Educating Online in South East Asia
A workshop for higher education policy makers and practitioners

Thailand

ICT for Education: Policy and development


Anuchai Theeraroungchaisri, Ph.D.
Thailand Cyber University Project
Office of the Higher Education Commission
Ministry of Education, Thailand
I. Background situation
   I. Higher Education Profile
   II. ICT for Education Policy
II. ICT for education development
   I. UniNet -> NEdNet
   II. Thailand Cyber University Project
III. The establishment of Thai-MOOC
I. Background situation
Demographic of Thailand HEIs

- 92 Public HEIs
- 71 Private HEIs
- 20 Community Colleges

183 HEIs

2,000,000+ students in higher education institutes
# Student drop out statistics

<table>
<thead>
<tr>
<th>Student education level</th>
<th>N / 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have job within one year</td>
<td>😊</td>
</tr>
<tr>
<td>Graduate bachelor degree</td>
<td>😊😊</td>
</tr>
<tr>
<td>Enter university</td>
<td>😊😊</td>
</tr>
<tr>
<td>Enter upper secondary school</td>
<td>😊😊😊😊</td>
</tr>
<tr>
<td>Enter lower secondary school (compulsary)</td>
<td>😊😊😊😊</td>
</tr>
<tr>
<td>Enter elementary school (6 years old)</td>
<td>😊😊😊😊</td>
</tr>
</tbody>
</table>

* Quality Learning Organization (2012) Public organization supported by Government
** Grade 9 is compulsory education
Using ICT in Education

The National Education Act A.D. 1999, Thailand's first of its kind, forms the core of the education reform movement. For the first time, direction points toward the philosophy of education provision for the purpose of lifelong learning and societal participation.

Also the first time that National Education Act stated explicitly about use ICT for education including ICT for support teaching and learning, enabling access to education as well as use of ICT and distance education to meet the needs and aspirations of all citizens for continuous education and skills upgrading without regards to age, profession, distance, or geography.
Thailand ICT for Education Policy

A.D.

<table>
<thead>
<tr>
<th>2005</th>
<th>06</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20</th>
<th>21</th>
<th>22</th>
<th>23</th>
<th>24</th>
<th>25</th>
</tr>
</thead>
</table>

**IT2010 Policy (2001-2010)**

- 2nd Thailand ICT Master plan (2009-2013)
- 3rd Thailand ICT Master plan (2014-2018)
- National Broadband Policy (2011-2020)
- Digital Economy Plan (2014-present)

**ICT for Education Master plan 2013-2025**

**New Distance education law (2005)**
**Updated DE regulation (2014)**

**The second 15 year long range higher education plan (2008 – 2022)**
- Seamless connection from Basic education, Vocational education and Higher education
- Emphasized on developing infrastructure for lifelong learning to enabling knowledge based society
### Statistics of Online distance education programs

<table>
<thead>
<tr>
<th>Type of University</th>
<th>Number</th>
<th>Number of program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Undergraduate</td>
</tr>
<tr>
<td>Public</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Autonomous</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Private</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>16</td>
</tr>
</tbody>
</table>

**33 programs**

<table>
<thead>
<tr>
<th>No</th>
<th>Area</th>
<th>Number of programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Business administration</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>Education</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>Political sciences</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Law</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Communication arts</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Public health</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>รวม</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

**Not include programs opened by Sukhothai Thammathirat Open University**
Ministry of Education: MOE

Office of PERMANENT Secretary

Office of BASIC Education commission
(Primary – Secondary level)

Office of HIGHER Education Commission: OHEC
(University, College, Continuing Education)

Office of VOCATIONAL Education Commission
(Vocational training for skilled workforce)

Inter-University Network (UniNet)

- Development of **ICT Infrastructure for Education**
- Administate and support the system that inter-connect public universities (founded 1996)

Thailand Cyber University Project

- Initiate, promote and support **online distance education** in higher education
- Create local and international universities network on e-learning, R&D, Learning resources sharing (founded 2005)
Thailand ICT for Education Policy

**A.D.**

2005 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

**IT2010 Policy (2001-2010)**

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**ICT for Education Master plan 2013-2025**

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II. ICT for education development
Development of ICT Infrastructure for Education

- Initiate, promote and support online distance education in higher education
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UniNet

• Interconnecting Thailand University and connecting to research network

• Consortium of Thailand University for
  • Increase the buying power of Internet Bandwidth
  • University ICT’s human resource development
  • Research and Development of technology and application for effective and efficient use of inter-university network

• Central hub for connecting to other national and international network
From UniNet to NEdNet (2012)
(National Education Network)

• Interconnecting 4 major educational network to become one National Education Network

• The previous education networks are
  • MOE Net (Ministry of Education)
  • OBEC Net (Elementary, Secondary schools)
  • VEC Net (Vocational education)

• Government stimulus package 2 (116 M US)
Thailand University and Research network

Peering Network Map

TOT_NIX  CAT_NIX  CAT_IIG
10G       40G       60G

APAN/JGN  TEIN4  Internet2
10G       450G     1 Gbps

UniNet/NEdNet
1G

ThaiREN
1G

ThaiSARN
1G

MOE_Net
1G

Updated March 2014
Uninet connected to more than 10,743 sites (2014) Include
1. All public universities and campuses 223 sites
2. Public Vocational education campuses 426 sites
3. Public secondary schools 9,715 sites
4. Others public institutes / libraries
Figure 2.1: Three stages in the evolution towards an information society

ICT Readiness (infrastructure, access) → ICT Use (intensity) → ICT Impact (outcomes)

ICT Development Index

Chart 3.6: IDI values compared with the global, regional and developing/developed-country averages, Asia and the Pacific, 2013

Thailand Cyber University Project

• Promote and support Thai University to utilize ICT for raising the quality of higher education
  • Promote sharing resources (courseware, human, etc.)
  • Promote sharing knowledge (conduct e-learning conference 2 times annually – one International / one National conference)
  • Online and in class training for capacity building

• Support all Thai University to provide quality online distance education

• Research and development in e-learning Quality guideline / Quality assurance including Innovative technologies for e-learning
TCU Strategies

To improve the quality of higher education through e-Learning by:

• **Empower 9 regional universities** to be regional e-Learning hub

• **Promote share open coursewares and learning resources** among universities

• **Human resources development** through e-training, conducts national and international conference

• **Research for e-Learning quality standard / best practice / guideline**
9 regional universities as e-Learning hubs
TCU’s projects and lesson learned before Thai-MOOC

Sharing open courseware and learning resources

1. TCU Open courseware project (TCU-OCW)
2. TCU-Globe project (interconnecting open courseware portal throughout Thailand and the world)

Human resources development

3. Conduct National and International e-Learning conference annually
3. e-Learning professional training program
TCU Open Courseware project

- TCU invites Universities to share courseware
- TCU funds Major Universities to produce quality courseware and then open for sharing via TCU portal
- TCU supports Universities to localize (quality) open MIT open coursewares
- TCU conducts courseware contest in some specific area (courseware for teaching Democracy, Moral and Ethic, Thai studies)
- TCU provides training on courseware development to university staffs
38 major public and private universities / HEIs joined TCU consortium to produce high quality open courseware
http://www.thaicyberu.go.th
Number of registered users

Number of Open courseware

Number of Full curriculums

Number of universities/Institutions join TCU consortium
TCU-Globe project

• TCU implements TCU-Globe for interconnected major Thailand courseware repositories and connecting to Globe network to increase the “courseware FINDABILITY” and “Global-Reach”
TCU-GLOBE Project: The GLOBE

• GLOBE (Global Learning Objects Brokered Exchange) is an one-stop-shop for learning resource broker organizations, each of them managing and/or federating one or more learning object repositories.

• GLOBE makes a suite of online services and tools available to its members for the exchange of learning resources, and is set up as a worldwide Open Community.
TCU-GLOBE Project: About the Project

• TCU establishes a “Common Infrastructure” for inter-connecting major open courseware providers (universities, institutions) to provide on-stop-shop service to coursewares and learning resources.

• This “Common Infrastructure” enables access of the educational resources that belong to major open courseware providers.
2. TCU-GLOBE Project:
Regional hubs connect together and to GLOBE

From the TCU-Globe project, TCU founded that there are a lot of quality coursewares and learning resources in many universities and they are willing to share among each others.
Human Resources Development (HRD)

• TCU provides in-class and online training to university staffs and faculty members.

• TCU conducts “e-Learning Professional Development” certificate program as a model for capacity building of “e-Learning professionals” which is first MOOC style online course opened in November 2006.
Thailand Cyber University: e-Learning Professional Development Program

First MOOC in Thailand launched Nov, 2006
<table>
<thead>
<tr>
<th>course</th>
<th>EL teacher</th>
<th>EL courseware designer</th>
<th>EL project manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Principle of e-Learning</td>
<td>core</td>
<td>core</td>
<td>core</td>
</tr>
<tr>
<td>2. e-Learning Delivery system</td>
<td>core</td>
<td>core</td>
<td>core</td>
</tr>
<tr>
<td>3. Innovative technology in e-Learning</td>
<td>core</td>
<td>core</td>
<td>core</td>
</tr>
<tr>
<td>4. Quality assurance in e-Learning</td>
<td>core</td>
<td>core</td>
<td>core</td>
</tr>
<tr>
<td>5. e-Learning methods and skills</td>
<td>core</td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>6. Evaluation of e-Learning courseware</td>
<td>core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Monitoring e-classroom</td>
<td>core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Designing effective website for e-Learning</td>
<td></td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>9. Evaluation methods and technique in e-Learning</td>
<td></td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>10. Design e-Learning courseware</td>
<td></td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>11. e-Learning project management</td>
<td></td>
<td></td>
<td>core</td>
</tr>
<tr>
<td>12. Organizational e-Learning policy and strategy</td>
<td></td>
<td></td>
<td>core</td>
</tr>
</tbody>
</table>
## e-Learning Professional Approach

<table>
<thead>
<tr>
<th>• Target</th>
<th>in-service teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Teaching &amp; Learning delivery system</td>
<td>100% online mode</td>
</tr>
<tr>
<td>• Learning management system</td>
<td>Moodle</td>
</tr>
<tr>
<td>• Instructional approach</td>
<td>Collaborative learning</td>
</tr>
</tbody>
</table>
The e-Learning Professional Development Program was the first MOOC style fully online certificate program in Thailand and found finish rate of 35% who have successfully completed the course.

### Number of registered students

<table>
<thead>
<tr>
<th>Class no.</th>
<th>EL Teacher</th>
<th>EL Courseware Designer</th>
<th>EL Project Manager</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>59</td>
<td></td>
<td>142</td>
<td>216</td>
</tr>
<tr>
<td>2</td>
<td>99</td>
<td></td>
<td>45</td>
<td>144</td>
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<tr>
<td>3</td>
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<td>23</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>85</td>
<td>257</td>
</tr>
</tbody>
</table>

### Certificate type

<table>
<thead>
<tr>
<th>Certificate type</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL Teacher</td>
<td>66</td>
</tr>
<tr>
<td>EL Courseware Designer</td>
<td>70</td>
</tr>
<tr>
<td>EL Project Manager</td>
<td>66</td>
</tr>
<tr>
<td><strong>total</strong></td>
<td><strong>202</strong></td>
</tr>
</tbody>
</table>

**Finish rate = 35%**
III. The Establishment of Thai-MOOC

Thailand Massive Open Online Course
Thailand Massive Open Online Course: Objectives

1. To design and develop MOOC platform with standard guideline for supporting Thai HEIs to provide MOOC
2. To provide opportunity for lifelong learning and access to higher education
3. To provide opportunity for HEIs student to take courses from other HEIs (provider HEIs) both for credit and not for credit
4. To implement “the credit bank system” for accumulated and transfer learning credits between HEIs
5. To conduct research on MOOC: system, pedagogy, media and courseware guidelines for providing MOOC in Thai context
THAI-MOOC

Foundations
- Reliability & Fast Network
- OER / OCW portals & findability
- Consortium of Universities

Enabling factors
- Readiness of learners
- Experience of fully online teaching

Flexible pathways access to Higher Education
Wide range of Higher Education Quality
Accommodate more higher education student
Support drop out students
Credit transfer between HEIs

Readiness of learners

Consortium of Universities
1. Student learn for knowledge (not for credit)

Thai-MOOC

- Subject A1
- Subject A2
- Subject B
- Subject C1
- Subject C2
- Subject D

Gain knowledge

Free for service

Provider HEIs

- Assessment services
- Credential services

Fee for service

2. Student learn for credit

3. Student learn for certificate/diploma/degree

HOME HEIs

Transfer credit / Grade

Credit Bank

Certificate / Diploma / Degree

Resources for learning
- ICT Infrastructure
- Student Administration

Supporting services

Quality Assurance/ Courses/ Program Accreditation

THAILAND Massive Open Online Course: The System
Thailand Massive Open Online Course: The Priority MOOC Courses

- General education courses
  (for first & second year student / common for all university)
- Languages and Culture (especially Asian countries)
- Life and Health Sciences courses
- Computer and Technology courses
- Business Administration courses
IV. CONCLUSION & PROPOSAL
IV. Conclusion & Proposal

• Thai Government has provided full support to establish Thai-MOOC.

• Thailand Cyber University (TCU) project together with partner universities / institutes will start Thai-MOOC phase I on 2015 targeting to provide 30 MOOC-style courses, “Credit-bank” and “Assessment-center” and enabling
  • Lifelong learning
  • Learn and transfer learning credit among university
  • Learn and accumulate learning credits to get certificate or bachelor/master degree
IV. Conclusion & Proposal

• Looking forward to partner with Regional MOOCs: ASEAN, ASIAN, GLOBAL MOOCs.
Q/A & Discussion

Thank you  ขอบคุณครับ