Digitalisation in Teaching and Learning – Challenges and Best-Practice
University of Konstanz

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Mr. Bernie Koh, Senior Manager, Centre for Teaching Excellence
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Before we begin...

Any questions....

Go to menti.com and use the code 99 54 97
SMU’s Goal: Deliver a holistic education experience with a distinctive interactive pedagogy, involving multi-disciplinary perspectives and a culture of rigorous learning and innovation.
Learning Spaces

1. U-shaped seminar rooms
2. Active learning spaces
3. Virtual learning
CTE Programmes

**TEACHING AND LEARNING PRACTICES**
Evolve teaching through developing one's understanding of pedagogy, teaching expertise, and professional values over time.

**INTEGRATING TECHNOLOGY**
Enhance and transform existing pedagogy, as well as, solve instructional problems through appropriate use of technology.

**EDUCATIONAL RESEARCH**
Improve student learning and enhance educational quality through scholarly inquiry.

**FEEDBACK ON TEACHING**
Uphold the quality of teaching and learning through continuous student and peer feedback.

**TEACHING EXCELLENCE AWARDS**
Recognise and value the importance of teaching as a complex and multi-faceted activity.
Learning Innovation Festival
LEARNING CIRCLES

BROWN BAG CONVERSATIONS

Prof Christie Scollon (School of Social Sciences) sharing her active learning strategies with peers.

EXPERIENTIAL LEARNING FORUM

Prof John Donaldson (School of Social Sciences) sharing his experience teaching an SMU-X course.
**Workshops**

**EMERGENCY PREPAREDNESS FOR TEACHING AND LEARNING**

EPTL workshops are available to prepare faculty members for online teaching during emergency situations when there are no face-to-face lessons.

**BLENDED LEARNING WORKSHOP**

Participants discussing tips and techniques to blend in-class interactions with online learning.

**CONTENT DEVELOPMENT WORKSHOP**

Participants exploring the use and value of educational tools to develop innovative digital content.
EDGE e-bulletins

TECHNOLOGY-ENHANCED LEARNING
ENGAGE • DEVELOP • GROW • EMPOWER

“... due to the difficulty of the subject matter and the need to reflect deeply, I have chosen to use online discussion forums to provide students with the opportunity to share their views in between our meetings in class...”

Tan Seow Hon, Associate Professor of Law,
School of Law

Designing Effective Online Discussions for Blended Learning

In this issue of E.D.G.E., CTE caught up with Seow Hon to find out how she uses online discussions to engage her students to think critically about current issues.

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“Learning happens when students apply computer programming concepts in solving problems. Students watch my videos before class and this frees up classroom time for more practice exercises. They are also able to review concepts by watching the videos again.”

Jiang Jing
Associate Professor of Information Systems
School of Information Systems

Designing Effective Videos for Blended Learning

In this issue of E.D.G.E., CTE caught up with Associate Professor Jing to find out how she designs and incorporates videos in her lessons to reinforce students’ understanding of key concepts.
When Associate Professor John Donaldson began teaching the Introduction to Political and Policy Studies course, he knew that he had to try a different pedagogy, one that allows students to learn through experience about public policy. He challenged himself to go beyond conventional approaches of using PowerPoint slides, group presentations and case studies to teach. There are many different views about public policy; one important underlying idea is that there can be different groups of people with different interests and such groups often use whatever means they have to influence public policy.

To help students appreciate this idea better, John partnered with CTE to develop a simulation entitled “The Scenario Generator”. The tool enables students to directly experience theories about public policy that are not entirely accurate, or do not necessarily work in practice.

An experiential learning activity

In the Scenario Generator, students are residents in a fictional poor, agrarian country. Students are assigned to different groups and allocated roles, such as farmers and owners of chemical companies. Each group has its own basis of power, e.g., the farmers are powerful in their numbers while chemical companies are powerful in terms of their finances. In the first round of the simulation, students prepare for their roles by thinking about the

The growth of a programme depends on the reputation of the institution and how interesting the programme curriculum is. Associate Professor Michelle Cheong, who is the Associate Dean overseeing Postgraduate Professional Education programmes, including the Master of IT in Business (MITB) programme, faces this challenge of making the MITB programme grow. “IT programmes are generally harder to sell than business programmes, so we have to work harder to attract students,” Michelle said, “and one way is to make the curriculum solid and interesting.” Hence, her thoughts constantly revolve around how to attract quality students to study IT and have fun at the same time. “For the past ten years, we have grown quite a bit, probably because every faculty is being pushed to make the programme better and better,” Michelle commented.

Small steps in the journey of innovation

A few years ago, the idea of employing blended learning to deliver some course segments within the programme was mooted. Michelle decided to start small by first experimenting with a single module in her course, using Lectora authoring tool and simple voice recording to produce online learning courseware. It was produced in-house and Michelle was pleasantly surprised by the quality of the eventual outcome. That encouraged her to expand her use of technology to include online learning using animation enhanced with fun elements for two
TEL Adoption

We advocate

- Open Educational Resources, OER (Library)
- Learning Management System, LMS (eLearn support, IITS)
- Third-party : Educational publisher model (adaptive learning)
- Technology Innovation (CTE team)
Technology-enhanced Learning

**Funding schemes**
Support faculty to develop digital resources and implement blended learning

**Workshops**
Introduce eLearn tools for synchronous and asynchronous learning

Introduce tools to develop digital resources (GoAnimate, ConceptMap)

**Sharing session**
Platform to discuss & exchange innovative ideas/teaching practices

(Learning Innovation Festival)
Technology that enables students to learn through collaboration

Bidding Game
In-class Multiplayer Game
School of Accountancy

SMU Board Game - Grade Inflation
Web/Mobile Board Game
School of Law; Multi-disciplinary

e-bidding Game

e-board Game

Co-Founders of the North
Board Game
Lee Kong Chian School of Business
Technology that enables students to learn at own pace

- Mobile Game
  - SMU Accounting Challenge (ACE)
  - Mobile Trivia Game
  - School of Accountancy

- Animation
  - Criminal Law Animation
  - Animation Case Study with Questions
  - School of Law

- Learning Object
  - Learning Objects
  - Self-contained units of learning content with clear learning objectives

- Mobile game
  - STARS Mobile Game
  - School of Social Sciences

- Mobile Game
  - CSI Game
  - School of Economics

For a list of our projects, [http://cte.smu.edu.sg/projects](http://cte.smu.edu.sg/projects)
Technology that enables students to learn through virtual immersion
Impact on Students’ Learning Experience

Sample data on feedback results of Co-Founders of North in T2 AY2016/2017

n = 663
Questions on Mentimeter

Q. Can you use the tool to conduct a seminar in both ways, online and with students in your seminar room, at the same time?
A. Yes, we use WebEx to facilitate this. WebEx is mainly used in our Emergency Preparedness for Teaching Programme. Faculty also use WebEx for online consultation with students and to facilitate overseas guest speakers.

Q. Do you grade the student’s Performance in the role PlayStation?
A. Projects developed are mainly ungraded and used as supplementary or for enhancement of learning. For all our projects, we measure the usability, satisfaction and learning effectiveness via student and faculty feedback. We also do extensive tests (Pre/post test, etc..) on other projects as requested.

Q. Which types of assessment do you use in your courses? Are there online assessments?
A. Students are graded via exams, tests, presentations, assignments and class participations. CTE conducts Assessment Workshops regularly for faculty. Yes, there are options for online grading and assessments provided by our Learning Management System.

Q. Your colleague mentioned instant feedback. Which software or app are you using?
A. SMU is currently developing an app – In-Class Sensing Tool - which offers students the chance to give instant feedback to faculty during class.
Thank you

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