Success Stories in Climate Change Education Advancement in the Asia-Pacific Region: UKM’s Experience in Blended Courses

Hoy-Yen Chan, Mazlin Bin Mokhtar & Sharifah Zarina Binti Syed Zakaria
Introduction: UN-CECAR

• The University Network for Climate and Ecosystems Change Adaptation Research (UN-CECAR) is a joint initiative of more than 20 leading universities across Asia
• It is committed to develop postgraduate educational and research programmes on climate and ecosystems change, adaptation and sustainability science
• The United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS) acts as the Secretariat
• Building Resilience to Climate Change (BRCC) courses have been developed since 2009
Introduction: BRCC Courses

• BRCC I: Science, Impacts and Vulnerability (15 lectures)
• BRCC II: Approaches to Adaptation (15 Lectures)
• 2009-2013: Were conducted through a typical classroom style, registered participants & lecturers travelled to UNU, Tokyo
• To reduce the operational costs and increase the number of participants, blended learning has been used as the teaching tool since 2014
Blended BRCC Course (2014-2015)

• Conducted *simultaneously* at partner institutions
  1) United Nations University (UNU), Tokyo Japan (Host Coordinator)
  2) National University of Malaysia (UKM), Malaysia
  3) Gadjah Mada University, Indonesia
  4) Indian Institute of Technology (IIT), Kharagpur, India
  5) Australian National University (ANU), Australia
  6) The University of Tokyo, Kashiwa Japan
  7) Chulalongkorn University, Bangkok Thailand
  8) Vietnam National University, Vietnam

• Applicants decided which institution they would like to go
• **Target Participants:** Postgraduates, researchers, decision/policy-makers (*Multi-disciplinary*)
• Lecturers delivered lectures at own or partner institutions
Blended BRCC Course: Learning Platform

- Moodle
- **Instructors**: Upload teaching materials & assignments, answer questions asked by students, view and evaluate the submitted assignments
- **Students**: View and download lecture notes, answer the questions/quiz, submit assignments, ask questions
- **Forum/private messages**: Administration announcement, create a topic for discussion, sharing information
  - LEAF Curriculum Modules were shared
Structure of the Lectures

Prior to the Lecture:
• Watch the video lecture (slides with audio) at Moodle, answer 2 questions & ask 2 questions
• To ensure students well prepared before the lecture

During the Lecture (2 hours):
• 30-60 min: Overview & Additional Information (Connected through Video Conferencing)
• 30-60 min: Discussion (Connected through Video Conferencing)
• 30 min: Local activities (Disconnected/ Optional)

Assessment:
• Mid-course: Group Presentation/ Debate
• Final: Online Examination/ Essay
Success Stories: UKM

- UKM created 2-credit-hour courses for BRCC I & II
- UKM Postgraduates: credit transfer
- The first-ever climate change curriculum courses available in UKM at postgraduate level
- 2014-2015: 22 students were trained
- Multi-disciplinary background:
  - Engineering, economics, environmental science, geology, science & technology

BRCC I: Science, Impacts and Vulnerability
• Trained 86 Persons from 22 Countries
• Shared 7 Experts from 3 Countries

BRCC II: Approaches to Adaptation
• Trained 83 Persons from 24 Countries were trained
• Shared 8 Experts from 5 Countries
Participant Feedbacks (Malaysia)

1) Climate Change Education
2) Teaching-Learning Methods
3) LEAF Modules
Experience from the UN-CECAR Programme, blended courses

• **INCREASE** number of trained *participants* around the world
• **SAVE** travelling *time*, increase the availability of lecturers
• **REDUCE** travelling *costs*, both lecturers & participants, honorarium for invited lecturers
• **REDUCE** carbon footprint for freight
What we also learned..

Video Conferencing does not hinder
- Interaction between students & lecturers
- Active learning:
  - Group activities, presentations, debate and forum
Group discussion

Presentation

From UKM

From other institutions

Debates (Local & Cross institutions)

Camera

The
LEAF Network & Curriculum

- Blended courses could be considered as a way forward
- Not only regional capacity building but also sharing expertise & sustaining the developed network & curriculum modules

What we need:
- Good internet connection
- Video conferencing facilities
- Host coordinator

Advantage of LEAF: Only an hour time difference between members (Except PNG)
THANK YOU