



北京大学
PEKING UNIVERSITY



eLearning Forum Asia 2012

24-27 April 2012 @ Peking University, China

Next Generation Learning

Visions • Innovations • Possibilities

Mix and Match : Blended Learning for Learning Continuity

Presented
by:

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Nanyang Technological University, Singapore



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



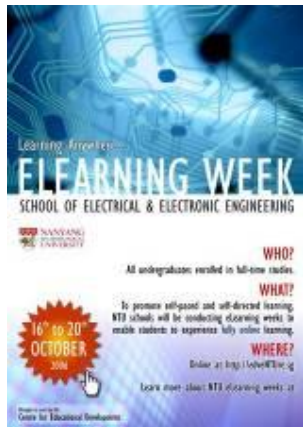
Tsunami

- 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

- 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.

Continuity of Learning

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

learn.ing - the activity of obtaining
knowledge

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 and tutor support
- Management
 - Policies – payment, learner loading
 - Assessment of learning – types, limitations, online exam policy



Case 1 : NTU Business Continuity Plan

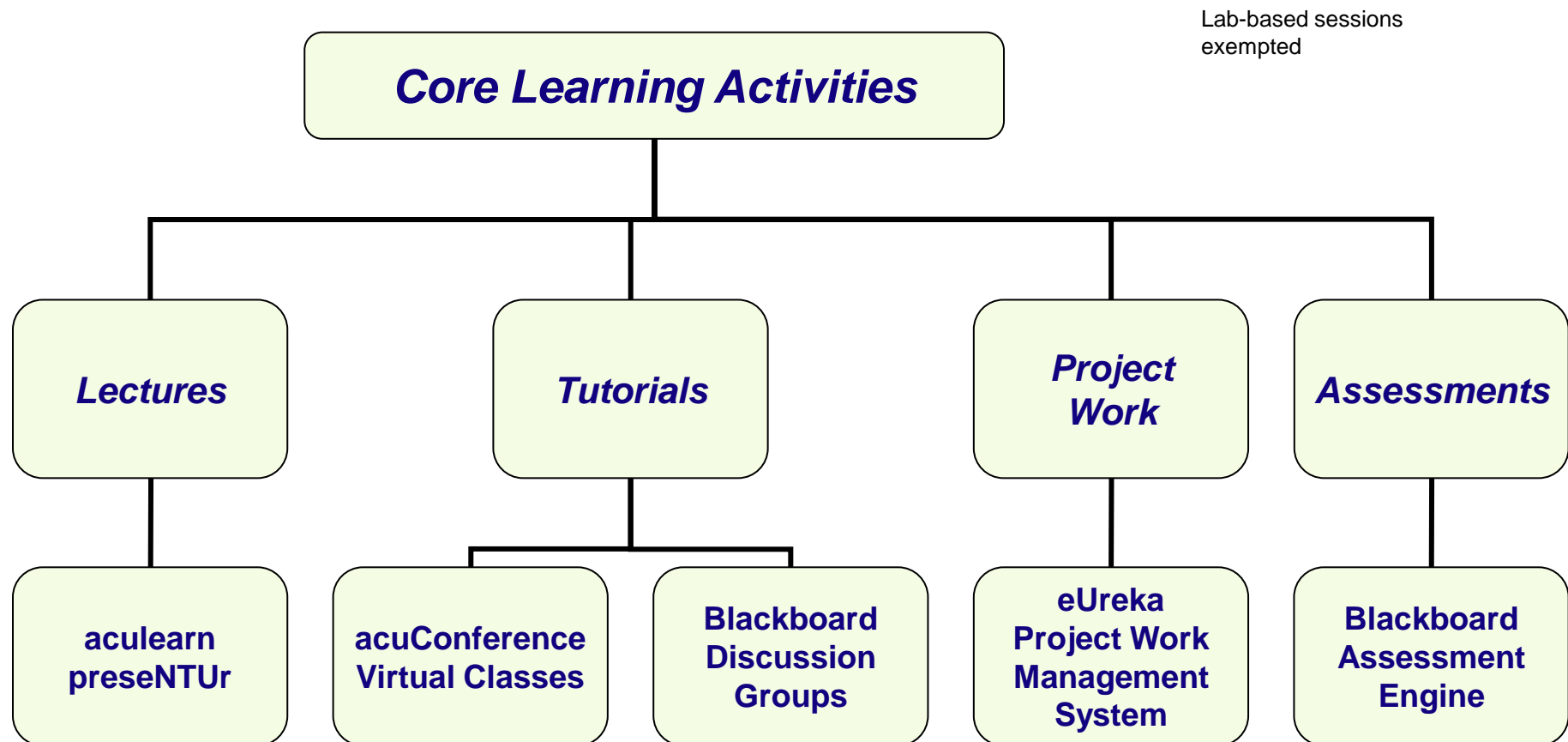
GREEN	YELLOW	ORANGE	RED & BLACK
<ul style="list-style-type: none"> • Lessons and exams as per normal. • LOA students to access materials from e-learning system. • Isolate LOA and sick students for exams. 	<ul style="list-style-type: none"> • Lectures, tutorials and laboratory sessions continue as per normal. • HQO students to access materials from e-learning system. • Isolate sick students for exams. 	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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.
<ul style="list-style-type: none"> • Research activities as per normal. 	<ul style="list-style-type: none"> • Research activities as per normal. 	<ul style="list-style-type: none"> • Research activities to continue, if possible. 	<ul style="list-style-type: none"> • Stop research activities.

CAMPUS CLOSURE

BCP formulated in 2006

NTU's Learning Continuity Model:

Selected Core Learning Tools



NTU eLearning Week

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
College of Engineering						eLW	eLW			
College of Business									eLW	eLW
College of Arts and Humanities				eLW	eLW					
College of Science										eLW

**Supported by
Blackboard
Connect for mass
notification
purposes**

Learning Anywhere...
ELEARNING WEEK
SCHOOL OF MATERIALS SCIENCE & ENGINEERING

WHO?
All undergraduates enrolled in full-time studies.

WHAT?
To promote self-paced and self-directed learning, NTU schools will be conducting eLearning weeks to enable students to experience fully online learning.

WHERE?
Online at <http://elearning.nyu.edu.sg>

23rd to 27th OCTOBER 2011

Learn more about NTU eLearning weeks at <http://elearning.nyu.edu.sg>

Learning Anywhere...
ELEARNING WEEK
SCHOOL OF HUMANITIES & SOCIAL SCIENCES

WHO?
All undergraduates enrolled in full-time studies.

WHAT?
To promote self-paced and self-directed learning, NTU schools will be conducting eLearning weeks to enable students to experience fully online learning.

WHERE?
Online at <http://elearning.nyu.edu.sg>

23rd to 27th OCTOBER 2011

Learn more about NTU eLearning weeks at <http://elearning.nyu.edu.sg>

Learning Anywhere...
ELEARNING WEEK
NANYANG BUSINESS SCHOOL

WHO?
All undergraduates enrolled in full-time studies.

WHAT?
To promote self-paced and self-directed learning, NTU schools will be conducting eLearning weeks to enable students to experience fully online learning.

WHERE?
Online at <http://elearning.nyu.edu.sg>

2nd to 6th OCTOBER 2011

Learn more about NTU eLearning weeks at <http://elearning.nyu.edu.sg>

Learning Anywhere...
ELEARNING WEEK
SCHOOL OF ART, DESIGN & MEDIA

WHO?
All undergraduates enrolled in full-time studies.

WHAT?
To promote self-paced and self-directed learning, NTU schools will be conducting eLearning weeks to enable students to experience fully online learning.

WHERE?
Online at <http://elearning.nyu.edu.sg>

9th to 13th OCTOBER 2011

Learn more about NTU eLearning weeks at <http://elearning.nyu.edu.sg>

Learning Anywhere...
ELEARNING WEEK
COLLEGE OF ENGINEERING

WHO?
All undergraduates enrolled in full-time studies.

WHAT?
To promote self-paced and self-directed learning, NTU schools will be conducting eLearning weeks to enable students to experience fully online learning.

WHERE?
Online at <http://elearning.nyu.edu.sg>

30th OCT - 3rd NOV 2011

Learn more about NTU eLearning weeks at <http://elearning.nyu.edu.sg>

Learning Anywhere...
ELEARNING WEEK
SCHOOL OF ELECTRICAL & ELECTRONIC ENGINEERING

WHO?
All undergraduates enrolled in full-time studies.

WHAT?
To promote self-paced and self-directed learning, NTU schools will be conducting eLearning weeks to enable students to experience fully online learning.

WHERE?
Online at <http://elearning.nyu.edu.sg>

16th to 20th OCTOBER 2011

Learn more about NTU eLearning weeks at <http://elearning.nyu.edu.sg>

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

Scenario for Week 1: content-ready

SINGAPORE POLYTECHNIC

Home Help Logout

My SP Guides My Modules

Announcements
Staff Information
Module Information
Learning Resources
Library Resources
Groups
Mass Briefings

Week	Topics/Learning Outcomes	Activities/Assessment	Learning Resources
1st week of Closure	<p>The topic we are doing this week is on <u>Topic 4: High Level (HL) GUI (with voice narration)</u></p> <p>On completion, you will meet the Specific Learning Outcomes for this week:</p> <ul style="list-style-type: none"> 4.1 List all the HL GUI in JME. 4.2 Develop a simple game with HL GUI. 	<p>Complete your <u>Tutorial 4</u> and upload your answers for Q5 and Q6 through <u>this link</u> by end of Week 1.</p> <p>Test your understanding on Topic 4 with this <u>Self-Assessment</u></p>	<p><u>Video on Programming in JME</u></p>

YouTube: Java Game Programming With Greenfoot (Part 1 of 2)

Take Assessment: The First American President

Lecture 1: Marketing

What is Motivation?

And let's not forget the infinitesimal puddle in which this motivational herring is swimming: novelty. Kids tell me they love using tech in school in large part because, admittedly and sadly, its effective integration is still so limited. But trust me - this won't last for long.

VoiceThread

Camtasia

Annotated notes, narrated with Natural Reader

Scenario for Week 2: higher order collaborative tasks

SINGAPORE
POLYTECHNIC



 Home

 Help

 Logout

eLea

My SPGuidesMy ModulesMy ContentsMy CommunityCDIO

<div>Announcements</div> <div>Staff Information</div> <div>Module Information</div> <div>Learning Resources</div> <div>Library Resources</div> <div>Groups</div> <div>Mass Briefings</div>		<div>The topic we are doing this week is on Topic 5: Low Level (LL) GUI (with voice narration). On completion, you will meet the Specific Learning Outcomes for this week:</div> <div>2nd Week of Closure</div> <div><div>5.1 List all the LL GUI in JME.</div><div>5.2 Develop a simple</div></div>	<div>Complete your Tutorial 5. No submission is needed.</div> <div>Test your understanding on Topic 5 with this Self-Assessment</div> <div><div>Submit your proposal on your gaming project by end of Week 2 through this wiki. Place your proposal according to your admission nos.</div></div>	<div>Video on Game Development with JME</div>
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Quick Links

Courses > CDIO (Student) > CDIO Student Journal (School of EEE)

 **CDIO Student Journal (School of EEE)** [\(permalink\)](#)

Journal Questions for Week 15 [\(permalink\)](#) - [edit](#) | [history](#) | [delete](#) |

Created on Sunday, 02/01/2009 8:37 PM by [Kim Myung Sae DASE/FTic0813297](#)

Updated on Sunday, 02/01/2009 8:38 PM by [Kim Myung Sae DASE/FTic0813297](#)

1. The semester will be ending in a few weeks time. List down the skills which you think you have developed in the *Introduction to Engineering module in both semesters*. (E.g.: ability to troubleshoot problems etc)

In my opinion, the best skill I have developed is teamwork and leadership skills. As an introvert person, I did not have the chance to be a leader before. However, in this module, I had to gather the group member's attributes, manage conflicts and etc.. Other than the skills that I have mentioned above this module taught me practical applications of the knowledge that I learnt during my lectures. The module helped me to see the design and implement the circuit to satisfy the required function.

2. What do you think are some of the ethical issues facing engineers in your field of engineering? We

Bb Blogs

Quick Links

... > Mobile Programming and Networking > Your Proposal > Home

 **Your Proposal** [\(permalink\)](#)

Home [\(permalink\)](#)

last edited by [CHERYL WEE EDU](#) on Friday, 05/08/2009 1:00 PM

Dear Student,

Use this wiki to work on your Gaming proposal.

Get into your pre-assigned groups and work on your group tasks.

Page

[Edit](#)

[New](#)

[Delete](#)

[History](#)

[Print \(w/ comments\)](#)

Page Stats

Views: 4

Edits: 2

Contributors: 2


Comments: 0




Page Contributors

Comments

Bb Wikis

Scenario for Week 3: Synchronous activities



Home Help Logout

eLea

My SP

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CDIO

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Learning Resources

Library Resources

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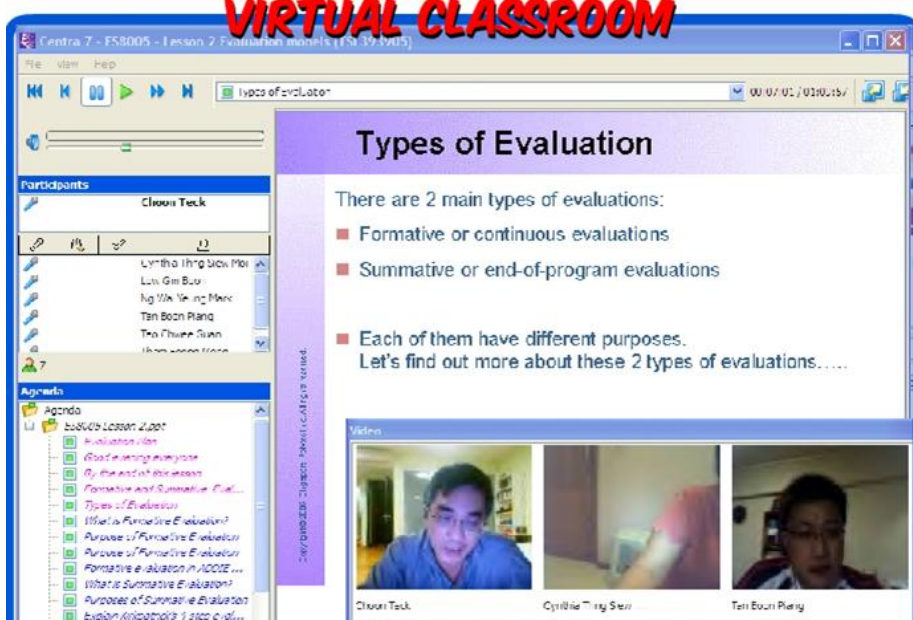
Mass Briefings

3rd Week of Closure	<p>The topic we are doing this week is on Topic 6: Network Connection (with voice narration).</p> <p>On completion, you will meet the Specific Learning Outcomes for this topic.</p>	<p>Complete your Tutorial 6. No submission is needed.</p> <p>Comment on at least 2 proposals through this wiki.</p>	<p>Additional Reading Materials:</p> <p>Purchase Tickets Online with Mobile Phones</p>
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On Tuesday 3pm, login to your Skype account for the 1st online discussion on Tutorial 6.

On Friday 3pm, login to your Skype account for the 2nd online discussion on your proposal.

VIRTUAL CLASSROOM



The screenshot shows a virtual classroom window titled 'Centra 7 - FS3005 - Lesson 2 Evaluation models (FS 39-005)'. The main content area displays a presentation slide titled 'Types of Evaluation' with the following text: 'There are 2 main types of evaluations: Formative or continuous evaluations, Summative or end-of-program evaluations. Each of them have different purposes. Let's find out more about these 2 types of evaluations.....'. Below the slide, there are three video thumbnails showing participants: Choon Teck, Cynthia Ting Siew, and Tan Boon Ping. On the left side of the window, there is a 'Participants' list and an 'Agenda' list.

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

“You can't really 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
 - relevance, stable

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

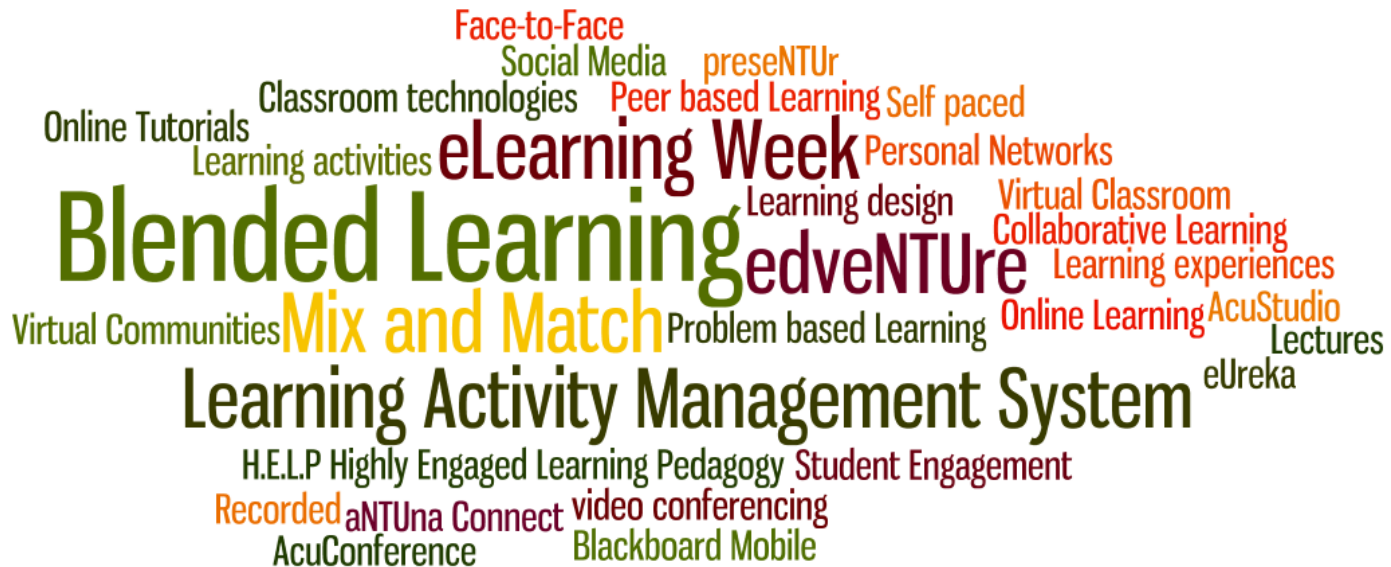
Objectives:

- 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

A series of horizontal lines in various shades of brown and grey, extending from the left edge of the slide and ending on the right side, creating a decorative border.

Mix of online and f2f activities

My edveNTURE

Courses

My Filing Cabinet

eUreka

Community

Library

Resources

Webmail

System Admin

Scholar

SOUTH PLAZA

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

HWD01 ENGLISH PROFICIENCY PRACTICE TUTORIAL SITE 2008/2009 SEMESTER 1 (HWD01-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

Distance learning course

My edventure

Courses

My Filing Cabinet

eUreka

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Webmail

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Course Materials

Synchronous Mtg

Assignments

Video FAQ

Groups

Control Panel

Quick Unenroll

Refresh

Detail View

M6426-MANAGEMENT OF TECHNOLOGY & INNOVATION (M6426-0752) > COURSE MATERIALS

Course Materials

Video Lectures and Learning Activities (Please start here)

Notes

Orientation and Demo

1. [Demo](#) (w/ vFAQ)

2. [Demo 2](#) (w/o vFAQ)

3. Can't view videos? Click [here](#) for tips.

4. A [Video Index](#) containing videos-class.

[Study Guide](#)

Video Lectures and Learning Activities (Please review by 17 Jan)

Notes

Lecture 1: Technology and National Competitiveness

1. [Introduction](#) (5:54) L1 1-7 (contains an overview page and a video lecture page)

2. [Productivity and Niche Strategy](#) (17:13) L1 8-20

3. [Multinational Corporations and Competitive Advantages](#) (17:58) L1 21-38

4. [Creating and Sustaining Advantage](#) (20:08) L1 39-53

5. [Global Strategy](#) (11:31) L1 54-60

6. [Discussion Board](#) (Your participation is compulsory)

[L1.pdf](#)
(150KB)

Please review video lectures prior to the scheduled synchronous online meeting. There will be an discussion of the lectures during the online meeting.

Online lessons deployed as learning sequences designed with LAMS.

22

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


 Resume


 Exit


 Export

DE-M6102_Wk1_demoV3

 Welcome!

 Introduction

 SoM Approach


 Reflection

Notebook

Title

Video 1.1: General Introduction

Please click the above link to view the video lecture. After viewing please answer the question below.



Time: 08:15

Notes: L1.pdf 1-5

Instructor: Ast/P Sunil Chandrakant Joshi

Question 1:

What are your learning objectives for this course? Remember, there is no right or wrong answer. However, it is important for you to answer as best as you can.

Answer:

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



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 have 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 addition 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 turbulence.
- 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 section)

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.



Highly
Engaged
Learning
Pedagogy

Q & A

Thank you

Want to know more? Contact :

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Email: ctong@ntu.edu.sg

ongct11186@gmail.com

Skype: ongct-sp