北京大学 PEKING UNIVERSITY

Next Generation Learning
Visions · Innovations · Possibilities

eLearning Forum Asia 2012
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eLearning Forum Asia

Mix and Match :
Blended Learning for Learning Continuity

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What I am sharing...

- **Learning Continuity** in Singapore institutions
- Planning for business / learning continuity
- Blended Learning in the context of Learning Continuity
- Use of Learning Activity Management System (LAMS) for blended learning design and development
- Case examples

Learning Continuity Situations

- Aftermath of Natural Disasters

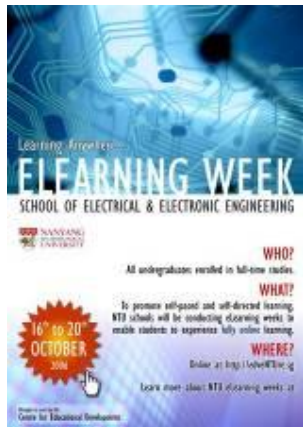Flood   Fire   Hurricane   Mass movement   Tsunami

- Pandemic Crisis

Learning Continuity Situations

- Distance Learning programmes
- Virtual Schools
- Adult and Continuing Education workshops
  - Planned eLearning Week(s)
  - Lecturer on leave (sick, urgent, holiday)
  - Overseas conference
  - Students on overseas attachment

Planning for Learning Continuity

- Nation wide
  - Triggered by authorities and preparedness policies.
  - National disaster and pandemics affect school closures and limited access to campus or learning zones

- Institutional level
  - eLearning Week exercises
  - Home Based Learning

Continuity of Learning

con.ti.nu.i.ty - uninterrupted; when something continues without being changed or stopped

learn.ing - the activity of obtaining knowledge

- Teacher/Professor
  - Self development to pilot new learning technologies for teaching purposes
  - Meet school policies on student engagement and collaborative learning
  - Absence from class due to sick, away for conference, etc.

eLearning: a solution for LC

- **eLearning** is usually the solution for learning continuity when institutions plan for campus closures or off-classroom learning events
- **eLearning** is one method used by lecturers to deliver their lessons and engage the students outside the classroom
- **eLearning** is a solution that students are used to since their early schooling years

Is your institution or company ready for Learning Continuity?

Readiness Assessment

- Preparing the teachers, students and school leaders
  - Communication channels
  - Training students (and parents), lecturers in the use of LMS, communication and distance learning tools
- Learning resources, activities and assessments
  - Build or invest in digital content and learning materials
  - Check workload demands on student across courses
- Technologies and platforms
  - LMS, LAMS, video streaming and web conferencing platforms
  - Licensing and availability of software applications for student home PCs
- Learning Support
  - Helpdesks an tutor support
- Management
  - Policies – payment, learner loading
  - Assessment of learning – types, limitations, online exam polic

Case 1 : NTU Business Continuity Plan

GREEN	YELLOW	ORANGE	RED & BLACK
• Lessons and exams as per normal. • LOA students to access materials from e-learning system. • Isolate LOA and sick students for exams.	• Lectures, tutorials and laboratory sessions continue as per normal. • HQO students to access materials from e-learning system. • Isolate sick students for exams.	• Stop mass lectures/activities and replace by e-learning, if possible. • Tutorials and laboratory sessions continue as per normal. • HQO students to access materials from e-learning system. • Isolate sick students for exams. Hold exams in small rooms or on e-learning system if possible. Postponed exams, if necessary.	• E-learning only via remote access for students from hall (foreign students) or homes. • Hold exams on e-learning system if possible, otherwise postpone exams.
• Research activities as per normal.	• Research activities as per normal.	• Research activities to continue, if possible.	• Stop research activities.

CAMPUS CLOSURE

BCP formulated in 2006

NTU's Learning Continuity Model:
Selected Core Learning Tools

Lab-based sessions exempted

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                    Core Learning Activities

   Lectures          Tutorials          Project           Assessments
                                          Work

   aculearn      acuConference   Blackboard    eUreka           Blackboard
   preseNTUr     Virtual Classes  Discussion   Project Work     Assessment
                                  Groups       Management       Engine
                                               System
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NTU eLearning Week

Supported by Blackboard Connect for mass notification purposes
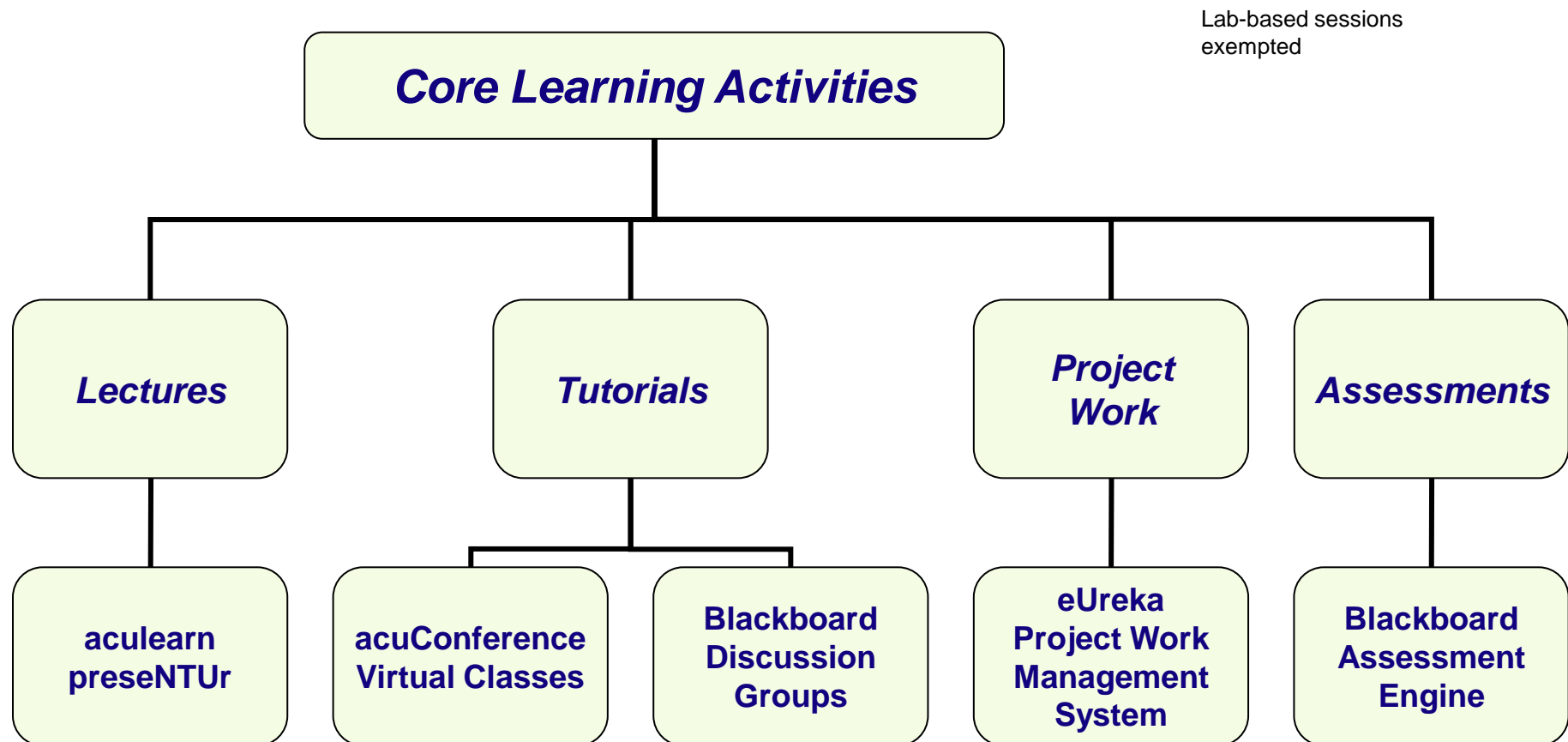
eLearning Weeks Schedule

eLearning Week 12: AY 2011/12 Semester II																
Week	1	2	3	4	5	6	7	Break	8	9						
Date	9-13 Jan	16-20 Jan	23-27 Jan	30 Jan - 3 Feb	06-10 Feb	13-17 Feb	20-24 Feb	27 Feb - 2 Mar	5-9 Mar	12-16 Mar	19-23 Mar				9-13	6-20 Apr
College of Engineering						eLW	eLW									
College of Business									eLW	eLW						
College of Arts and Humanities				eLW	eLW											
College of Science											eLW	eLW				

Case 2: SP eLearning Contingency plan

- SP had conducted **campus-wide** eL Week exercises per semester from 2005 to 2007
- Swine Flu (H1N1) crisis in 2009 eLearning Contingency plan calls for lecturers to prepare a minimum of 3-weeks eLearning tasks, such as

Week 3	Virtual classrooms	Week 2 types	Week 1 types
Week 2	Web research, simulations, higher collaborative tasks		Week 1 types
Week 1	Enhanced learning materials; Formative assessments; Basic communication and collaborative tasks.		

- Enhanced learning materials – eg. PPT with voice over (Camtasia, Voicethread)
- Collaborative tasks – blogs, wikis, group submissions
- Virtual classrooms – audio/web conferencing, live chats (skype, Centra)
- Module Maps for each course are updated for the

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Scenario for Week 1: content-ready

VoiceThread

Camtasia

Annotated notes, narrated with Natural Reader

Scenario for Week 2: higher order collaborative tasks

Scenario for Week 3: Synchronous activities

Issues with Online content

- Lessons are usually delivered as a self-paced, single learner and from teacher-to-student.
  - Instructions not clear or present to guide students on how to learn or where the specific learning content resides.
  - Hyperlinks to resource placed in announcements or other areas can be messy or missed out.
- Lots of learning materials reside in the course-site
  - Level of use (or non-use) by lecturers.
  - Difficult to navigate due to illogical structure of content
  - Content not updated - poor/no ownership if sites change hands
- Online lessons for a particular eLearning Week are poorly designed and lacks certain activity tools to build a similar experience in a classroom-led session.
- Lack of social interaction and engagement often cited as poor experiences with eLearning Week

Blended learning

- *Blended Learning is "the thoughtful integration of classroom face-to-face learning experiences with online learning experiences"*

- BL courses combine online and face-to-face time in an optimal way to improve student learning outcomes and to address important institutional issues. [Sloan Consortium]

- BL attempts to merge the strengths in both environments to provide more engaged learning experiences for students

- BL requires strong human-human interaction as well as learner-material interactions, thus there are different modes of student engagement

"I don't teach... I create an environment for them to learn"

Albert Einstein

What goes into a blend?

- Course Re-design / Design
  - Analyse and break the course objectives into small but pedagogical learning activities that can be done both online and in the classroom
  - Explore technologies for effective delivery of the learning activities
- Who and type of learners
  - prior competence, motivational level, culture
- Resources
  - include budget and technology infrastructure, tools
- Location where online learning is conducted
  - Physical and pedagogical distance between learners and instructor
  - Timing of activities (synchronous/asynchronous)
- Content & learning activities

Illustrating Blending...

ONLINE

Objectives:
- Encourage students to understand diversity of economic situations around the world
- Promote independent research skills & collaborative learning

Activities:
- Individual reading of primary electronic sources
- Group research
- Collaborative writing of case reports

CLASS-BASED

Objectives:
- Provide students with theoretical approaches to understanding world economy
- Engage students in evidence-based seminar discussion & debate

Activities:
- Weekly lectures/seminars
- Group presentations

Mix and match ratios may depend on a variety of factors such as lecturer preference and learning outcomes
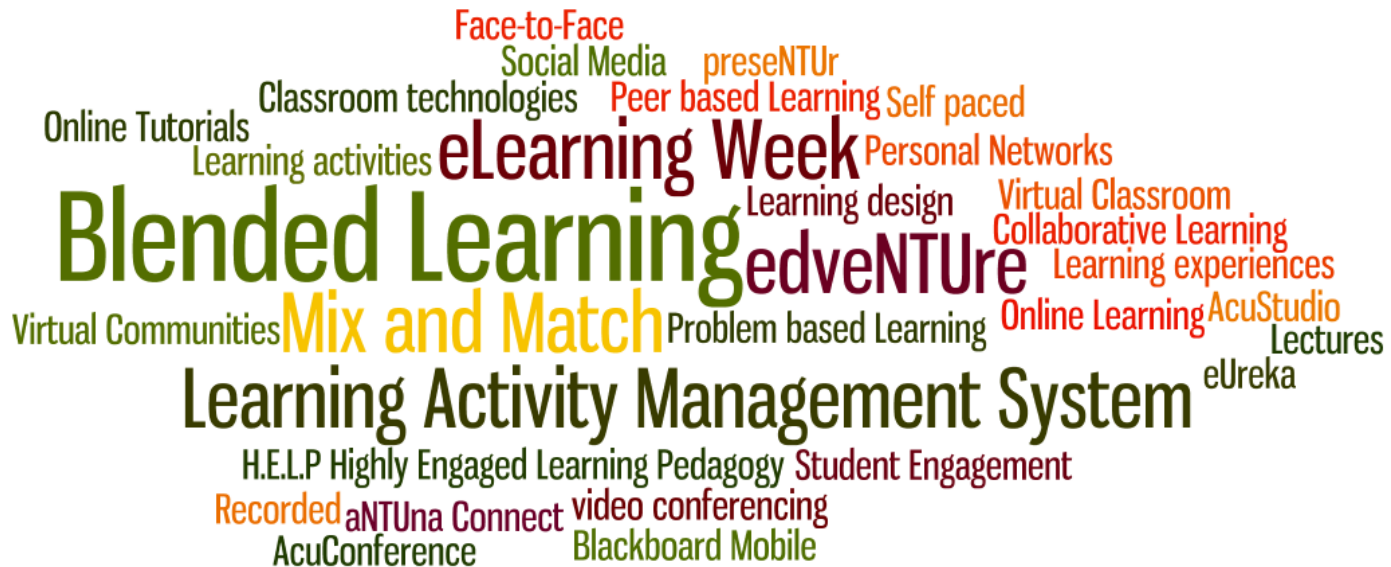
Blended learning @ NTU

- Propelled by eLearning Weeks and other LC situations in NTU.
- Greater use of technologies to blend online activities with f2f classes.
- Wide range of tools within NTU eLearning ecosystem, with online Blended Learning leveraging mainly on edveNTUre, LAMS and AcuLearn.

Examples

Mix of online and f2f activities

Announcements
Course Information
Cycle 1
Cycle 2
Cycle 3
Discussion Board
My Writing Lab
Expressways Website

Tools
- Communication
- Course Tools
- My Portfolios
- Course Map

- Control Panel
- Quick Enroll

- Refresh
- Detail View

HW001 ENGLISH PROFICIENCY PRACTICE TUTORIAL SITE 2008/2009 SEMESTER 1 (HW001-TUT-PRACT) > CYCLE 3 > WEEK 10/11: SELF-ACCESS SESSION

Week 10/11: Self-Access Session

Oral Skills

Final Online Practice for Oral Presentation

- Listen to the **recorded speech** (10 minutes)
- Give your feedback on areas identified. (45 minutes) 15min per forum
- Do a peer review with the person assigned to you. (45 minutes) 15 min per forum
- Tutor will review your feedback and give final comments. (20 minutes)

Please refer to the sample schedule below to arrange the timing for your tutorial group's synchronized oral activity.

Sample schedule

3.30 pm to 3.40 pm   listen to the presentation

3.40 pm to 4.25 pm   give individual feedback

4.25 pm to 5.10 pm   review assigned partner's feedback

5.10 pm to 5.30 pm   tutor will review and provide final feedback

(Optional): Questions from Self Access Work

From 5.30pm to end of the week: As this will be your final session before the exam, you could use the discussion board to ask or clarify any doubts you may have of work completed in any of the self-access tutorials.

Give clear instructions and guidelines to work with the online content

- Pre-recorded video/audio
- self reflection
- peer review
- presentation in class.
- discussion board
- Final submission

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Distance learning course

Online lessons deployed as learning sequences designed with LAMS.

Online lab session

LAMS

Resume
Exit
Export

Online Activities on...

- Introduction to ...
- Navigating throu...
- Lecture I - Wind...
- Test your unders...
- Wind & Water Tun...
- Test your unders...
- Lecture II - Mea...
- Test your unders...

Notebook

Lecture I - Setup of Experiments and Wind Tunnels

The next activity is a lecture on how to plan and setup an experiment and on how wind tunnels are designed.

To access the lecture click on the link below.

Recorded Lecture - Wind Tunnel (25m 06s)

Package helps students better understand aerodynamics before attending lab session. Professor use lab time to engage students in further understanding and assessments. Documentary style videos also overcome the limitation of putting many students in the wind and water tunnel facility.

Mix and match relevant activities to enhance learning experience!

LAMS activities can be matched and combined to deliver a meaningful learning activity. For eg. a student can watch a video or presentation and submit their answers or reflections to a question within this activity.

Higher quality of learning

Resume
Exit
Export

Online Activities on...

Introduction to ...

Navigating throu...

Lecture I - Wind...

Test your unders...

Wind & Water Tun...

Test your unders...

Lecture II - Mea...

Test your unders...

Wrap-up

Answers from other Learners

Question :

Wind tunnels take up a lot of space compared to the relatively small size of the test section that can be used for experiments. Can you explain why?

Because for wind tunnels, the Reynolds number must be sufficient for the flow to be fully turbulent and thus simulate the real flow.

Reduce TI

Flow of low Turbulence Intensity is required to conduct an accurate experiment in the wind tunnel, thus the wind tunnel needs to hav various components such as the settling chamber, contraction cone, diffuser and drive section to ensure that the air flow is of high quality.

wind tunnel contains other sections in addtion to the test section. these include the settling chamber and contraction cone. for the closed wind tunnel, there is an additional diffuser. these sections are important in creating the correct flow for the test to be carried out. The settling zone will take out disturbances in the air flow, the contraction cone will reduce turbulence intensity and the diffuser allows recycle of air.

1) settle flow to decrease turbulance.
2) increase speed of flow in test section.

The majority of the space taken up by the wind tunnel is used for:
1) to let disturbance die out (settling chamber)
2) reduced turbulence intensity (contraction cone)
3) move the air flow (drive secion)

LAMS tools are structured such that a F2F activity can be conducted online with similar pedagogical principles.   Here, students view answers from other learners only after submitting their own, hence multiple varied answers (*good, poor, incomplete, right, wrong, partial*) to the same question.   Learners are more discerning and professors have a better gauge of students' understanding.

order to reduce Turbulence Intensity. As for a closed wind tunnel, additional space is needed for the drive section which is needed to circulate the air

Summary

- Experiences and lessons from eLWs and HBL exercises – a move towards adopting a blended learning environment.

- Use the right tools for the job (whether it is big or small).   Effective blended learning programs start with the instructor designing the **right** online and in-class learning activities to support intended learning outcomes and assessment strategies.

- LAMS is a good choice to develop typical lesson designs and build expertise for blending online and in-class lessons.

LAMS   can

Highly
Engaged
Learning
Pedagogy

Q & A

Thank you

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