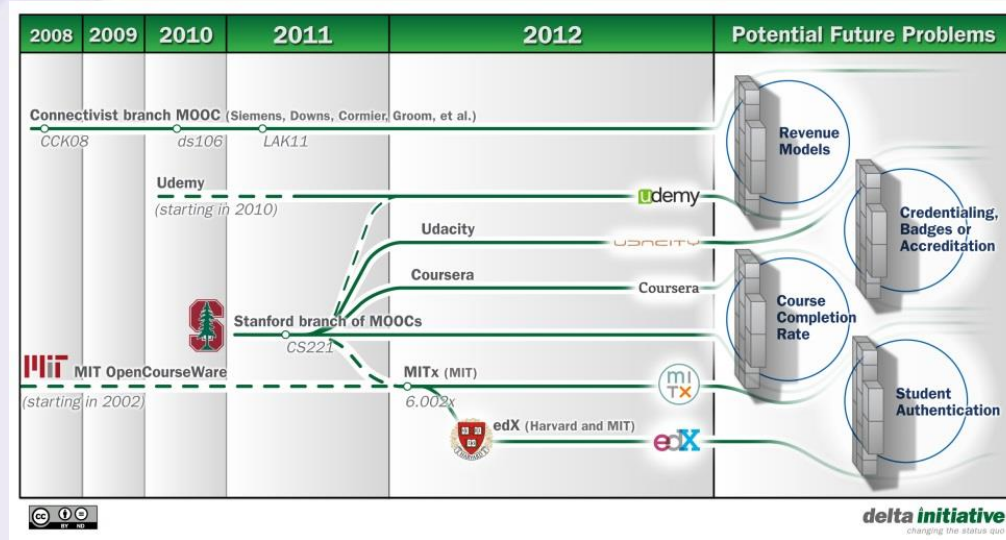
Source: <http://bit.ly/1r0UUE3>, Retrieved 5th Sept 2014



# Implications for Pedagogy

- Shift from teacher moderation to learner responsibilities
- Dynamic pedagogy: Learning Analytics
- Move from small group teaching to offer eLearning to masses

## Evolution of MOOCs



# *Qingdao Declaration 2015*

Online learning, including in the form of *Massive Open Online Courses (MOOCs)* has the potential to build new learning pathways towards tertiary education and lifelong learning. We therefore recommend that governments, institutions and other stakeholders further consider and *harness the opportunities brought by online learning innovations.*



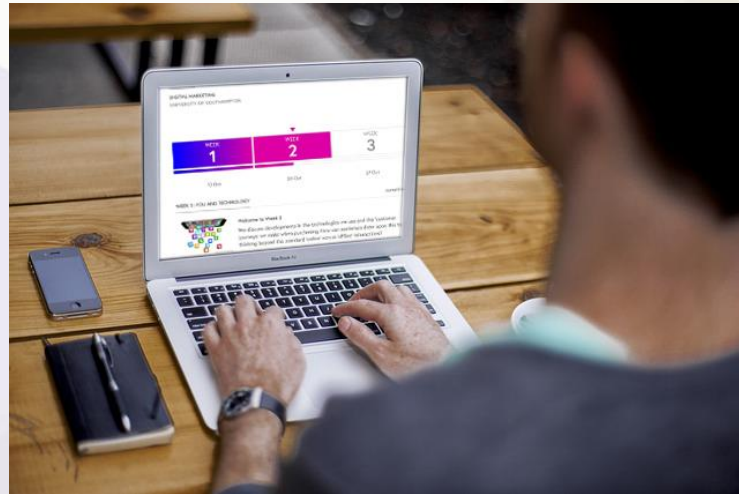


*Impact on  
ODL*



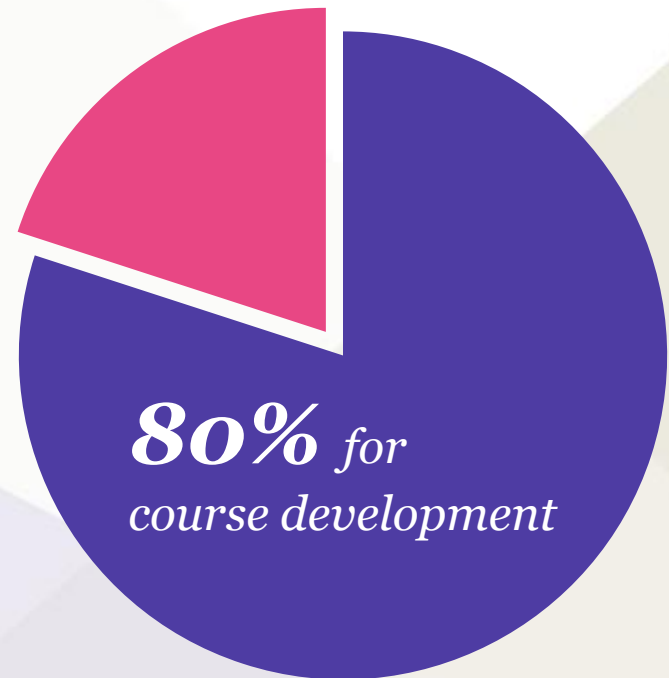
# *ODL in the age of OER and OOCs?*

- ODL institutions played a minimum role in innovation and became followers
- ODL institutions yet to adopt, appropriate and domesticate OER & MOOCs

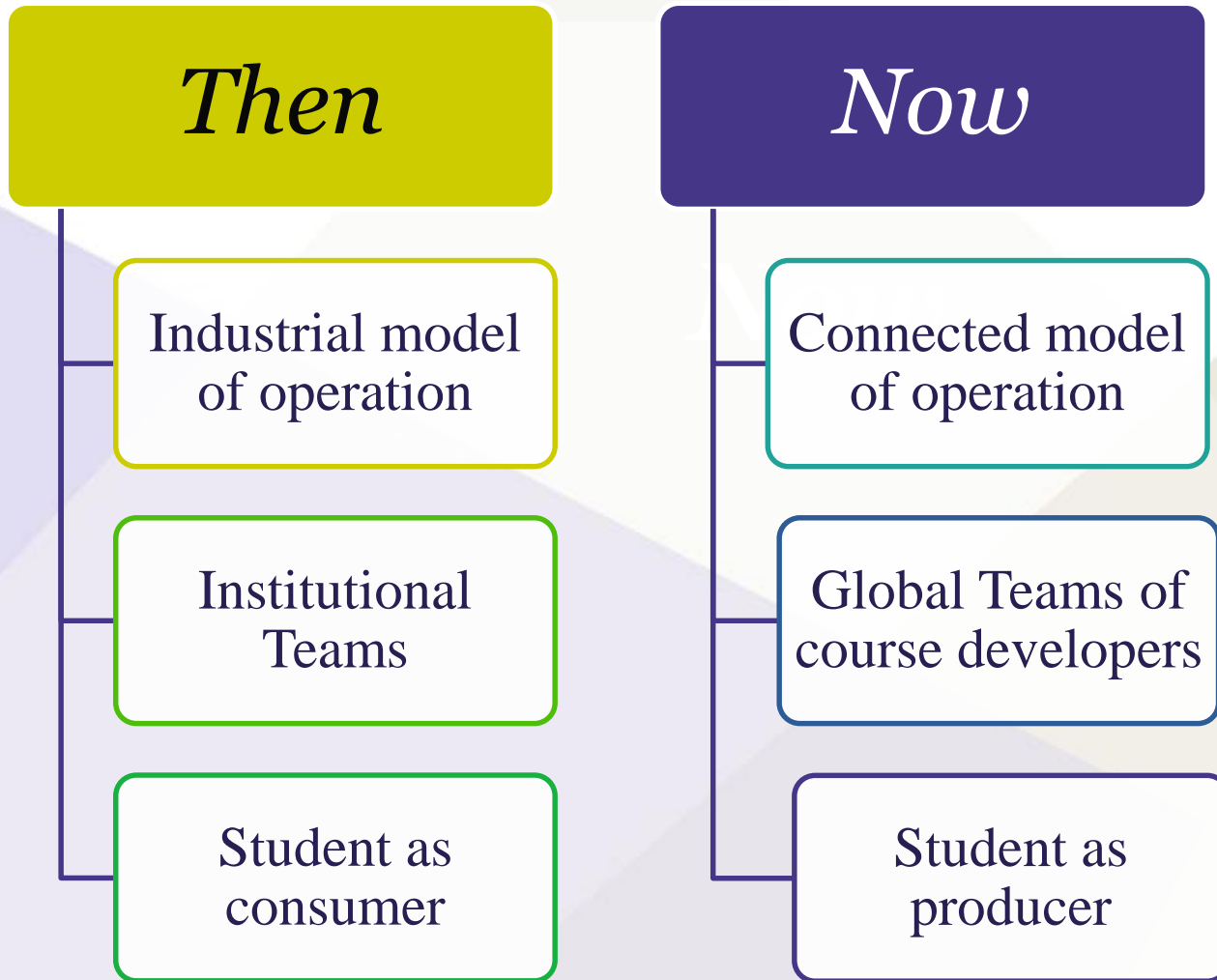


# OER as Disruption in ODL practices

- Free availability of content
- Faculty time used up to 80% for course development before: can now focus on learner support



# Open Universities

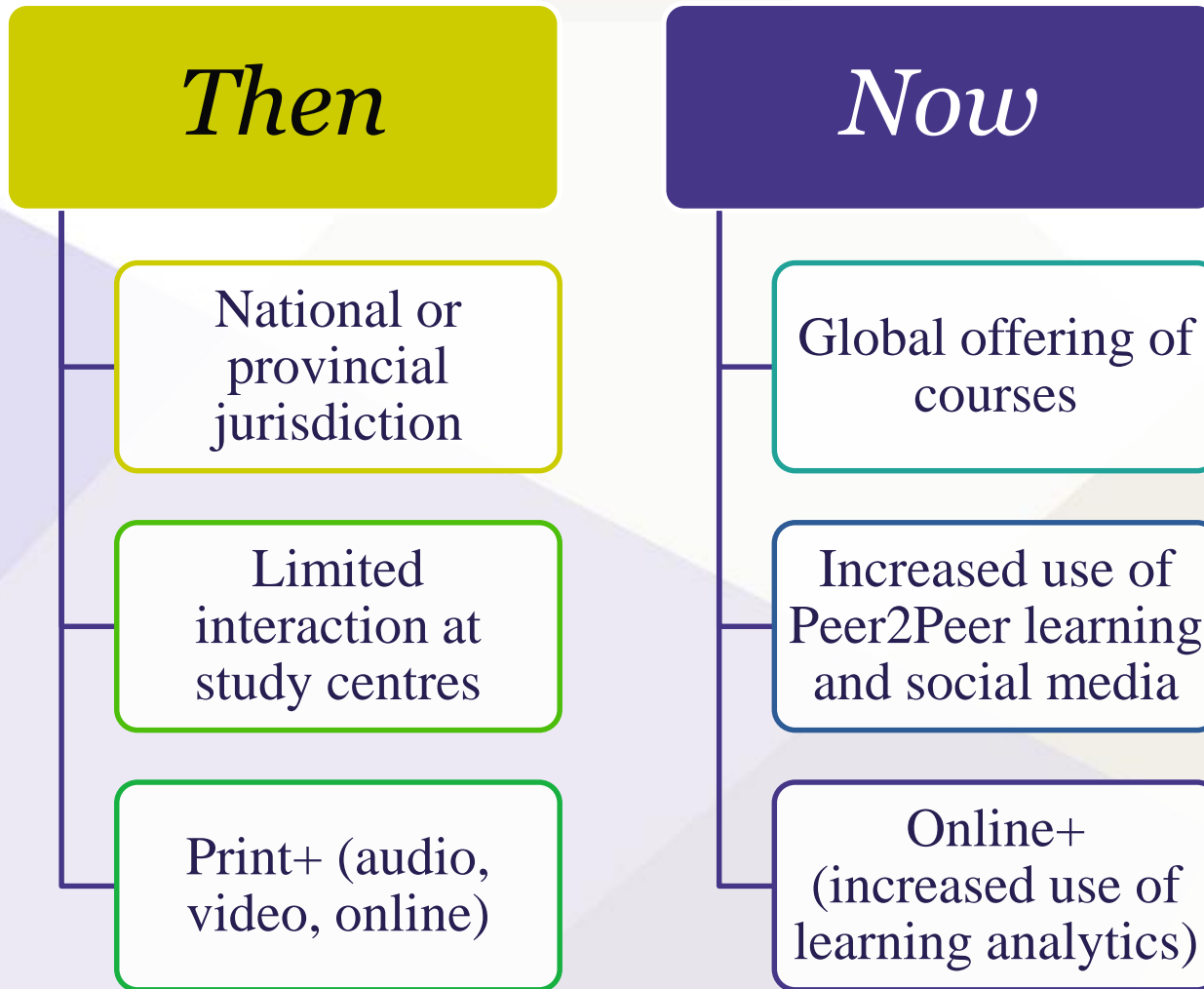


# *MOOCs as Disruption in Higher Education*



- Flexibility
- Affordability
- Fast-track

# Open Universities





# 1. Revisit the Philosophy of 'Open-ness'



Open as to people



Open as to places



Open as to methods



Open as to ideas



*Lord Crowther*

# 1. *Embrace openness*



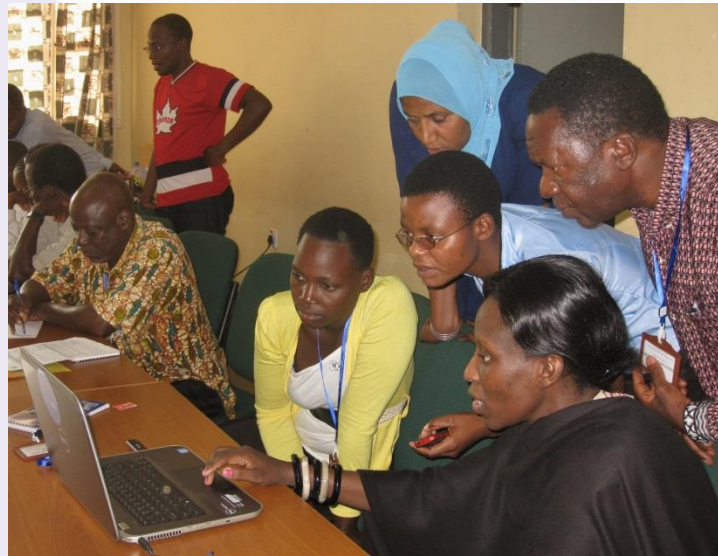
Adopt openness in a systematic manner.

This would include adopting and adapting **OER** as well as **MOOC** platforms for sharing and collaborating on research locally and globally.



## *2. MOOCs promote:*

- Higher learner autonomy
- More structured course content
- Increased peer to peer dialogue and interaction



## 2. Review Practices

Do we need  
smaller  
segments of  
*content*?

What  
*technology*  
options do  
learners  
prefer?

Can we  
provide  
*instant*  
assessment?

Do we need  
to offer  
*nano and*  
*micro*  
qualifications



# *3. Sustainable Development Goals*

**Sustainable  
Development  
Goals**





# GOAL 4

ENSURE INCLUSIVE AND EQUITABLE QUALITY  
EDUCATION AND PROMOTE LIFELONG LEARNING  
OPPORTUNITIES FOR ALL



**SUSTAINABLE DEVELOPMENT GOALS**

More at [sustainabledevelopment.un.org/sdgsproposal](https://sustainabledevelopment.un.org/sdgsproposal)



# Goal 4

Quality education leading to effective *learning outcomes*

*Skills* for employment and entrepreneurship

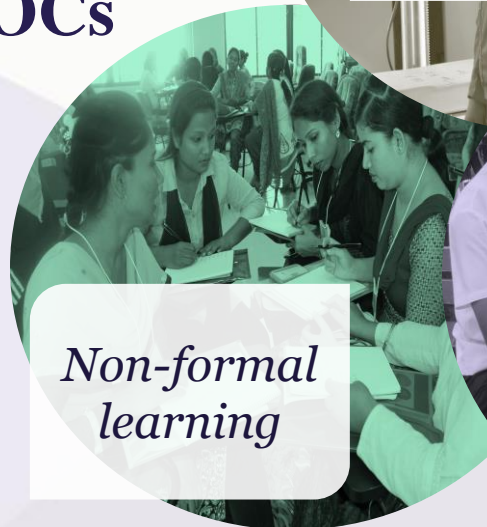
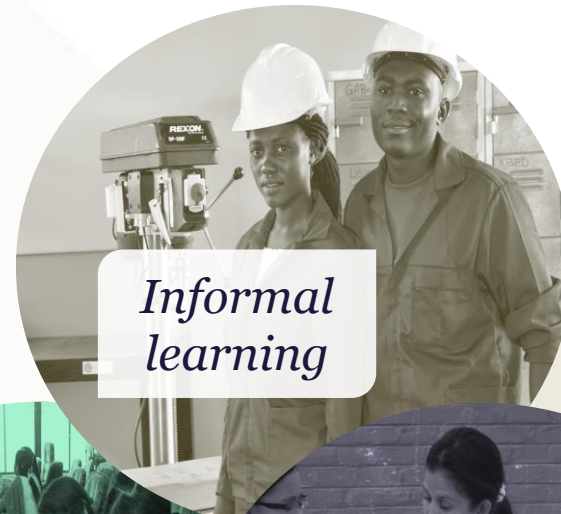
Knowledge and skills for *peace* and global *citizenship*

Qualified *teachers*



# 3. Promote ODL for Development

- Evidence-based advocacy for ODL for **formal, non-formal, informal learning**
- Support **lifelong learning**
- Harness **OER & MOOCs**







*Thank You*  
*[www.col.org](http://www.col.org)*