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The Commonwealth
Comprises 52 nations around the world
Commonwealth Heads of Government Meeting
Vancouver, 1987
To help Commonwealth governments and institutions use various technologies to improve access to learning in support of development
Context
GOAL 4

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

SUSTAINABLE DEVELOPMENT GOALS
More at sustainabledevelopment.un.org/sdgsproposal
The Youth ‘Bulge’: 1.2 billion 15-29

Of the 2.2 billion population of the Commonwealth, 60% under the age of 30

Source: The Commonwealth Youth Programme, last accessed on October 12, 2017
Gross Enrolment Ratio 2015 by Region and Level of Education

Source: UNESCO Institute for Statistics, Last accessed on October 12, 2017
MOOCs can be an ally in Open Learning

- Provide access to **quality** learning at **low costs**.
- Build **capacity at scale**.
- Improve learning outcomes, through the use of alternative pedagogical approaches.
- Be integrated within national quality assurance frameworks.
MOOC as a Tech Suite....

- Scalability
- Media Technology
- Assessment Techniques Online
- Online Event/Conferencing Management
Diversification in MOOCs

- No longer limited to credit orientation
- Not limited to Higher Education sector
Direct Use of a MOOC Service

From Climate Science to Action
Adaptation of Tech

XuetangX has Eight Million learners (Sep 2017)
Re-engineering the Tech Suite in MOOC

MOOC portal of Ministry of HRD, India (built by Microsoft)

For-profits in China, such as 163.com
Why is re-engineering necessary for MOOC4D in Open Education

• Reaching out to Faculty with no exposure to TEL
• Learners not comfortable with peer-grading and online socialising paradigms in industry-grade MOOCs
• Strongly felt need for mentoring in the course space
• Video streaming demands bandwidth
  • implies reasonable or high costs to learners
COL’s MOOC4Dev

• Adaptation
• Re-engineering and innovation
COL and Indian Institute of Technology Kanpur partnership

- MooKIT platform
  - Scalable to tens of thousands at low cost
  - Uses publicly accessible video streaming services (such as YouTube)
    - Content is open (OER)
- Audio track of video accessible on a phone
- Scripts of talks and slides available (as PDF)
- Integrates Social Media into the course discussion space
COL’s MOOC4D: Overview

18 MOOCs on topics related to Human and Sustainable Development

112 countries

3 MOOCs using just basic cell phones as access devices

20,000 learners
mooKIL Platform Deployment

~112,000 learners in past 30 months

Platform used for capture of analytic data covers more offerings by partners
• Videos and text used
• Material in video format was couriered on DVDs and memory cards to Sierra Leone and Zambia
• The groups completed online assignments and examination; some eligible for certification
Using ICTs to Enrich Teaching and Learning

• Collaboration with African Virtual University (AVU) – 2015
  • 1,692 registered
  • Use of video clips, graphics and games

Kenya, South Africa, India, United States, Nigeria, Uganda, Trinidad & Tobago, Jamaica, Pakistan, Tanzania
“…..presenters were amazed at the contributions and cross cultural exchanges that happened on Social Media”.

Ian Thomson, Course Manager
Platform support
MOOCs for Agriculture

- Online learning
  - Food and Ag sector underserved
- A consortium conceptualised by COL, anchored at IIT-Kanpur
Important to allow content access in multiple formats
Certificate is not the main source of motivation.
Methods of Access
(Data from a MOOC, 10 October 2017)

Devices Used

- **1,114** desktops
- **780** phones
- **15** tablets

Device Names:

- LS
- Micromax
- Asus
- vivo
- CPH1701
- Lenovo
- iPhone
- Samsung
- Generic
- Moto
- XiaoMi
- Other
An “Off-lined” MOOC?
mooKIT is a powerful MOOC management system that instructors, learners and system administrators find easy to work with. mooKIT has been built ground up at Dept. Of Computer Science and Engineering, IIT Kanpur, which is well known for its excellence in education and research.

mooKIT's unique architecture makes it highly customisable and cost-effective at any scale. As of now, tens of courses have been offered to more than 100000 students.

mooKIT Offline tries to address the challenges with internet connections. Archived courses can now be accessed using an intuitive mobile app without an internet connection, which also makes content sharing much easier. All the course information like announcements, resources and forums from the previous run can be accessed, thus giving a complete MOOC experience without internet.

COURSES

Introduction to programming in C
TELMOOC
Mooc on Mooc
Learning PHYSICS through SIMPLE EXPERIMENTS
Integrated Pest Management (IPM)
Audio-only MOOC for Semi-skilled Gardeners
Audio-only MOOC
Correlation between clips listened to and completion rates
Reaching the Bottom Billion

• Content should be designed for delivery in low bandwidth
• Be able to deliver on a basic phone
• Social media integration is a must
• Online peer-to-peer interactions must be supplemented with blended approaches
• Content should be open (i.e. OER)
Quality
Guidelines for Quality

COL Guidelines for MOOCs

• Purpose decides quality indicators
• Context critical
• Accreditation agencies looking for credit equivalence
Guidelines for QAA of MOOCs

- Platform and Provider
- Credits and Credentials
- Institutions, Instructors
- Learners
- Instructional Design
- Resources

Presage

Process
- Learning Process
- Engagement and Participation

Product
- Completion
- Satisfaction
Malaysian MOOC Credit Transfer

FIGURE 1: EVALUATION PROCESS ON CREDIT TRANSFER FOR MOOCS

Source: Prof. Dato’ Dr. Mohamed Amin Embi (UKM)

Guideline of Credit Transfer for MOOCs 125
Issues for Quality

- Student verification and academic integrity
- Peer assessment needs to be accepted
- Delinking of the institutions which teach and the institutions which offer credential
Implications for Policy
National Policy

• View MOOC as a new, interactive broadcast medium
• Develop credible QA and Credentialing framework
• Focus on Higher Education as well as advanced skills development/in-service training
• Develop and nurture a capable and robust infrastructure
• Manage costs: adopt OER policies
'Register at Swayam to become a trained teacher, or lose your job': Javadekar

Prakash Kumar, DH News Service, NEW DELHI, Sep 5 2017, 18:39 IST
Rise of the Messaging Paradigm

Data from BI Intelligence, Sep 2016
Mainstreaming of MOOCs in developing countries national systems

Integration of two technologies:

**Messaging** space for interactions

Use of **Blockchains** for preserving integrity of learner records
Finally, for developing countries

• New model of MOOCs required, one that reaches the unreached
• MOOCs will supplement rather than replace traditional institutions
• Excellent platform for skilling at scale and speed
MOOCs

A tool for achieving SDG 4
Thank You