



**Using Active Learning Technology to
Prepare for Disasters and Contingencies
in Chulalongkorn University**

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Outline

- ✿ **Chulalongkorn University**
- ✿ **Teaching & Learning Process**
- ✿ **Use of Echo360 in Normal and Crisis Situation**
- ✿ **What's next?**



Chulalongkorn University

Chulalongkorn University is Thailand's first institution of higher education founded nearly a century ago.

As a national intellectual center, the university produces the finest quality graduates with a high level of knowledge and skills in the arts and sciences that they can use to contribute to society.



CU Facts & Figures

- Thailand's oldest and one of the country's most prestigious universities, established on March 26, 1917.
- Chulalongkorn University consists of 19 faculties, 3 schools, 3 colleges and 6 institutes.
- The university has a total of 38,180 students.
The undergraduate student body numbers 25,154.
- Currently, there are 9,958 students studying for their Master degree and 2,385 studying for their Doctorate.
- Faculty and staff, including government officials and university personnel is numbering at 8,093.

CU Student's Characteristics Ideal

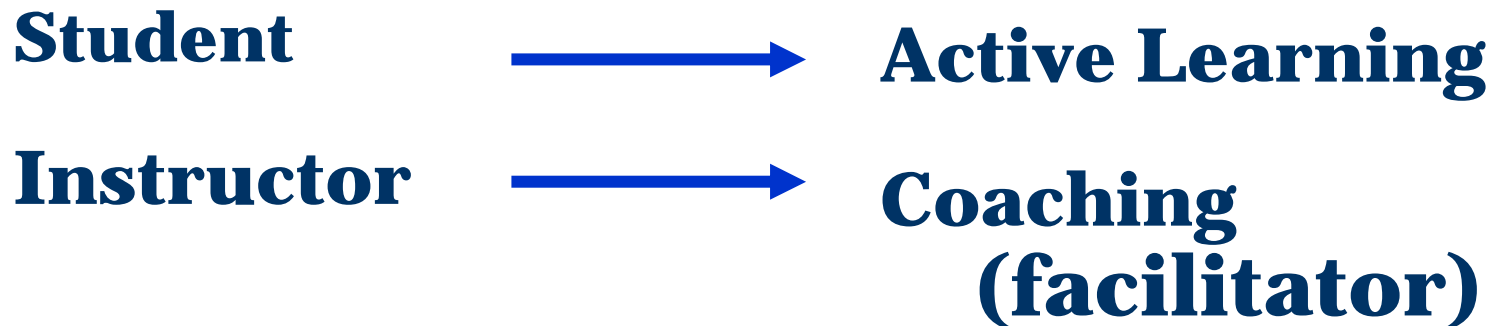
Chulalongkorn University Desired Characteristics of Graduates 2010

"Chulalongkorn University Graduates are Valuable Global Citizens"



Learning Process

- **Teach Less, Learn More**
- **21st Century Skills**
(Rethinking How Students Learn)



ICTs ^{Move} **Constructivist Approach**

Interactive Learning

- Student : Self learning
- Teacher : Guided instruction
- Small group discussions for problem solving
- Encourages teachers to create teaching media in various forms, such as video clip for self learning

Education 3.0

Meaning	Socially constructed and contextually reinvented
Technology	Everywhere, ambient, digital universe
Teaching	Teacher to student, student to student, student to teacher, people-technology-people (co-constructivism)
Schools	Everywhere (thoroughly infused into society: workplaces, etc.)
Parents view schools	A place for them to learn, too
Teacher	Everybody, everywhere
Hardware and software	Are available at low cost and are used <i>purposively</i>

ICT as Technology-driven Learning

- Active Learning
- Student-centric Learning, using computer as a main media
- Utilize many tools such as Echo 360, Clicker to facilitate learning

Chula U : Echo 360

Normal Situation

- Record lecture materials for student self-review or for student's absence
- Utilize 10 minute clips to support the learning processes
- Currently, there are 6 sets of Echo 360
 - Complicated Content : Basic Science (Math, Physic, Chemistry)
 - Large Class : General Education

Data of Echo 360 usage by each faculty

Academic Year 2012

No	Faculty	2 nd Semester (24 Oct, 2012 - 9 Mar, 2013)		
		Subject	Times	Hours
1	Learning Innovation Center (No.1)	7+15	83	126
2	Learning Innovation Center (No.2)	6+15	75	107
3	Faculty of Commerce and Accountancy	6+12	43	87
4	Faculty of Nursing	5+7	64	108
5	Faculty of Engineering (No.1)	3+1	28	28
6	Faculty of Engineering (No.2)	3+2	35	41
7	Office of Commission on Agricultural Resource Education (OCARE)	7+3	64	128
Total		37+55 = 92	421	637

**Data of Echo 360 usage, Academic Year 2012
February, 2013**

No.	Subject	Students	Statistics
1	Faculty of Science		
	2302272 ORG CHEM II	379	1,573
	2302112 GEN CHEM II	636	1,566
	2301118 Calculus II	99	848
	2304108 GEN PHYS II	223	309
2	Faculty of Engineering		
	2103231 MECH OF MAT I	293	915
	2102202 ELECT ENG MATH II	40	123
	2105474 TRANS PHENOMENA	30	122
3	Faculty of Veterinary Science		
	3141207 VET ANAT II	100	538
4	Office of Commission on Agricultural Resource Education		
	4000201 PRIN FOOD ANL PROD	47	211
	4000202 FARM MGT I	47	154
Total		2,454	6,610

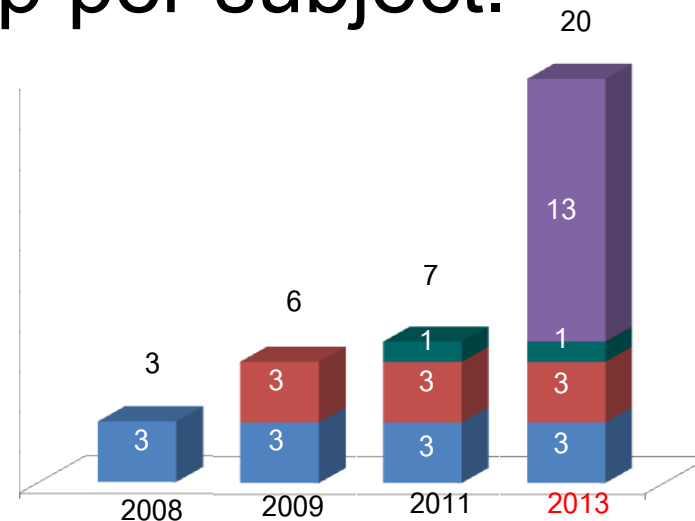
Chula U : Echo 360

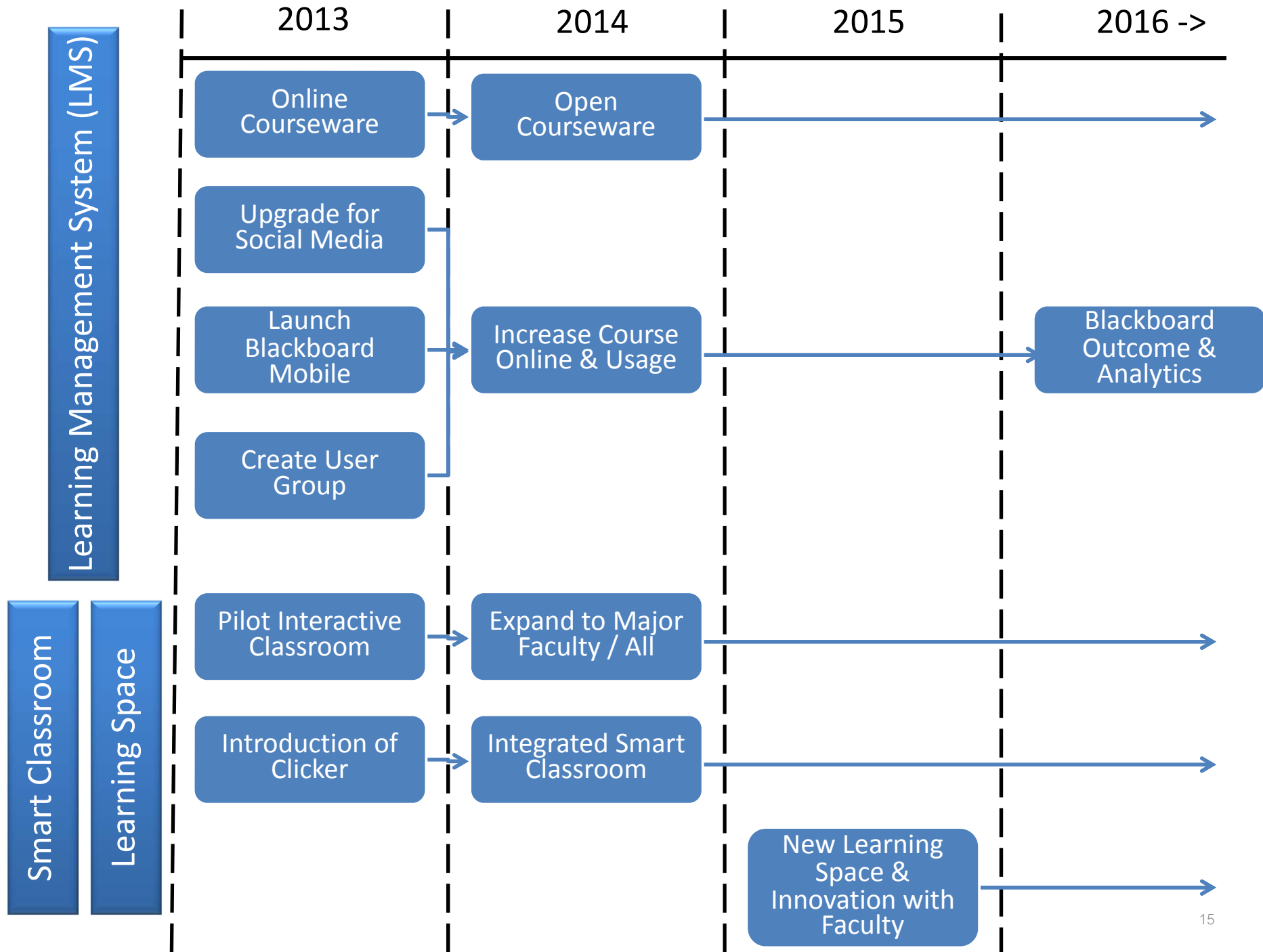
Crisis Situation

Chula has experienced political crisis in 2010 and flooding in 2011. This has impacted some faculty and students who are unable to attend class. Echo 360 provide benefit to these students immensely to view online lectures. Faculty members can also lecture at homes using Echo personal capture and keep it as archive.

What's next? : 2013

- Expand from 6 to 20 sets of Echo 360
- Distribute to every faculty. The requirement is usage time not less than 20 hrs./month or 3-4 subject/semester.
- Promote and support professors to create brief video clip, 2-3 clip per subject.





Thank you

