Infrastructure and Access Challenges and Opportunities for Asia and the Pacific

UNESCO Asia and the Pacific Regional Bureau for Education
Bangkok, Thailand

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To empower interested learners from around the globe who lack access to higher education.

UNESCO Paris Declaration regarding OER in 2011

Our cables have been stolen... cannot access internet!

... access to email is limited.
There are still 58 million children of out of school globally. Of these children, 25 million are in the rural, low-income, post-conflict regions that UWS targets. Creating a fair, inclusive, and equitable future requires us to recognise and meet the needs of children in some of the most remote, excluded and far-reaching communities of the world.

Inclusive and Equitable Quality Education
SDGs – How can we attain this goal?

* Goal 4: Ensure inclusive and equitable quality education and promote life-long learning opportunities for all

Empowerment & Sustainable Education Development

- Building capacity, capability and community
- Sustainable development - focus on growth and development of community and environment
- UNESCO Sustainability Goals
Sustainability Goals - UNESCO

- Poverty eradication
- Food security and nutrition and sustainable agriculture
- Rural Development
- Education
- Gender Equality and Women’s Empowerment
- Water & Sanitation
- Energy
- Employment, decent work for all and social protection
- Green economy in the context of sustainable development and poverty eradication
- Sustainable Tourism
- Industry
- Africa
- Disaster Risk Reduction
- Chemicals & Waste
- Atmosphere
- Biodiversity
- Integrated decision making and participation
- Capacity building
Challenges and Opportunities

- Infrastructure and access
- Community building: Regional and glocal partnership & collaboration
- Quality framework: design, online educator, accreditation
- Equity, diversity and inclusivity and glocalization
- Corporate greed and external agents of change
- Community based empowerment and development
- Pedagogical purpose to lead technology integration
- Intellectual Property Rights
Internet broadband in Malaysia as compared to other Asian countries

11. FIXED (WIRED) BROADBAND PER 100 INHABITANTS, ASEAN COUNTRIES

<table>
<thead>
<tr>
<th>Year</th>
<th>Singapore</th>
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<th>Thailand</th>
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12. FIXED (WIRED) BROADBAND PER 100 INHABITANTS COMPARED WITH 10 BIGGEST TRADING PARTNERS, MALAYSIA

<table>
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<th>Year</th>
<th>South Korea</th>
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<th>Japan</th>
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Source: MCMC, ITU
Technology-enabled learning?

**Perspectives on technology-enabled learning**

* Creativity, innovative (context-based) solutions & best practice
* Innovation = technology: myth?
* Pedagogy driven technology to enhance learning
* Reframe our neighbourhood as multidisciplinary learning space
* Engage learners in divergent thinking and harvesting ideas

**Equity, Diversity & Inclusivity**

* Matters related to equity (access to technology, enable learning, provide technology resources)
* Diversity of approaches and perspectives to enhance learning through technology integration
* Inclusive of diverse learners, marginalised populations and glocal communities (local & global)
Critical review

- Whose goals are reflected in ONLINE/MOOC objectives?
  - Access for whom?
  - Barriers to access?
  - USA based MOOC providers – e.g. Coursera
  - MOOC instructors – training and qualifications to facilitate online learning
  - Participant diversity
  - Other stakeholders e.g. HEIs and Ministry of Education

Yanez (2014, p.8)
Pedagogic purpose

Education enhancement or commercial gain?

“International advantages include enabling universities to be more visible overseas, building their reputation and global brand”

(ICEF Monitor, 2013)
• Partnerships: Support and promote integration of pedagogical dimensions.
• A missing dimension is a missing partnership

Quality assurance:
Design, online educators, accreditation

* Quality of content design, online educator training, accreditation of courses, policies and practices governing online learning...
* “offering a watered down curriculum to them creating a breed of superstar professors with outside influence”

(ICEF Monitor, 2013)
Glocalization of learning

- Context-based learning, glocalization of learning, application and relevance to natural and human disasters, needs and demands for enhanced quality of life and sustainable living...
- Local and global level engagement
Empowerment, development and community based models

* Open, transparent dialogue, planning and implementation, community driven, needs based, stakeholder wide consultation...
Response to local community needs, adoption of innovations, training and skills upgrade, enabling local community to use and repair equipment, empowering local users...

“Concerns have been expressed about MOOCs’ domination by US developers, the one-way transfer of educational content from rich nations to poorer nations, and the cultural damage that could occur in the wake of “a wave of intellectual neo-colonialism”

(ICEF Monitor, 2013)
Lessons from MOOCs in Asia

* 1st Asian MOOC – Hong Kong
  * Sharif created first MOOC – Science, Technology & Society in China
  * “faceless large mass” and “more time consuming than face-to-face teaching” (ICEF, 2013)

* MOOC in China
  * China: August 2013 – National Taiwan U & Chinese University of HK Language challenge – Coursera Chinese language course“
  * Chinese courses need to be “made in China not America,”
Lessons from MOOCs in Asia

* MOOC in Malaysia
  * First collaborative MOOC among 22 HEIs
  * Supplements on-going HEI programs

* MOOC in China
  * Professor Wang Defeng of Fudan University taught an introductory philosophy class to 1,072 students from 30 schools across Shanghai”
    - “not a true MOOC… not open to global registrants”
Online Learning Challenges #1

Concerns

* Culturally and regionally relevant content?
* Localized and glocalized framework?
* Exported solutions versus local solutions
* Technology access & training?
* Language of online – English?
* Diffusion of innovation
* Certification recognition
* Infrastructure

* (Yanez, 2014, p.16)

Technology access

* “The first is a technological barrier: MOOCs are designed to work on a computer with broadband Internet, something that in many developing countries, less than a quarter of the general population has access to”

* (Yanez, 2014, p.18)
Online Learning Challenges #2

* Revenue models
* Credentialing & accreditation
* Course completion rates
* Student authentication

(Duarte.com)

* Business models
* Students pay for certificates
* Institutions pay for sponsored classes
* Additional paid resources for students

(Duarte.com)
“Coursera earned US $220,000 in the first quarter after it started charging for verified completion certificates under a programme called Signature Track, and also earns cash from Amazon.com if course enrollees buy books recommended by professors”
Importing models of online learning – the problem

* Lessons from the MOOC design and implementation trends
MOOCs Around the World - Concerns

- Quality training of online educators
- Models of MOOC design and implementation
- Assessment strategies
- Teaching practices
- Inadequate motivation
- High Attrition

(Curtis Bonk, 2015)
Important considerations in online learning

* Academic quality in online learning same high standard as face-to-face program.
* Good infrastructure key to successful blended learning models.
* Blended learning may exclude learners with disability and learners with diverse learning preferences.
* Partnerships important for sustainable learning programs.
* Understanding of blended learning requirements (infrastructure, training, support and guidance) is critical to effective implementation.
Reframing our neighbourhoods as learning spaces

- Glocal experience = local plus global
- Partnerships with all stakeholders: community, industry, campus departments, Schools, Faculties, staff and students
- What multidisciplinary opportunities do you see in your neighbourhood?
Empowerment led development

* Pedagogic Purpose
* Community First
* Dialogue ongoing
* Local socio-economic issues
* Skills development education
* Literacy & communication
* Entrepreneurship opportunities
* Enabling paradigm
Effective Management of Online Learning

- Engaging all stakeholders
- Closing the loop
- Continuous education development.

(Patel, 2014, p.115)
Partnership in technology-enabled learning

Building Educational Development Partnerships

- Stakeholder meetings
- Negotiation of perspectives on design and implementation
- Technical support (ITS, eSolutions...)
- Educating the educators (training and development programs)

(Adapted from Patel, 2014, p.33)

Interactive Model of Online Learning Design
Quality – policy and practice

ASEAN QUALITY ASSURANCE NETWORK (AQAN)

Established under the Kuala Lumpur Declaration 2008

Main objectives:
• to promote networking among ASEAN QA agencies
• to learn about each other's system of assuring quality in higher education
• to consider the establishment of an ASEAN QA network

Member countries
Cambodia, Philippines, Lao PDR, Myanmar, Indonesia, Vietnam, Singapore, Malaysia, Thailand
Learner Mobility

ASEAN MOBILITY PROGRAMME FOR STUDENTS (AIMS)

AIM:
To promote student mobility involving students from ASEAN countries, where programme costs are shared amongst stakeholders

COORDINATED BY SEAMEO-RIHED

IMPLEMENTATION:
• Duration of minimum one semester
• Credits received for each subject registered at host university
• Credit transfer system used: UMAP UCTS
CHALLENGES AND OBSTACLES

- Students have to extend their duration of study (home-university);
- Students having narrow views on potential destinations (host university);
- Lack of incentives for academic faculty to promote and support study abroad;
- Lack of knowledge on partners’ universities;
- Course matching between universities and credit transfer;
- Political, economics, geographical challenges.

HIGHER EDUCATION WILL PLAY A CRUCIAL ROLE IN SUPPORTING THE CONTINUED ECONOMIC INTEGRATION OF ASEAN

- Higher education system must employ diverse strategies to promote international interactions among the indifferent as well as among the motivated.
- Recognize the Malaysian AIMS students’ learning experiences after they return in order to minimize them from having to extend their study duration.
- Improve and sustain the AIMS program so as to align and support harmonization of higher education in the ASEAN region.
Quality

- **Quality assurance, accountability and qualification frameworks**
- The need for internationally recognised standards among and between nations has become urgent.
- Explosive growth of providers raises questions in regards to quality.
- Mobility has made comparability of qualifications a key area to be identified.
- Need to integrate national, regional and international efforts.
The Private Revolution

- The Private Revolution
- 30% of global higher education enrolment globally is in private institutions.
- A further trend is the privatisation of public universities. HEIs are being asked to earn more of their operating expenditure.
- Can contribute to commercialisation and conflict with traditional university roles.
The role of the internet in communicating knowledge.

Social networking and the potential for collaboration over time and space.

Increasing division between those with access and those without.

Distance learning being transformed by ICT.
HE across borders

Cross-Border Higher Education

- Requires cooperation between countries and agreements between universities
- Use ASEAN dimensions as platform to develop cross-border education initiatives
- Regional Credit Transfer System (SEA-CTS)
- Regulation / recognition framework should be developed
- Organizing summer workshops for academic exchange on academic topics.
Further Research

Areas Requiring Further Research:

2. Sustainable Development and Social Responsibility
3. Cross-border education
4. Higher Education and National Development
5. Ensuring Quality
6. Research and Innovation
7. Good Governance
Distance Education – The Mandate

**Social Mandate of Distance Education**

- DE has had a mandate to provide access to underserved populations, particularly in developing countries.
- DE has been extremely successful at providing quality education to disadvantaged groups.
- Existed on the “margins” of conventional universities for many years.
Recommendations: Online Learning in ASEAN Century

- Partnership driven
- Grassroots up
- Empowerment models
- Participatory, Transparent and inclusive
- Equity and diversity principles
- Glocalization of learning
- Diffusion of innovations in line with pace of sustainable change
- Home grown vs imported models
- Interactive model of diffusion innovation (Patel, 2009)
Challenges in cross-border negotiation of norms for engagement
Infrastructure and access issues
Existing structures to be redefined and renegotiated
New structures to be developed
Equity, diversity & inclusivity in technology enabled learning

* Whom have we left behind or outside the learning space and why?
* Transgression of the rights of learners and teachers
* Intellectual property rights: What have we “borrowed”, “stolen” and reinvented as our own?
* Committed to a social justice and responsibility ethic and visibility in learning design and practice
* Exclusion and/or eradication of voices, histories and cultures
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