



COMMONWEALTH of LEARNING



PACIFIC ISLANDS FORUM SECRETARIAT

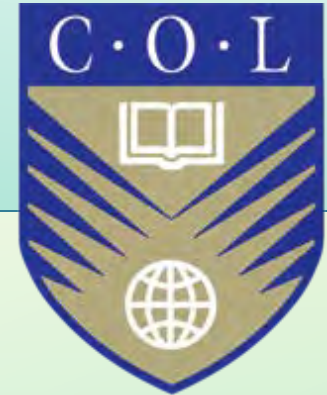
Moving Towards Relevant & Inclusive Education: the role of distance learning and technology

Forum Education Ministers' Meeting
Cook Islands, March 31, 2014

Professor Asha Kanwar
*President & CEO,
Commonwealth of Learning*



COL Vision



**Access to Learning is
the Key to Development**

**Created by the Heads of
Commonwealth at CHOGM 1987**

Intergovernmental Organization



1987 Commonwealth
Heads of Government
Meeting (CHOGM),
Vancouver, Canada



COMMONWEALTH *of* LEARNING

WHAT IS IT FOR?

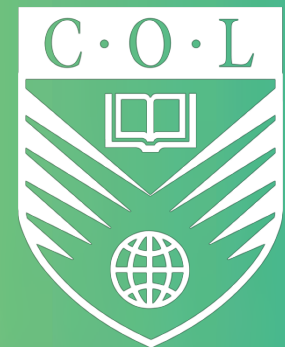
To help Commonwealth governments and institutions use various technologies to improve and expand learning for development

Plan

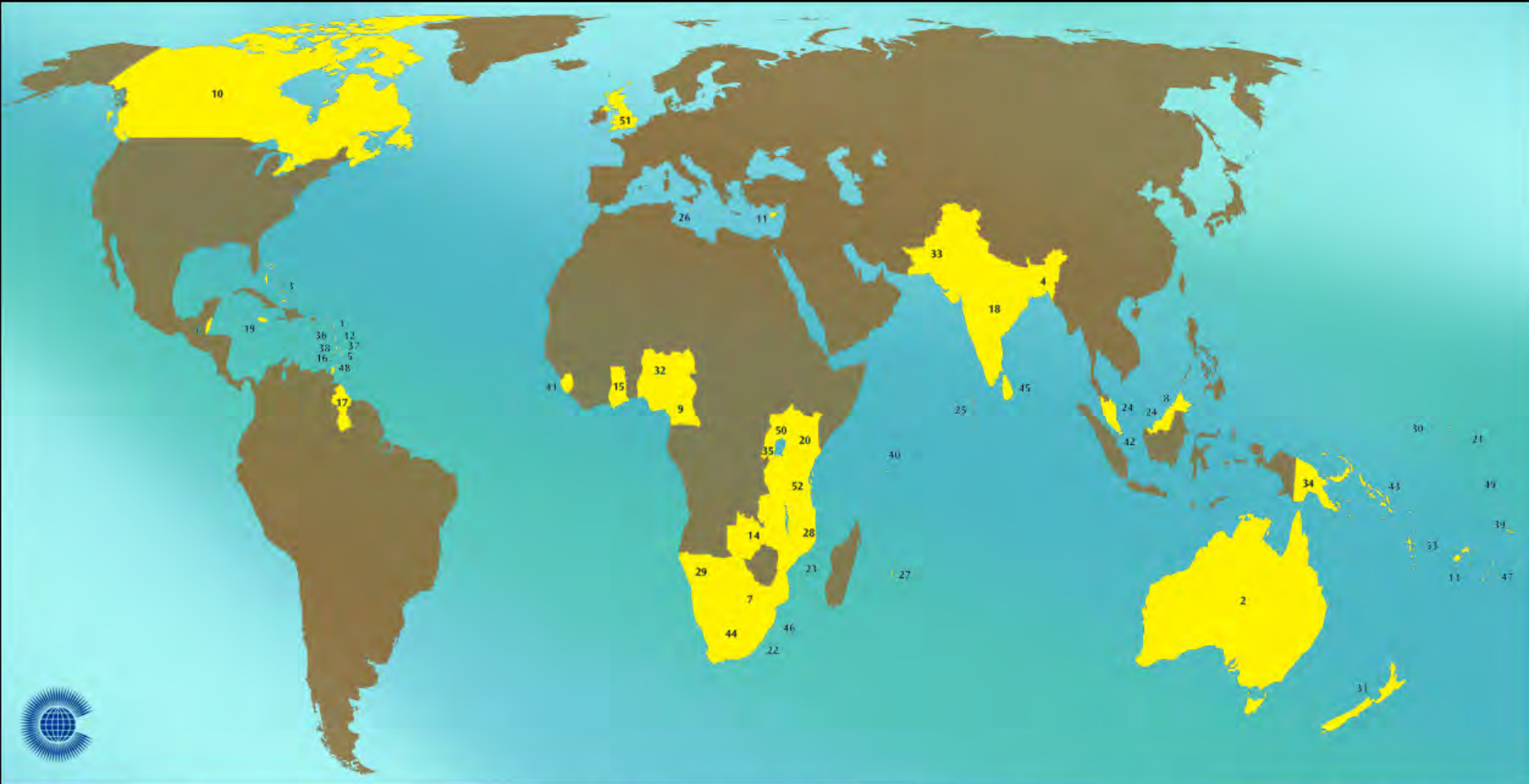
- The Context of Education
- Trends in distance learning and technology
- Towards Relevance & Inclusion



THE CONTEXT



The Commonwealth



THE COMMONWEALTH COMPRISES 53 DEVELOPED AND DEVELOPING NATIONS AROUND THE WORLD

Map Published by the Communications and Public Affairs Division, Commonwealth Secretariat.

The Commonwealth is home to

- 1/3 of the world's poor, 2/3 of them are women (ODI, 2009);
- 23.3 million children out of primary school (*Education in the Commonwealth 2012*);
- 462 million adult illiterates (ibid)

Human development report 2013

Country	HDI	Maternal Mortality per 100,000 births
Australia	0.938	7
New Zealand	0.919	15
Tonga	0.71	110
Samoa	0.702	
Fiji	0.702	26
Kiribati	0.629	
Vanuatu	0.626	110
Solomon Islands	0.53	93
Papua New Guinea	0.466	230



UN Millennium Development Goals

Keep the promise
Millennium Development Goals



Education for All (The Dakar Goals)



Numbers rather than quality

- Goal 1: Eradicate Extreme Hunger and Poverty
- Goal 2: Achieve Universal Primary Education
- Goal 3: Promote Gender Equality and Empower Women
- Goal 4: Reduce Child Mortality
- Goal 5: Improve Maternal Health
- Goal 6: Combat HIV/AIDS, Malaria and other diseases
- Goal 7: Ensure Environmental Sustainability
- Goal 8: Develop a Global Partnership for Development

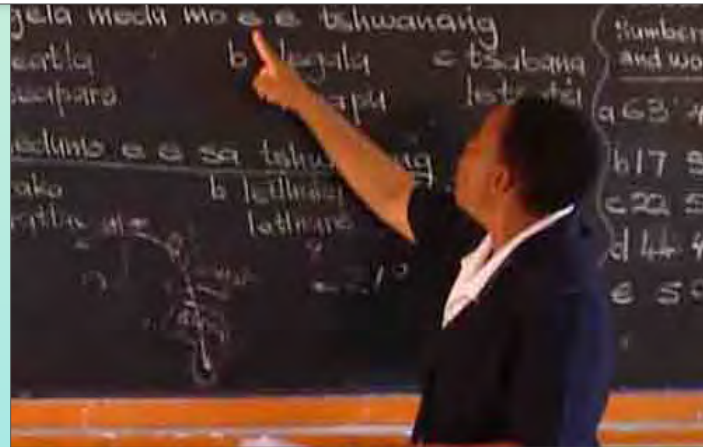
Quality only at goal number 6

- Goal 1: Universal access to learning
- Goal 2: A focus on equity
- Goal 3: Emphasis on learning outcomes
- Goal 4: Broadening the means and the scope of basic education
- Goal 5: Enhancing the environment for learning
- Goal 6: Strengthening partnerships by 2000



Assumption: learning will happen

School + Teachers + Students



Annual State of Education Report, India: 2005

- 600 districts in India
- 35% children 7-14 year old: unable to read a single para (grade 1 level)
- 30% could do second-grade maths (basic division)

Banerjee & Duflo, *Poor Economics*,
2011, p 75



Uwezo Survey, Kenya: 2010

- 27% in 5th Grade could not read a simple para in English
- 23% could not read in Kiswahili
- 30% could not do basic division

Banerjee & Duflo, 2011, p 76

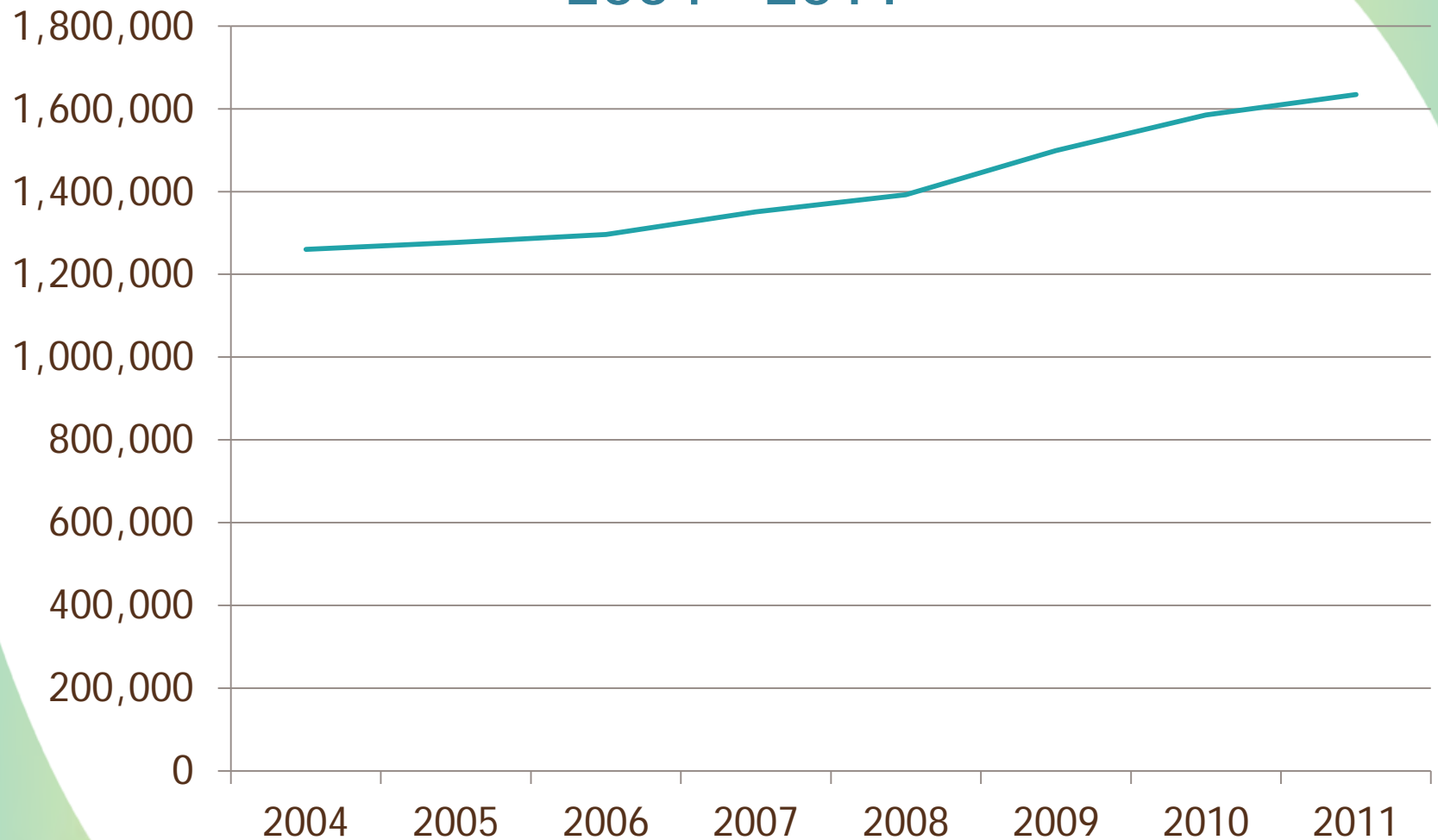


Photo source: *Are Our Children Learning? Numeracy and Literacy across East Africa*, uwezo.net, 2011

Secondary & Tertiary enrolment

Country	Secondary NER	Tertiary GER
Australia	86	83
New Zealand	97	81
Fiji	84	62
Samoa	80	
Vanuatu	52	
Solomon Islands	42	

Tertiary Enrolment in the Pacific 2004 - 2011



Source: [UNESCO Institute for Statistics](#), Retrieved on March 18, 2014.

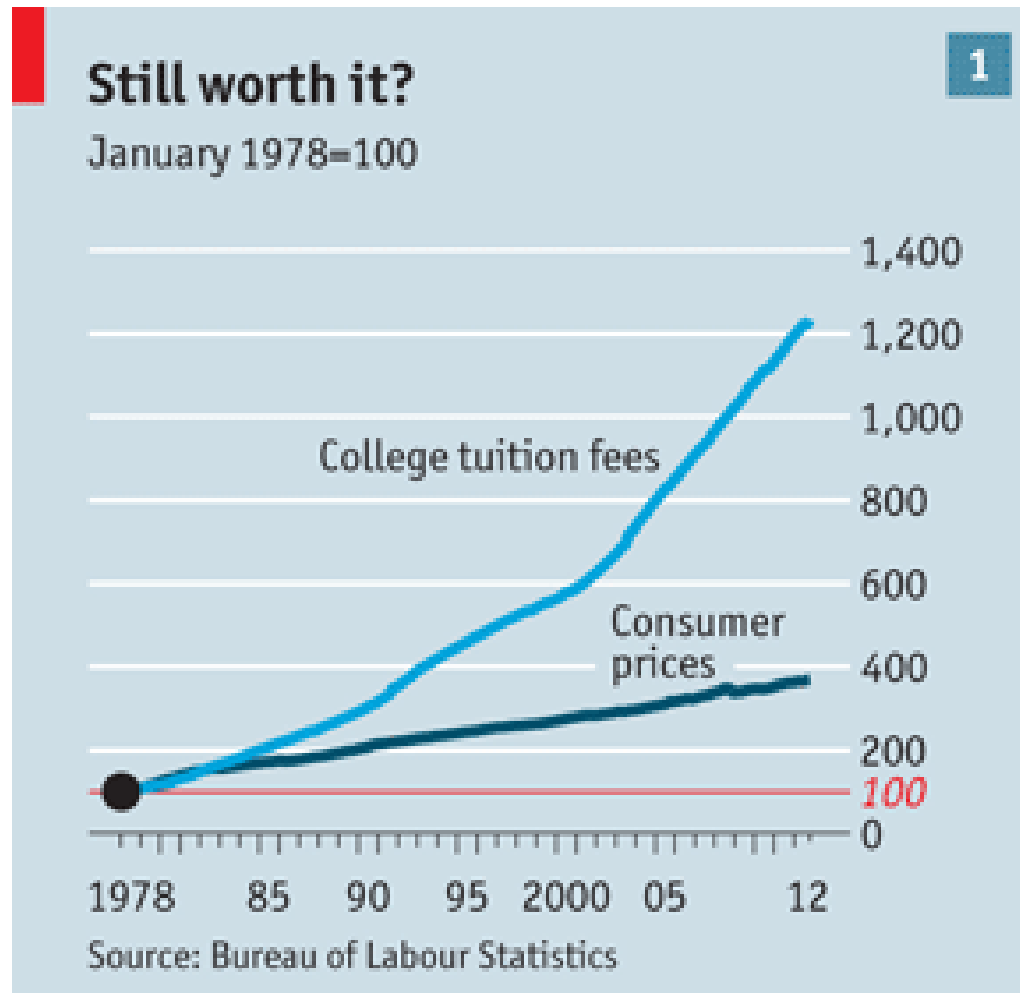


Expected Years of Education

Country	Expected years of schooling, female	Expected years of schooling, male
Australia	20	19.2
New Zealand	20.5	18.8
Samoa*	12.4	11.8
Kiribati	12.4	11.6
Vanuatu*	10.1	10.1
Nauru	9.9	8.9
Solomon Islands	8.9	9.6

* from year 2000 and rest from 2012-2013

Rising Costs of Higher Education



Source: The Economist Dec 1st – 7th, 2012, Higher education, [Not what it used to be.](#)

And yet...

- 36% of college graduates did not show any significant cognitive gains over 4 years

Arum & Roksa, *Academically Adrift*, 2011

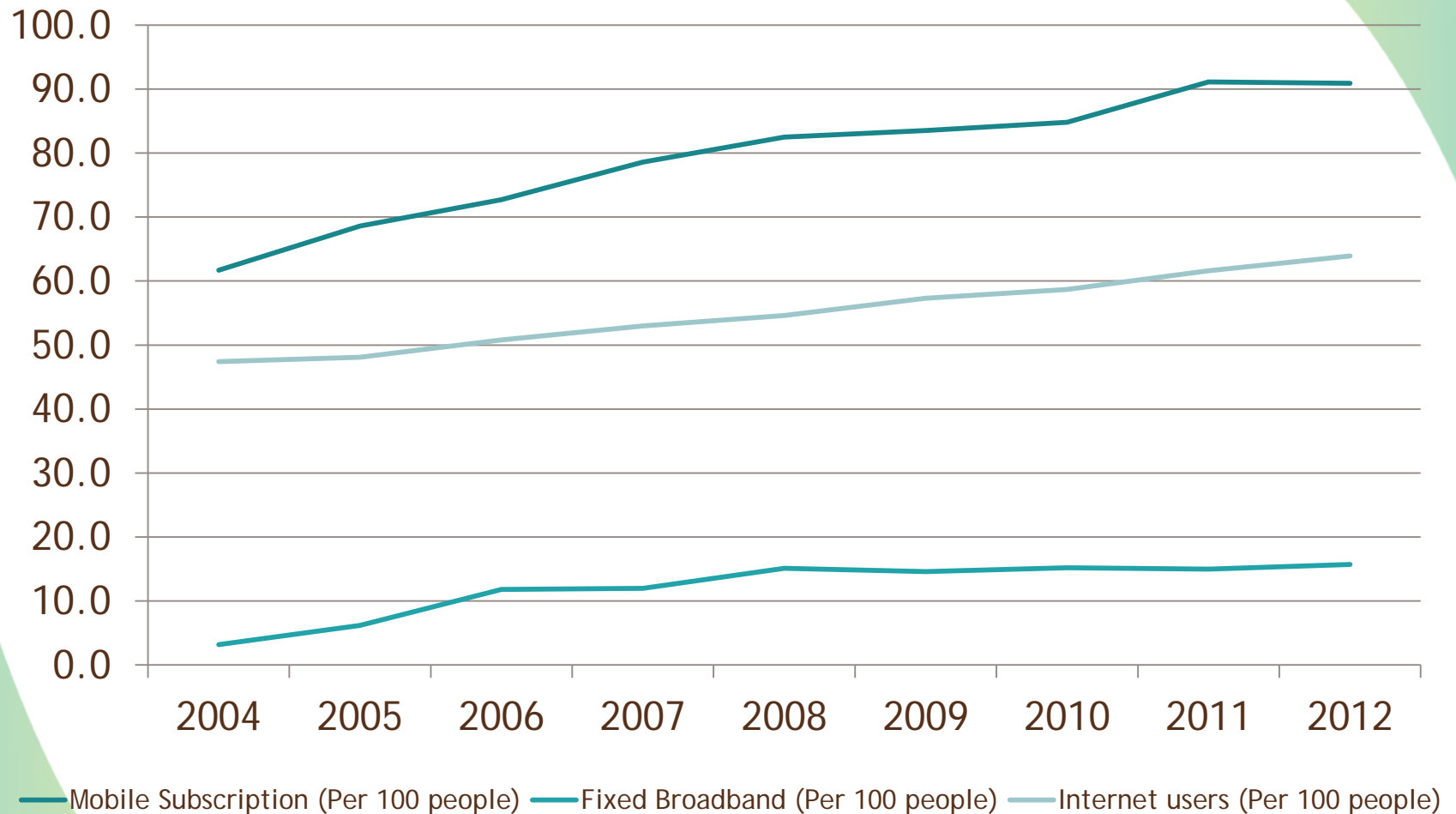
- Half the employers say they have trouble finding qualified graduates to hire

Chronicle of HE and Marketplace



Cover Credit: PHOTOGRAPHS BY PETER HAPAK FOR TIME

ICT in the Pacific 2004 - 2012



Source: [The World Bank DataBank](#), Retrieved on February 25, 2014.

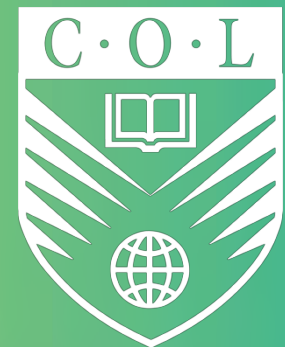


However, without Australia & New Zealand

- Pacific Island Countries & Territories (PICTs) have
 - Broadband penetration only 1%
 - Monthly fees for basic broadband: USD 25—USD1000
 - Only 30% have ICT policies

Secretariat of the Pacific Community, 2010

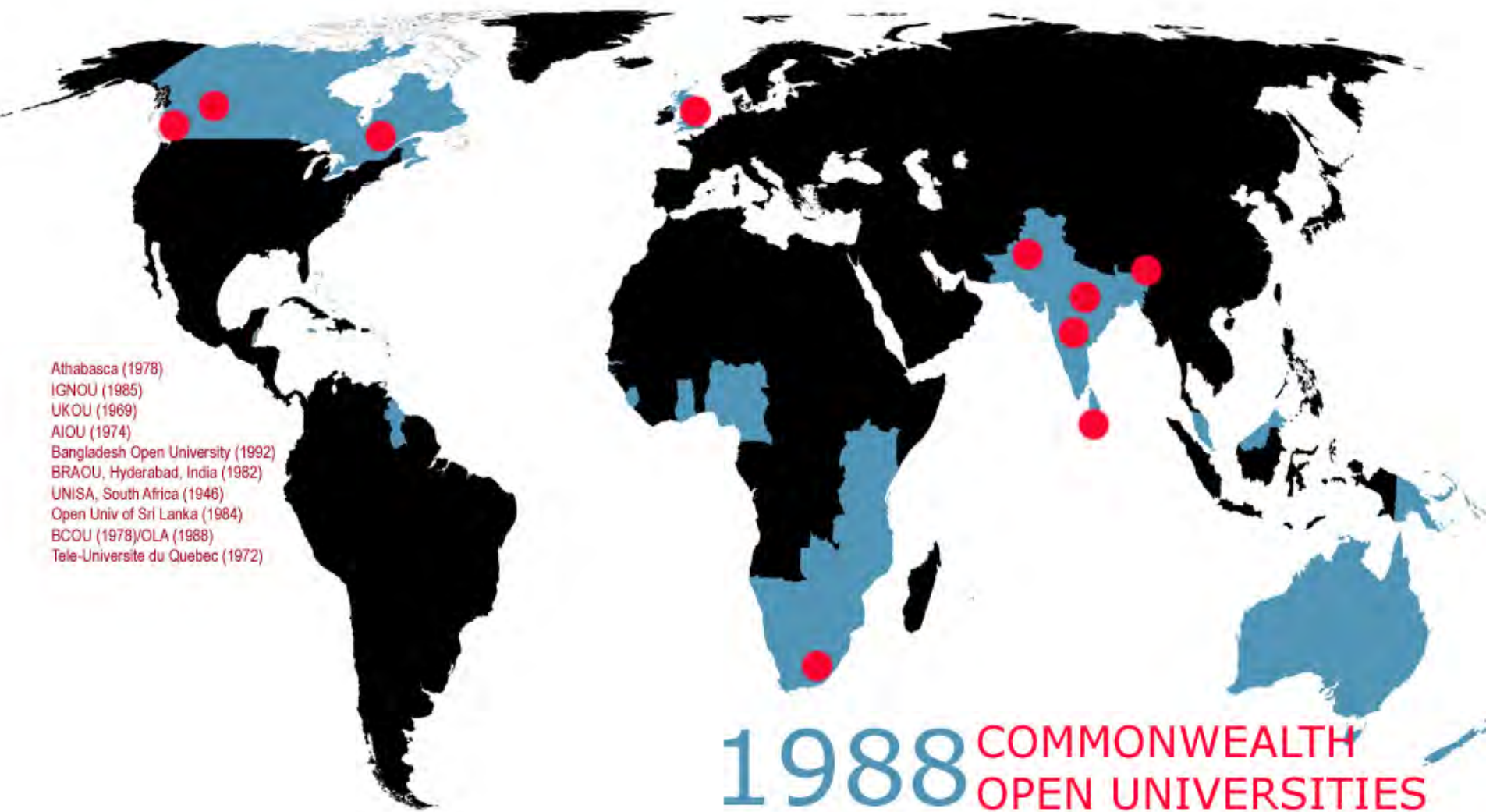
TRENDS IN DISTANCE AND ONLINE LEARNING



I

The Rise of Open Universities





- 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
- Athabasca
- 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

2012 COMMONWEALTH OPEN UNIVERSITIES



Costs in ODL



- Korea (KNOU): annual cost/student \$186 as compared to \$2880 in a campus university



- Thailand (STOU): studies show cost/learner is \$226 compared to \$876 for conventional learning

Open and Distance learning in the developing world –
Perraton (2000)

Dual-mode provision



- University of Nairobi: cost/learner of a residential B.Ed was 3 times that of an ODL programme

For dual mode systems: cost in CCIs were 15% of conventional departments

Perraton (2000)

Open and distance education in mega universities

Country	Institution	Enrolment	% of Campus Cost*
Pakistan	AIOU	456,126	22
China	CCRTVU	2,300,000	40
India	IGNOU	1,187,100	35
UK	OU	203,744	50

*Unit cost per student as a percentage of the average for other universities in the country, NKC, 2004.

The Open University



The Open
University

- highest rated for overall student satisfaction in the 2012 National Student Survey
- rated fifth of 100 UK universities (2003)

Online enrollment as a % of total enrollment, 2002 to 2012: US



Online enrolments in Asia and Latin America

- Asia has highest growth in the world at 17.3%
e.g. Vietnam: 44.3% Malaysia: 39.4%
- The growth rate in Latin America is 14.6%
e.g. Brazil: 21.5% Columbia 18.6%

Ambient Insight Regional Report, October, 2012

III

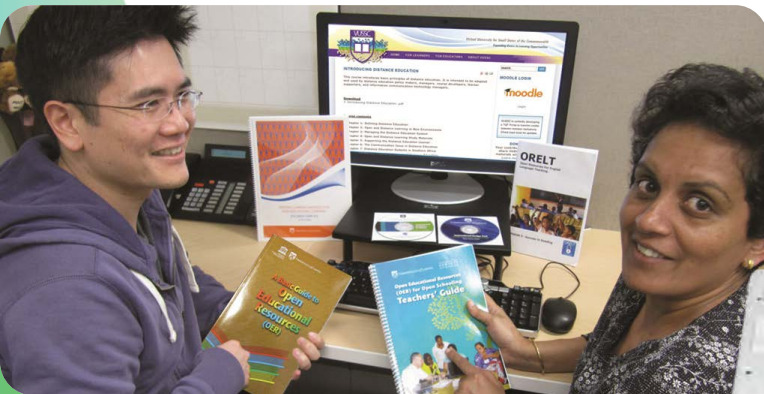
Open Education Resources (OER)



What are Open Education Resources (OERs)?

Materials that are

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



Costs: \$ 10 per teacher

- 20 teacher education programmes in 12 countries
- Materials available in 4 languages
- In 2010, 320,000 teachers benefited

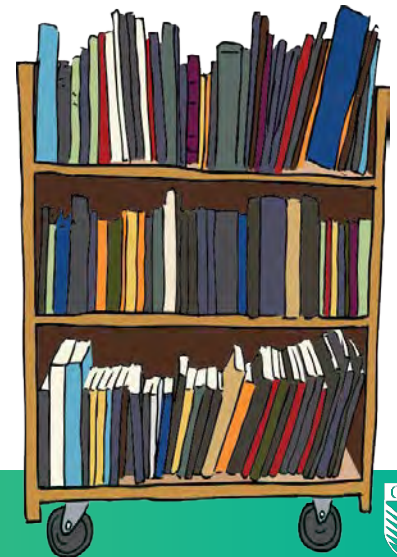
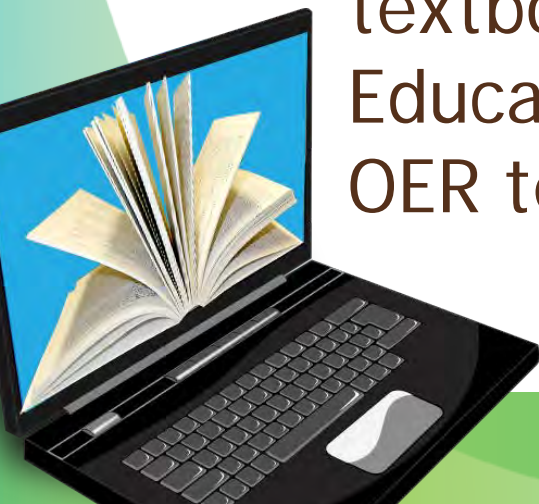


TESSA

Teacher Education in Sub-Saharan Africa

OER and Textbooks

- **Brazil:** a study found that for 75% of students at University of São Paulo, the cost of acquiring books was higher than the family's monthly income.
- **USA:** Utah Open Textbooks project: \$5 per printed and zero for online content
- **South Africa:** R 1.5 billion for textbooks: Department of Basic Education decides to develop OER textbooks.



OERu

- Athabasca University
- Otago Polytechnic
- University of Southern Queensland



Athabasca
University



UNIVERSITY
OF SOUTHERN
QUEENSLAND



James
Taylor



Students
awarded
credible degree or
credential



Participating
Institutions grant
credit for
courses



Open assessment
from participating
institutions



Open student
support via
“Academic Volunteers
International”



Learners
access courses
based solely
on OER



The OER university concept. Adapted from Taylor (2007)

Can OER contribute to Quality?



■ 611 institutions in India

- KSS Women's Engineering College, Andhra Pradesh
- Maya Devi Educational Foundation, Uttarakhand
- Bhilai Institute of Technology, Chattisgarh



IV

Massive Open Online Courses: MOOCs

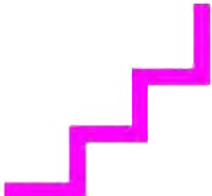
... a MOOC is a type of online course aimed at large scale participation and open access via the web. MOOCs are a recent development in the area of distance education, and a progression of the kind of open education ideals suggested by OER

Wikipedia, 20/09/12

Massive Open Online Courses:

MOOCs

The Coursera logo features a stylized blue infinity symbol followed by the word "coursera" in a lowercase, sans-serif font.

The Future Learn logo consists of a pink, stylized staircase icon to the left of the words "Future" and "Learn" stacked vertically in a bold, black, sans-serif font.

Future
Learn

The Udacity logo features a large, orange, stylized letter "U" above the word "UDACITY" in a smaller, orange, uppercase, sans-serif font.

UDACITY

The edX logo features the letters "ed" in a grey, lowercase, sans-serif font, followed by "X" in a blue, uppercase, sans-serif font.

edX

The 'Massive' in the MOOC

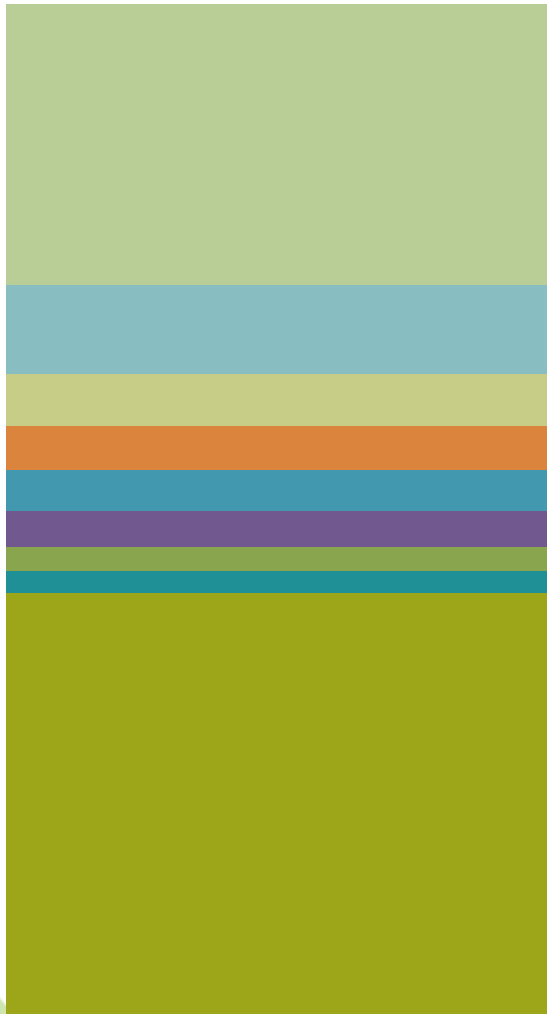
270 000

Students enrolled in Udacity's Computer Science MOOC

200 000

US University first-year students intending to study Computer Science in 2968 4-year degree granting institutions

Student Origins



- United States, 27.7 %
- India, 8.8 %
- Brazil, 5.1 %
- United Kingdom, 4.4 %
- Spain, 4 %
- Canada, 3.6 %
- Australia, 2.3 %
- Russia, 2.2 %
- Rest of the world, 41.9 %

Source: Waldrop, M. M. (2013). *Campus 2.0. Nature*, 495, 160-163.

Courses Offered



- Mathematics, 6 %
- Science, 30 %
- Arts and humanities, 28 %
- Information technology, 23 %
- Business, 13 %

Source: Waldrop, M. M. (2013). Campus 2.0. *Nature*, 495, 160-163.

MOOC for Development (M4D)

- Designed and offered by COL and IIT-Kanpur
- Content created by IIT, COL and Athabasca U, Banking Institute
- Delivery compatible with mobiles using Android
- Experts from different countries for online mentoring
 - 2286 sign ups; 1462 active; 333 certificates (89 for competence, five high distinction)
 - 116 countries
 - Content as OER



Udacity + Georgia Tech

- Masters in Computer Science: \$7,000
- Existing cost: \$40,000
- Will reach 10,000 within the next 3 years



Stanford 2011

- Artificial Intelligence course
- 160,000 registered
- 23,000 completed
- All countries except North Korea

STANFORD
UNIVERSITY



STANFORD ENGINEERING

Oct. 10 - DEC. 16, 2011

INTRODUCTION TO

Artificial Intelligence

In partnership with the Stanford University School of Engineering.
You can join this online worldwide class this fall.



Sebastian Thun

Sebastian Thun is a Research Professor of Computer Science at Stanford University, a Google Fellow, a member of the National Academy of Engineering and the German Academy of Sciences. Thun is best known for his research in robotics and machine learning.

Fast Company Magazine selected him as the first most creative person in business, the UK Telegraph included him in their list of 100 living geniuses, and Popular Science included him in their list of Brilliant Ten. His self-driving car was

Signup is temporarily unavailable. Please check back in a few hours.

[Follow updates](#)

Over 135,000 have signed up!

We're setting up the official registration page right now.

graphixshare.com

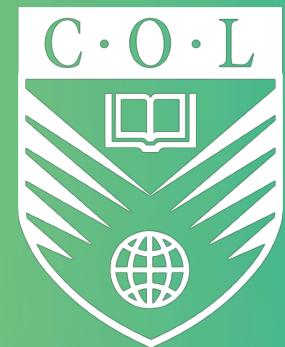
Stanford's [Introduction to Databases](#) and [Introduction to Machine Learning](#) are also available online this fall!

Distance and Online Learning can

- Enhance access and equity by reducing costs
- Improve quality by providing free world class resources
- Provide flexible learning opportunities using appropriate technologies



TOWARDS RELEVANCE & INCLUSION



Relevant Learning develops Capability for

- Personal autonomy/independence of thought
- Livelihoods
- Social relations/identity

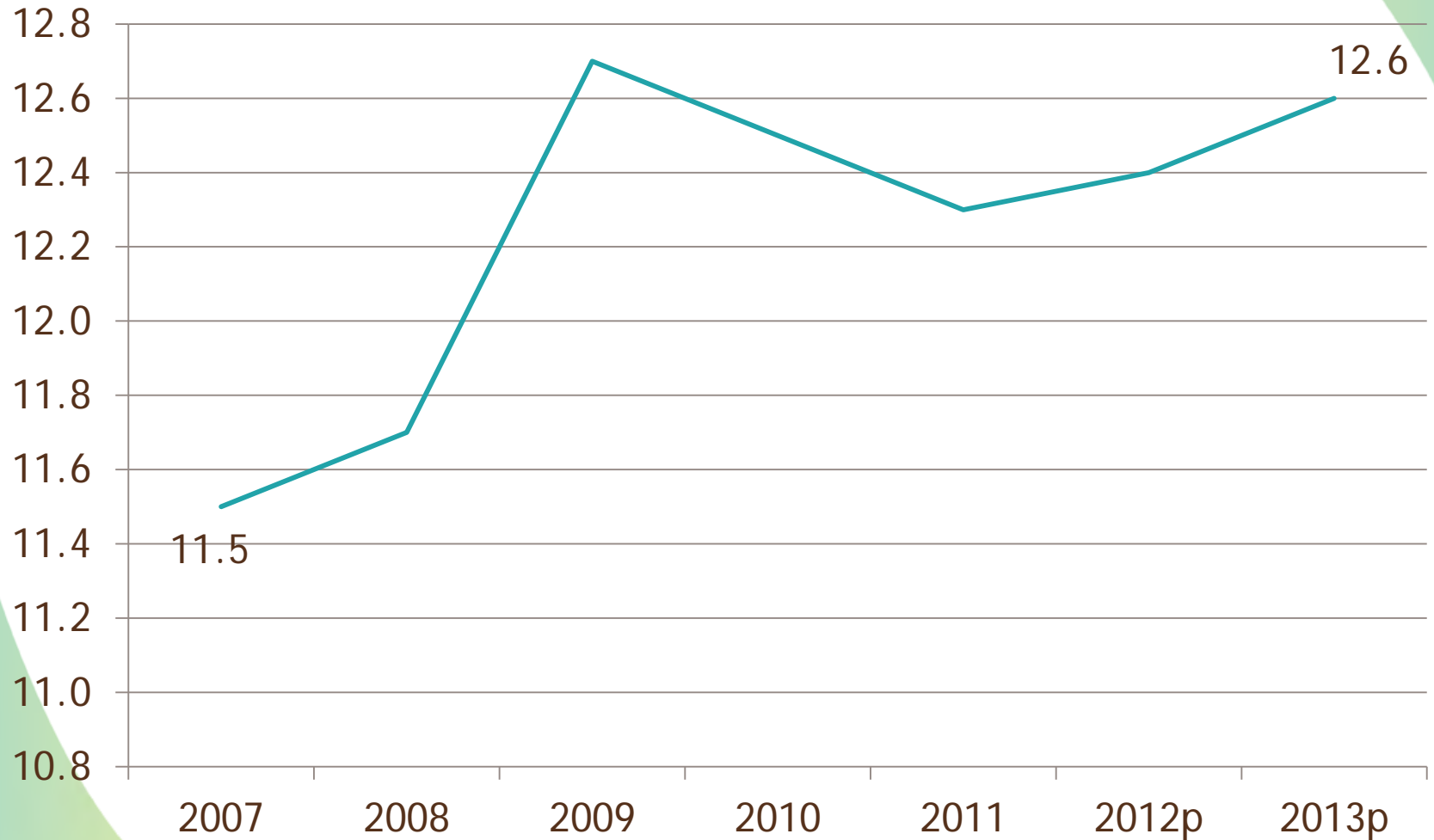
Walker, 2006

Inclusive education means

“Bringing the benefits of education to the poor, the excluded, to indigenous people, to the marginalised and to those with special needs.”

2008-13 Medium term strategy of UNESCO

Global Youth Unemployment Rate 2004-2013



Source: [ILO - Global Employment Trends for Youth 2013](#)



Unemployment

Country/Region	Unemployment %		Youth Unemployment %		Unemployment with Tertiary Education (% of Total Employment)
	Male	Female	Male	Female	
Australia	5	5	12	11	19
New Zealand	6	7	18	16	26
Samoa	5	7	14	22	

Source: Unemployment, 2.5, World Development Indicators, 2013, World Bank, <http://wdi.worldbank.org/table/2.5>

Emigration Rate of Tertiary Educated to OECD Countries

Country/Region	% of Tertiary Educated Population Age 25+
Kiribati	55.7
PNG	27.8
Samoa	73.4
Solomon Islands	25.7
Tonga	75.6
Tuvalu	64.9

Source: Movement of People across Borders, 6.13, World Development Indicators, 2013, World Bank, <http://wdi.worldbank.org/table/6.13>

“Employers, Education Providers and Youth Live in Parallel Universes”

Country	% of youth who believe that their Secondary Education Improved their Employment Opportunities	% of Employers who believe that new graduates are not adequately prepared for entry level vacancies
Brazil	59	48
India	54	53
Turkey	46	56
United States	44	45

Source: McKinsey Survey, August-September 2012, in *Education to Employment: Designing a System That Works*, McKinsey Center of Government

Three types of skills

- Foundation skills
- Transferable skills
- Technical and vocational skills

UNESCO: GMR, 2012

Skills for employability?

- **Non-cognitive skills:** leadership, communication, honesty/ethics, teamwork and flexibility
- **Cognitive skills:** analytical and critical thinking and the ability to learn

Burnett, 2012

Education to Employment Strategy in Europe

- **Innovate** with design, course delivery and financing to make education more affordable and accessible
- **Focus** on young people, employers and education providers on improving employment readiness
- **Build** the supporting structures that allow the best intervention to scale up
- **Share** relevant practices on matching labour market demand and supply

Source: *Education to Employment: Getting Europe's Youth Into Work*, McKinsey Center of Government
http://www.mckinsey.com/insights/social_sector/converting_education_to_employment_in_europe

Addressing Challenges

- Transform the curriculum to integrate cognitive and non-cognitive skills
- Harness appropriate technologies
- Facilitate the convergence between education, the labour market and the learner





Open Schooling

- Open schooling responds to the increasing demand for secondary education at scale and at lower costs.
- It has the potential for complementing the conventional school system and using ICTs to scale up education.



Open Schools in the Pacific

- OSs in Tonga; Kiribati; Solomon Islands
- Vanuatu Open School launched
- Te Kura Correspondence School twins with Vanuatu
- Convergence of Academic & Vocational courses





























VUSSC in the Pacific

- University of Samoa, sustainable agriculture
- TQF: Vanuatu, Tuvalu, Tonga, PNG, Samoa and the South Pacific Board for Educational Assessment (SPBEA).



Some of the Institutions that participate in VUSSC

-  National University of **Samoa**
-  National University of Lesotho
-  Botswana College of Distance and Open Learning (BOCODOL)
-  University of Swaziland
-  Maldives College of Higher Education
Fondazzjoni Temi Zammit, Malta
-  University of **Papua New Guinea**
-  Antigua State College
-  Dominica State College
-  University of Belize
-  Clarence Fitzroy Bryant College,
St. Kitts & Nevis
-  College of The Bahamas
-  University of Seychelles
-  Namibian Open Learning Network
-  Sir Arthur Lewis Community College,
St. Lucia
-  St. Vincent and the Grenadines
Community College
-  St. Vincent and the Grenadines
Teachers College
-  University of Cyprus
-  Polytechnic of Namibia
-  University of Mauritius
-  Seychelles Agricultural Agency
-  Samuel Jackman Prescod Polytechnic,
Barbados
-  Seychelles Maritime Training Centre
-  **Vanuatu** Institute of Technology
Caribbean Maritime Institute
-  Lesotho College of Education
-  Maldives National University
-  **Tonga** Institute of Higher Education
-  Open University of Mauritius

If someone can give me the skills and the opportunity to work, I know I can achieve my goals.

young woman, Ethiopia
GMR, 2012, p.13





COMMONWEALTH *of* LEARNING



Learning for Development