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

Photo Credit: Pacific Islands Forum Secretariat — in Kiribati
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
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 COMPRISSES 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

<table>
<thead>
<tr>
<th>Country</th>
<th>HDI</th>
<th>Maternal Mortality per 100,000 births</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>0.938</td>
<td>7</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0.919</td>
<td>15</td>
</tr>
<tr>
<td>Tonga</td>
<td>0.71</td>
<td>110</td>
</tr>
<tr>
<td>Samoa</td>
<td>0.702</td>
<td></td>
</tr>
<tr>
<td>Fiji</td>
<td>0.702</td>
<td>26</td>
</tr>
<tr>
<td>Kiribati</td>
<td>0.629</td>
<td></td>
</tr>
<tr>
<td>Vanuatu</td>
<td>0.626</td>
<td>110</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>0.53</td>
<td>93</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>0.466</td>
<td>230</td>
</tr>
</tbody>
</table>

Source: Human Development Report 2013, UNDP
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

## Secondary & Tertiary enrolment

<table>
<thead>
<tr>
<th>Country</th>
<th>Secondary NER</th>
<th>Tertiary GER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>86</td>
<td>83</td>
</tr>
<tr>
<td>New Zealand</td>
<td>97</td>
<td>81</td>
</tr>
<tr>
<td>Fiji</td>
<td>84</td>
<td>62</td>
</tr>
<tr>
<td>Samoa</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Vanuatu</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>42</td>
<td></td>
</tr>
</tbody>
</table>

Source: [UNESCO Institute for Statistics](https://www.unesco.org), retrieved in March 2014
Tertiary Enrolment in the Pacific
2004 - 2011

## Expected Years of Education

<table>
<thead>
<tr>
<th>Country</th>
<th>Expected years of schooling, female</th>
<th>Expected years of schooling, male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>20</td>
<td>19.2</td>
</tr>
<tr>
<td>New Zealand</td>
<td>20.5</td>
<td>18.8</td>
</tr>
<tr>
<td>Samoa*</td>
<td>12.4</td>
<td>11.8</td>
</tr>
<tr>
<td>Kiribati</td>
<td>12.4</td>
<td>11.6</td>
</tr>
<tr>
<td>Vanuatu*</td>
<td>10.1</td>
<td>10.1</td>
</tr>
<tr>
<td>Nauru</td>
<td>9.9</td>
<td>8.9</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>8.9</td>
<td>9.6</td>
</tr>
</tbody>
</table>

* from year 2000 and rest from 2012-2013

Source: [Statistical Yearbook for Asia and the Pacific 2013](https://www.unescap.org) UN ESCAP
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

- Half the employers say they have trouble finding qualified graduates to hire
  *Chronicle of HE and Marketplace*
ICT in the Pacific 2004 - 2012

However, without Australia & New Zealand

- Pacific Island Countries & Territories (PICTs) have
  - Broadband penetration only 1%
  - Monthly fees for basic broadband: USD 25—USD 1000
  - Only 30% have ICT policies

Sectt of the Pacific Community, 2010
TRENDS IN DISTANCE AND ONLINE LEARNING
The Rise of Open Universities

UNISA

The Open University

Athabasca University

IGNOU

THE PEOPLE'S UNIVERSITY
Athabasca (1978)
IGNOU (1985)
UKOU (1969)
AICU (1974)
Bangladesh Open University (1902)
BRAOU, Hyderabad, India (1982)
UNISA, South Africa (1946)
Open Univ of Sri Lanka (1984)
BCOU (1978)/OLA (1988)
Tele-Universite du Quebec (1972)
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

<table>
<thead>
<tr>
<th>Country</th>
<th>Institution</th>
<th>Enrolment</th>
<th>% of Campus Cost*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>AIOU</td>
<td>456,126</td>
<td>22</td>
</tr>
<tr>
<td>China</td>
<td>CCRTVU</td>
<td>2,300,000</td>
<td>40</td>
</tr>
<tr>
<td>India</td>
<td>IGNOU</td>
<td>1,187,100</td>
<td>35</td>
</tr>
<tr>
<td>UK</td>
<td>OU</td>
<td>203,744</td>
<td>50</td>
</tr>
</tbody>
</table>

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

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

Source: [http://www.open.ac.uk/about/main/the-ou-explained/facts-and-figures](http://www.open.ac.uk/about/main/the-ou-explained/facts-and-figures)
Online enrollment as a % of total enrollment, 2002 to 2012: US

Source: Grade Change - Tracking Online Education in the United States I.E. Allen and Jeff Seaman
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
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

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
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

Coursera

Future Learn

UDACITY

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%

Courses Offered

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

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

Photo source: http://www.m4dev.org/m4d.pdf
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
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
## Unemployment

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Unemployment %</th>
<th>Youth Unemployment %</th>
<th>Unemployment with Tertiary Education (% of Total Employment)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Australia</td>
<td>5</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>New Zealand</td>
<td>6</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>Samoa</td>
<td>5</td>
<td>7</td>
<td>14</td>
</tr>
</tbody>
</table>

Source: Unemployment, 2.5, World Development Indicators, 2013, World Bank, [http://wdi.worldbank.org/table/2.5](http://wdi.worldbank.org/table/2.5)
## Emigration Rate of Tertiary Educated to OECD Countries

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>% of Tertiary Educated Population Age 25+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kiribati</td>
<td>55.7</td>
</tr>
<tr>
<td>PNG</td>
<td>27.8</td>
</tr>
<tr>
<td>Samoa</td>
<td>73.4</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>25.7</td>
</tr>
<tr>
<td>Tonga</td>
<td>75.6</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>64.9</td>
</tr>
</tbody>
</table>

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

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

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 Member States
VUSSC in the Pacific

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

Source: http://talloiresnetwork.tufts.edu/national-university-of-samoa-samoa/
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

photo: ILRI/Ranjitha Puskur
Learning for Development