XJTLU

ANNUAL LEARNING AND TEACHING COLLOQUIUM 2017

Innovative teaching and student learning

6-7 April, 2017

XJTLU | ACADEMIC ENHANCEMENT CENTRE

WELCOME TO THE XJTLU 2017 ANNUAL LEARNING AND TEACHING COLLOQUIUM

The XJTLU Learning and Teaching Colloquium brings together an eclectic and diverse range of colleagues from across the University and beyond who seek to continuously improve their academic and teaching practice through the scholarship of teaching and learning (SoTL).

As always, the primary aim of the Colloquium is to provide an opportunity for colleagues to present their evidence of good teaching and learning practice from within their own particular context, and to demonstrate innovation and boldness in trying out new approaches and practices that further enhance the learning experiences of their students.

This year's focus is on "Innovative teaching and student learning" which explores not only current but also potential future trends in learning and teaching approaches and practices. We will examine how these trends will fit into the XJTLU context as an independent transnational English as a Medium of Instruction (EMI) institution.

Like last year, we have opened our doors to the external community and we are pleased to say that we have attendees from the University of Liverpool, University of Nottingham Ningbo China, East China University of Science and Technology, GIST International College/ Staffordshire University, Central South University, Soochow University and Huaiyin Normal University who are here to embrace the culture of learning and teaching at XJTLU, and to provide us with a slice of their own practice in their respective institutions.

This year, in comparison to last year, we have increased the amount of presentations in our parallel sessions to 33; 17 on the afternoon of Thursday 6th July and 16 on the morning of Friday 7th April.

To follow on from last year's highly successful "Educational Technologies Showcase" we are once again offering colleagues the opportunity to experience innovative developments in learning technologies from across various departments at XJTLU. This year on Friday morning 7th July at 09:30, our Educational Technologies Team will once again host a "Educational Technology Showcase" in room 1106 where snippets of examples of good practice will be presented by colleagues from across the university, and the development of new key technologies at XJTLU will be explored by the team.

During the closing lunch we will celebrate the teaching achievements of colleagues across the University. Colleagues who have championed learning and teaching innovation across the University will be presented with awards through our Teaching Prizes programme.

The Academic Enhancement Centre (AEC) would like to take this opportunity to thank everyone participating in the Colloquium. We would like to also express our sincere appreciation to everyone who supported this effort and helped make it happen, in particular University Marketing and Communication, Campus Management Office, and the Management Information Technology and Systems Office.

The Academic Enhancement Centre team

OPENING SESSION

This year, at the opening of the Colloquium rather than having a keynote speaker we have decided to introduce a debate/discussion session that focuses on "Current/future challenges in Higher Education. Four motions will be presented and two colleagues will argue for and against their respective motion. There will also be some time made available for an open discussion with all panel members and attendees.

We have selected what can be described as contentious motions but ones that warrant serious discussion as they reflect current issues that are continuingly being discussed across the Higher Education sector.

We are sure these will be interesting and at times lively debates.

CHAIR: Ms Janet Thistlethwaite (Director, CAA)

MOTION:

1. The future of Higher Education (HE) is online and robots will replace teachers

FOR	AGAINST
Theodoros Dounas	Vijayakumar Nanjappan

2. The purpose of HE is to prepare a future workforce

FOR	AGAINST
Sophie Sturup	Chia-lin Chen

3. HE is ill-equipped to drive innovation

FOR	AGAINST
Eduardo Medina-Roldan	Adam Cross

4. HE is a product rather than a social good

FOR	AGAINST
Mona Wells	Eric Amigues

PROGRAMME

Detailed Colloquium Schedule

Thursday 6th April	Event				Venue
12:30pm	Sign-in attendance and pick up colloquium bag				G23W
1-2:45pm	Opening session: "Current/future challenges in Higher Education" **Chair:** Ms Janet Thistlethwaite Selected colleagues will present arguments "for and against" 4 statements that focus on the higher education environment. An open discussion/Q&A session to conclude.				G23W
2:45-3pm	**Group Photo and move to 11th floor for parallel sessions**				G23W
	Session 1, Room 1106 **Chair: Henk Huijser**	**Session 2, Room 1113** **Chair: Dawn Johnson**	**Session 3, Room 1115** **Chair: Jianmei Xie**	**Session 4, Room 1117** **Chair: James Wilson**	
3-3:30pm	Improving the teaching of Power Electronics and Sustainable Energy By well-designed Laboratory Experiments - Huiqing Wen (EEE)	Research-oriented teaching via international field trip at UPD -Yunqing Xu; Raffaele Pernice (UPD)	Giving Students Written Feedback - Challenges and Possibilities- Gareth Morris; Wenjuan Liang (LC)	Educating for Transformation- Sophie Sturup (UPD)	11th Floor, Central Building, XJTLU
3:30-4pm	The Medium Matters: An evidence-based critique of the communication, interaction, and collaboration in writing centre tutoring sessions - Karissa J. Kilgore (LC)	Research-led teaching and practice-driven learning via business case studies- Sam YU (Soochow University)	Innovation driven teaching and learning: CSE313 Big Data Analytics module report - Gangmin Li (CSSE)	Critical Thinking and Scaffolding Activities - Xinhui Liu (LC)	11th Floor, Central Building, XJTLU
4:30-5pm	Engaging Students through Technology: A Team-based Collaborative Approach - Halis Sak (IBSS); Henk Huijser (AEC)	Skills Required for Learning Introductory Statistics in Transnational Education: a test to detect weaknesses -.Giovanni Merola (MS)	Exploring the Effectiveness Student-generated Video Tutorials in the Electronic Lab-based Teaching - Shaofeng Lu (EEE)	Sustainability Education among Global Pioneering Business Schools: What Could IBSS Learn From - Xuanwei Cao (IBSS)	11th Floor, Central Building, XJTLU
5-5:30pm	Learning by creating: A case study in teaching computing to entry level students - Vijayakumar Nanjappan (CSSE)	Starlight Navigation - Robert Holmes (LC)	Design, implementation, and effectiveness of flipped classroom and debate in Money and Banking module - Qing Ye and Jie Zhang (IBSS)	Title: Piloting a Year 3 EAP Module - Jon Ford; Charlie Reis (LC)	11th Floor, Central Building, XJTLU
5:30-6pm	Systems are arcane, forced to work, unreliable and convoluted" The long and winding road of Electronic Management of Assessment - Alexander Spiers (University of Liverpool)				

| Friday 7th April	Event				Venue
9:30-11am	**XJTLU Educational Technology Showcase:** Providing updates about key technologies and presenting examples of good practice from across the university				11th Floor, (Room 1106) Central Building, XJTLU
	Session 1, Room 1106 **Chair: Henk Huijser**	**Session 2, Room 1113** **Chair: Dawn Johnson**	**Session 3, Room 1115** **Chair: JIanmei Xie**	**Session 4, Room 1117** **Chair: James Wilson**	
11-11:30am	Creating an Online Self-Study Tool for EAP Essay Writers at Xi'an Jiaotong-Liverpool University – Charlie Reis (LC); Henk Huijser (AEC)	Title: Focus Groups – a sound choice of research methodology? -James Lee (LC)	Innovatively Evolving an Inter-disciplinary Course to Enhance Student Learning - Gareth Morris (LC). Raffaele Pernice (UPD), Ann Brantingham (LC) and Gloria Molinero (LC)	Trials of Game-Based Teaching in XJTLU - Zheng Chen (ES)	11th Floor, Central Building, XJTLU
11:30am -12pm	The enabling role of online learning environments in value co-creation: a case of IBSS-ULMS joint assignment- Lixian Qian (IBSS)	Theory U for student Final Year Projects (FYP): experiential learning, personal transformation and innovation - Beatriz Carrillo (CS)	Astronomy and space science as tools for tertiary education and research training - M.B.N. (Thijs) Kouwenhoven (MS)	Joint Delivery: Development and Practice - Minghao Zhang (LC)	11th Floor, Central Building, XJTLU
12-12:30pm	Factors affecting the use and adoption of mobile learning technologies: A multi-university study- Hai-Ning Liang (CSSE); Ying Guo (IBSS)	Title: Preparing professional exam papers using LaTeX tool -Francis Ting (EEE)	Greening our Campus through Research-led Learning & Teaching Activities- Bing Chen, (UPD); Xuanwei Cao, (IBSS); Xiaojun Zhang (ILEAD); Jianmei Xie, (AEC)	Managing student participation: Teacher strategies in an EFL course - Airong Wang (LC)	11th Floor, Central Building, XJTLU
12:30-1pm	Establishing a Writing Habit: The 30-Day Challenge - Jessie Cannady (LC)	Title: Gamifying Learning: Perspectives and Experiences in EAP Classes - Ling Xia; Mark Sinnott (LC)	Using Concept Mapping to Explore Integrated Learning- Mona Wells (ES); Donald Meyer (LC)	Title: How can EAP skills enhance students' academic study?- Bin Zou (LC)	11th Floor, Central Building, XJTLU
1-2pm	Closing Lunch and Learning and Teaching Awards				11th Floor, (Room 1134) Central Building, XJTLU

PRESENTATIONS THURSDAY

• SESSION 1: ROOM 1106

• **IMPROVING THE TEACHING OF POWER ELECTRONICS AND SUSTAINABLE ENERGY BY WELL-DESIGNED LABORATORY EXPERIMENTS**
HUIQING WEN (Department of Electrical and Electronic Engineering)
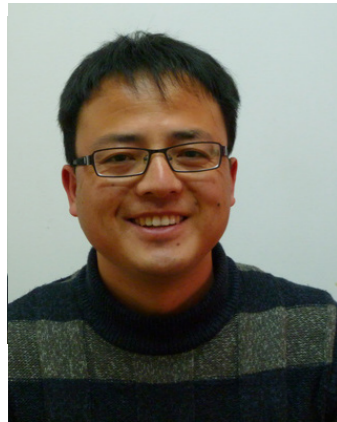
The laboratory exercises have been an important part of the engineering curricula. Traditional laboratory education could not bridge the gap of theoretical concepts learning by attending lectures and hands-on skills in designed circuits. In order to solve this problem, this project will take renewable energy teaching as an example to seek innovative methods in improving the engineering courses education quality. Browser-based multimedia-rich software tools and virtual e-learning curriculum are used since they can cover a wider audience including distant-learning students in engineering education. Computer-simulated tools including Matlab, PSPICE, and dSPACE will be used to design and evaluate the performance of various converter topologies. In order to gain practical design experiences, unique virtual laboratories are designed to meet various-levels teaching requirements. Results from the students' performance in these virtual laboratory experiments will be presented after the project to verify the effectiveness of the proposed method.

Key words: Laboratory exercises; Renewable energy teaching; Computer-aided teaching; Research-led teaching; Engineering course innovation

HUIQING WEN

• **THE MEDIUM MATTERS: AN EVIDENCE-BASED CRITIQUE OF THE COMMUNICATION, INTERACTION, AND COLLABORATION IN WRITING CENTRE TUTORING SESSIONS**
KARISSA J. KILGORE (Language Centre)

Traditional writing center methodology defines the tools of a session and the rules for interaction and collaboration in a paper-based tutoring session, but when the tools change in a computer-based session, the rules are diminished and tutors fumble to create new rules designed for computer-based tutoring. In ignoring differences between working with paper and electronic drafts, we might overlook the needs of students seeking help at the writing center, especially English as a Second/Foreign Language (ES/FL) students. This study investigates the differences between working with ES/FL students on paper and electronic drafts, specifically to see the effects on communication, interaction, and collaboration in writing center tutoring sessions.

I conducted my exploratory study at a writing center at a mid-sized state university in the northeastern United States. I videotaped tutoring sessions and transcribed the audio from each video, then watched the videos with the transcripts in hand to note instances of communication, interaction, and collaboration.

This presentation will discuss the collected data, which illustrates that current writing center practices and ideology do not always fit sessions with electronic drafts, and call for discussion of best practices of working with electronic drafts to meet the needs of all writing center tutoring sessions.

Key words: Writing; English as a Second/Foreign Language (ES/FL); human-computer interaction.

KARISSA J. KILGORE

• **ENGAGING STUDENTS THROUGH TECHNOLOGY: A TEAM-BASED COLLABORATIVE APPROACH**
HALIS SAK (International Business School Suzhou), HENK HUIJSER (Academic Enhancement Centre)

Quantitative skills are in greater demand than ever in the finance industry as there are increasing amounts of data to be processed and¬ analysed in recent years. In the meantime, training in Finance programmes in higher education institutions have not been able to transform themselves at the speed required to produce career-ready graduates. We have begun to address this problem in the Business School at Xian Jiaotong-Liverpool University by implementing a particular technology-enhanced learning and teaching approach in a Module called "Risk Management for Business". The approach consists of the following four elements: a) A computational environment, R, is introduced to the module b) Real-world financial data are used to showcase the methodologies of risk management instead of short text-book examples c) A competency-based assessment, which requires no memorization, is used for the final exam d) A group project requiring an understanding of cutting edge practice in risk management is carried out by the module students. All the quantitative evidence (a very high Module Questionnaire response rate of 76%, a very low failure rate of 5.7%, and an average mark of 66.8) strongly supports the conclusion that students find the new version of "Risk Management for Business" valuable and worth their engagement. Furthermore, 70% of the respondents of MQ emphasize one or more of the components of the implemented technology-enhanced learning and teaching environment as two features that enjoyed most about the module.

Key words: Technology-enhanced learning and teaching

HALIS SAK

HENK HUIJSER

• **LEARNING BY CREATING: A CASE STUDY IN TEACHING COMPUTING TO ENTRY LEVEL STUDENTS**
VIJAYAKUMAR NANJAPPAN (PhD Student; Department of Computer Sciences and Software Engineering)

In this presentation we explore a case of using tools that allow students to create content to support their learning process. Our case is based on a module at year one where students from different backgrounds need to learning programming. We collected data from students and our analysis of the data shows that (1) students regardless of gender and program of study benefited from this approach; (2) students found it interesting and useful to build things to support their learning of programming; (3) most students prefer themes related to their personal interests and daily experiences; and (4) female students, Non-STEM students, and students without prior background in programming can do equally well (and sometimes even better) than their counterpart classmates if they have a right platform to support their learning.

Key words: Programming; Gender; CS0/CS1; Media Creation

VIJAYAKUMAR NANJAPPAN

• **SYSTEMS ARE ARCANE, FORCED TO WORK, UNRELIABLE AND CONVOLUTED" THE LONG AND WINDING ROAD OF ELECTRONIC MANAGEMENT OF ASSESSMENT**
ALEXANDER SPIERS (University of Liverpool)

Why can the institutional adoption of systems for e-submission and electronic marking be so contentious and emotive? The University of Liverpool is no exception to this. As a response to the Student Union survey the implementation of electronic submission of coursework policy was developed and implemented in September 2016, ensuring that all students had the opportunity to submit coursework electronically, where practical. One of the main aims of the policy was a strategic approach to scaling up of the process, as it was already recognised that there were pockets of good practice already. A board was set up for one year to oversee the process and provide guidance across a range of systems for users with different requirements, skill levels and motivations. The adoption and use of technologies to enhance and support learning use across Higher Education sector is widely documented as being variable. According the latest HELF survey (Newland, et al, 2016), it's increasingly recognised that adoption of e submission policies is growing across the sector with many recognisable benefits for staff and students. However, the same can't be said for electronic marking and feedback whose uptake in universities remains comparatively small. Of course, electronic marking of coursework is more complex as it represents a significant change in practice, not only for academic staff, but also central support services, faculty and school administrators as well as students. Against this backdrop, this presentation aims to explore the varied reasons for why this is the case. Taking into consideration the strengths and weaknesses of the two central systems that support e-submission: Blackboard Assignment tool and Turnitin and Grade Mark which are both widely used across the UK Higher education sector. We will report on the outcomes of the project based on the responses to a questionnaire responded to by academic, research and professional services staff (n346).

Key words: e-Submission; electronic marking and feedback; Blackboard Assignment; Turnitin and Grade Mark

ALEXANDER SPIERS

• SESSION 2: ROOM 1113

• RESEARCH-ORIENTED TEACHING VIA INTERNATIONAL FIELD TRIP AT UPD
YUNQING XU and RAFFAELE PERNICE (Department of Urban Planning and Design)

At the Department of Urban Planning and Design (XJTLU), a research-oriented teaching has been adopted at year 4 undergraduate module (CDE310) to encourage active learners of urban planning and development. An international field trip to an overseas city, with drastic urban development and transformation, is selected as a destination for a one-week intensive study programme. Students choose one topical area for their research projects, gain relevant trainings and conduct pre-trip study and on-site research activities. This presentation explores the pedagogical structuring and organisation of teaching activities, discusses the learning outcomes of students and reflects on future improvement. It argues that students become active learners and deep thinkers through the diverse on-site experience that builds the bridge between theory and practice. It enables a real-life examination of not only the composition of planning policies and design innovations, but also the implementation of different ideas and approaches. The comparison between foreign and Chinese practices provides both a broader perspective on international contexts and a deeper understanding of the transferability in local context. Moreover, students also learn about essential skills of doing researches and adapting to local conditions.

Key words: Research-led teaching; International field trip

YUNQING XU

RAFFAELE PERNICE

• RESEARCH-LED TEACHING AND PRACTICE-DRIVEN LEARNING VIA BUSINESS CASE STUDIES
SAM YU (Foreign Cooperative Education, Soochow University)

This paper aims to discuss the methodologies we used via implementing research-led teaching methods to lead second and third year students at Soochow University to conduct various groups of case studies (including new energy electric vehicles, innovation in tourism and university-led venture incubator) in Suzhou. We found that the implications of research-led teaching can facilitate both the students' understanding of research techniques and methodologies as well as demonstrate how applying their knowledge can help influence other students' learning. This study also found that encouraging students to see themselves as research collaborators is part of the effective learning process and that can inspire students to transform experience to others.

Key words: Research-led teaching; Knowledge; Experience

SAM YU

• SKILLS REQUIRED FOR LEARNING INTRODUCTORY STATISTICS IN TRANSNATIONAL EDUCATION: A TEST TO DETECT WEAKNESSES.
GIOVANNI MEROLA (Department of Mathematical Sciences)

We discuss the results of a diagnostic skill test that we offered to our Introductory Statistics students. The test was directed to students who study in a transnational education environment like RMIT Vietnam. We measured mathematical skills on questions in English and in Vietnamese. The test results confirm that students who have better mathematical skills perform better in the course. We also found that the knowledge of mathematical keywords in English and in Vietnamese has a positive effect on the final result in the course. Not understanding questions that contain mathematical keywords in English has a stronger negative effect on for students in more advanced programs. We also found that attending classes has a very significant positive effect, and that female students achieve higher marks because they accrue more marks in intermediate assessments, even though they do not show better skills in the test.

Key words: Transnational education; Skill tests; English Language learners.

GIOVANNI MEROLA

• STARLIGHT NAVIGATION
ROBERT HOLMES (LANGUAGE CENTRE)

Last year I spoke at the 2016 colloquium expressing thoughts about the complex constellation of influences on my teaching. I mapped the relationships between staff, students, assessments and policies and how I saw it as a complex sea of stars, by which I had to navigate a course for my classroom. One year later and I want to return and outline the paths I have taken since, and the progress I have made in my corner of the university. Steering by the stars of learning outcomes, the University's mission, my role as EAP tutor, and the needs of my electronics engineering and computer science students, I will outline an assessment I devised and describe how this maps onto my teaching practice. The assessment itself, writing a technical report, represents an important method of communication in engineering. As such it results in a more concrete product than the abstract essays and pseudo reports used previously. The clearer purpose then makes it easier to situate language learning more firmly within the context my students must navigate; leading to what I hope is a more motivating and tangible destination.

Key words: Assessment; Engineering; EAP; Technical report; Teaching practice

ROBERT HOLMES

• SESSION 3: ROOM 1115

• GIVING STUDENTS WRITTEN FEEDBACK - CHALLENGES AND POSSIBILITIES
GARETH MORRIS and WENJUAN LIANG (Language Centre)

This presentation will consider providing written feedback to students. Currently within the Language Centre the default option for some time has been to provide brief written feedback to every student who submits a summative coursework paper, at least in terms of EAP assessments. Often the feedback is quite formulaic. The catch is that tutors can effectively revert to providing fairly generic comments even with specific examples being drawn upon. From a teaching perspective it adds an additional, reasonably time consuming, layer on to what is already a fairly daunting list of assessment protocols. And this is making no mention of the formative feedback that has to be provided. When many students only then take token notice of the feedback it can feel like markers are jumping through hoops rather than providing something more meaningful. In light of how students may also not choose to or be able to act on the limited feedback they receive, and how it is time consuming to provide rounds of feedback to a large number of learners, this presentation seeks to consider the advantages and disadvantages of different types of feedback and see if there is any space for innovation or improvement to aid learning.

Key words: Feedback; EAP Assessments

GARETH MORRIS

WENJUAN LIANG

INNOVATION DRIVEN TEACHING AND LEARNING: CSE313 BIG DATA ANALYTICS MODULE REPORT

GANGMIN LI (Department of Computer Sciences and Software Engineering)

Continuous reform and development in teaching and learning are discussion topics in any higher education institutions. Recent movements in "education rethinking, university reshape and teaching-learning redefine" have driven reform in higher education into a new level that innovative teaching and learning are important key indicators in response to the environmental changes in Higher Education (HE). This paper reports our trial and practice in this area in "Big Data Analytics" module. From subject change to reflect innovation on the new technology and contents definition and selection based on our own research, to innovative delivery in deciding which web-based technologies to adopt and innovative assessment; deciding which design to encourage creation and innovation. The success and lessons learnt are reported to shed light on potential similar future practices for colleagues.

Key words: Innovative teaching and learning; Innovation-driven education; Technology enhanced teaching; Education performance reform.

GANGMIN LI

EXPLORING THE EFFECTIVENESS STUDENT-GENERATED VIDEO TUTORIALS IN THE ELECTRONIC LAB-BASED TEACHING

SHAOFENG LU (Department of Electrical and Electronic Engineering)

Lab-based teaching in which hands-on experiments are to be conducted by students takes an important part for a wide range of engineering and science disciplines. In our current practice, the lab-based teaching involves live demonstration and tutorials after the off-line lab manual review. This has become particularly problematic when the number of students is large and insufficiency on the lab-supporting system becomes a common issue. In the meantime, even with a small number of students, it can be interesting to prepare the lab in a one-to-one tutorial. Well-designed video tutorials eliminate the time and space constraints on learning and provide comprehensive details to students to enable them focus on deepening the understanding of concepts, rather than spending majority of time of trouble shooting during the lab.
With the full technical support from the Digital Learning Resources Hub at Xi'an Jiaotong-Liverpool University, one of the pioneer international university in China, we propose to involve student volunteers to generate a series of customized video tutorials into our electronic lab-based teaching practice. From the viewpoint of students themselves, these video tutorials are carefully designed based on students' learning needs to seamlessly integrate a wide range of theoretical and practical information. Under the supervision of staff, volunteers will be able to repeat their learning cycles with a different role and enhance their own understanding and knowledge structures, promoting the student-centered education model. Some scenery-based video tutorials will be used in the online quizzes questions to better prepare the students. The generated video tutorials will be shared across a number of electronic modules to further investigate the effectiveness of these video tutorials. The effectiveness will be further explored using online questionnaires and online quizzes.

Key words: Flipped classroom; Lab-based teaching; Online quizzes; Student generate video tutorials

SHAOFENG LU

DESIGN, IMPLEMENTATION, AND EFFECTIVENESS OF FLIPPED CLASSROOM AND DEBATE IN MONEY AND BANKING MODULE

QING YE and JIE ZHANG (International Business School Suzhou)

We adopted two innovative teaching methods in a post-graduate module (Money and Banking): flipped classroom and debate. We find significant evidence that these innovative teaching methods are effective in improving student performance as reflected in exam marks. In addition, we adopt surveys to investigate students' perception of these two new teaching methods. The results indicate that students have great consensus in terms of the benefits of these approaches suggested in literature. In addition, based on the experience we gained in teaching this module and the students' feedback, we provide some suggestions in terms of how to best apply the flipped classroom and debate methods in teaching.

Key words: Flipped classroom; Student performance; Student experience

QING YE

JIE ZHANG

• SESSION 4: ROOM 1117

• EDUCATING FOR TRANSFORMATION
SOPHIE STURUP (Department of Urban Planning and Design)

There is a distinct difference between epistemological mastery of a subject and an ontological mastery of a subject. Epistemological mastery of a subject leaves one knowing about something, ontological mastery leaves one being and acting in accordance with that mastery as a natural self-expression. Many disciplines whether explicitly or not are trying to create people who act from the distinctions of that discipline as a natural self-expression. This paper discusses some of the theory used to devise the ontological development program "Being a Leader and the Effective Exercise of Leadership" which the author attended last year. The paper provides a starting point for explicit engagement with this 'other side' of teaching.

Key words: Teaching for Mastery; Transformative teaching

SOPHIE STURUP

- **CRITICAL THINKING AND SCAFFOLDING ACTIVITIES**
  Xinhui Liu (Language Centre)

Critical thinking, among other skills, is identified as the key leading to innovation and academic success. The question "how can this cognitive concept be turned into specific actions in teaching and coursework design" not only addresses a list of discrete "skills" but also a dynamic network, composed of enlightening, questioning, networking, reflection, knowledge input and output and awareness of the function of digital technology. In this network, teachers and students are the two most active elements, whose actions upon each other expand the knowledge system. Hence, how to trigger students' interest, activate their prior knowledge, and engage them in the interaction with the teacher and other students is the main concern of this research. With reference to Bloom's taxonomy and other research concerning the process or sequence of cognitive development, especially the concept of pre-requisites, four models of classroom activities have been suggested. Hopefully, students will learn how to develop a creative mindset and gain the independence to explore the unknown.

Key words: Critical thinking; Engagement; Classroom activities

XINHUI LIU

- **SUSTAINABILITY EDUCATION AMONG GLOBAL PIONEERING BUSINESS SCHOOLS: WHAT COULD IBSS LEARN FROM**
  XUANWEI CAO (International Business School Suzhou)

The UN post 2015 agenda identified requirements and opportunities for universities to play a more important role to promote sustainable development within and beyond campus. The UN Decade of Education for Sustainable Development (2005-2014) sought to mobilize the educational resources of the world to urgently strengthen and scale up Education for Sustainable Development (ESD). As the main higher education institution, business schools are training tomorrow's leaders. At the same time, management education is now challenged to equip our graduates with the ability to integrate global sustainability issues into the skill sets, competences, decision-making processes, mindsets and values that will support them in their future careers. This presentation introduces the good practices of pioneering business schools around the world on developing sustainability education. This may have meaningful reference for the work of IBSS in near future.

Key words: Sustainability education; Business schools

XUANWEI CAO

- **PILOTING A YEAR 3 EAP MODULE**
  JON FORD and CHARLIE REIS (Language Centre)

As a team, we have this year developed and delivered XJTLU's first EAP module for Year 3 students. An advantage of this department-specific EAP module is that it allows for the development of a more customized curriculum and assessments as determined by the requirements of the students' degree programme. This presentation will therefore cover the creation of a Year 3 EAP module in terms of: the rationale behind Year 3 EAP; assigning learning outcomes and descriptors; needs analysis responses of the academic department and students; development of innovative assessments; development of learning and teaching materials with an enhanced subject-specific focus.

Key words: EAP; Year 3; Department-specific; Customized curriculum

JON FORD

CHARLIE REIS

PRESENTATIONS FRIDAY

- **SESSION 1: ROOM 1106**

- **CREATING AN ONLINE SELF-STUDY TOOL FOR EAP ESSAY WRITERS AT XI'AN JIAOTONG-LIVERPOOL UNIVERSITY**
  CHARLIE REIS (Language Centre) and HENK HUIJSER (Academic Enhancement Centre)

This paper reports on a TDF extension project that intends to further develop Marking Mate, a self-directed assignment writing support programme developed at Xi'an Jiaotong-Liverpool University (XJTLU) by Eoin Jordan and Andy Snyder. The study explores how students can use specific links in automated feedback on writing to self-study and improve in areas relevant to EAP writing, such as academic or formal language, in addition to providing student with better instructions on how Marking Mate functions. In this paper, we explore how adding additional resources and explanations including instructional videos has helped position Marking Mate as a learning tool rather than merely a correction tool, which is what many automated feedback tools tend to be, with reference to the specific Chinese context of an EMI university. Thus, the aim is to support students' self-directed learning, rather than 'spoon feed' correct answers. An additional tension between a highly contextualised and locally developed programme (such as Marking Mate), and widely available online tools that allow for potentially similar outcomes (such as Grammarly), is also discussed, as well as the role of face-to-face contact in academic support contexts. In this paper, we explore how adding additional resources and explanations, including instructional videos, have helped to position Marking Mate as a learning tool rather than merely a correction tool. An actual demonstration of Marking Mate and some suggested improvements will be modeled, and an initial evaluation is reported on.

Key words: Self-study; Student writing tool, On-line learning

CHARLIE REIS

HENK HUIJSER

• THE ENABLING ROLE OF ONLINE LEARNING ENVIRONMENTS IN VALUE CO-CREATION: A CASE OF IBSS-ULMS JOINT ASSIGNMENT
LIXIAN QIAN (International Business School Suzhou)

Despite the increasing internationalisation of Higher Education (HE) in the past decades, few international partnerships offer students and educators the opportunity to co-create value. In particular, the role of Online Learning Environments (OLEs) in facilitating communication and offering opportunities to co-create value has received little attention in an international context. In response to such practical gap in HE, International Business School Suzhou (IBSS) at XJTLU and the University of Liverpool Management School (ULMS) started a joint assignment initiative in 2014 in an undergraduate module at both schools. After its first delivery in 2016, we conducted focus groups, interviews and thematic reviews of students' reflections on their learning, to examine the collaborative process between student/student and student/educator actor dyads in this joint assignment. We find that OLEs can play a central role in collaboration between actors, particularly in an international context. Through using OLEs, technology explorers were able to co-create a valuable HE experience, while technology sceptics appeared to undertake value co-destruction activities.

**Key words:** Online Learning Environments (OLEs)

LIXIAN QIAN

• ESTABLISHING A WRITING HABIT: THE 30-DAY CHALLENGE
JESSIE CANNADY (Language Centre)

30-Day Challenges are everywhere. The concept is quite simple; participants complete a task every day for 30 days straight. While these participants are often focused on the possible results that can be achieved in 30 days, the real benefit gained is the establishment of a habit that often pushes them to continue on the practice beyond the thirtieth day. This presentation will explore how the concept of a 30-Day Challenge can be applied to writing using a virtual learning environment. The 30-Day Writing Challenge designed by the Writing Center at XJTLU asked students to post a response to daily prompts using an online forum. While the topics for these prompts were not explicitly academic, each one was designed to encourage students to practice analytic skills, provide support for arguments, and reflect on their own beliefs and practices. By encouraging more generative writing, the challenge aimed to offer an environment where students could validate their own experiences, support a regular writing habit, and foster creative thinking. The online element allowed students to interact as community, creating a collaborative element for what is often perceived as an individual and isolated activity.

Key words: Writing; VLE; Forum
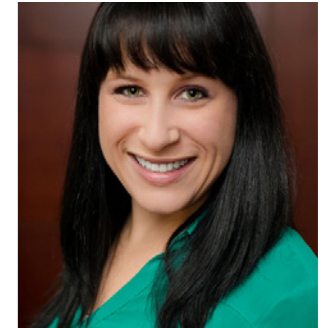
JESSIE CANNADY

• FACTORS AFFECTING THE USE AND ADOPTION OF MOBILE LEARNING TECHNOLOGIES: A MULTI-UNIVERSITY STUDY
HAI-NING LIANG (Department of Computer Sciences and Software Engineering) and YING GUO (International Business School Suzhou)

Despite the large amount of research in mobile learning adoption among university students, very little has been conducted in China. Our study thus aims to examine the factors that predict mobile learning acceptance in Chinese higher education context and to investigate both the instructors' and students' current use patterns and perceptive of mobile learning. Built on the Unified Theory of Acceptance and Use of Technology (UTAUT) model, we introduced perceived convenience as a predictor and hypothesized the direct effects of social influence on other determinants. The proposed model was empirically validated based on the data collected from students from two Chinese universities using a survey. Results revealed that perceived convenience is the strongest predictor of the intention to adopt mobile-learning among students. Social influence's direct impact was also confirmed. In general the students are positive of mobile learning while instructors are skeptical about its effect on students' performance.

Key words: Mobile learning; Higher education; Convenience

HAI-NING LIANG

YING GUO

• SESSION 2: ROOM 1113

• FOCUS GROUPS – A SOUND CHOICE OF RESEARCH METHODOLOGY?
JAMES LEE (Language Centre)

This paper examines the focus group as a research methodology. It questions what drives the choice of the focus group as a way to gather data, looking particularly at five core issues covered by the relevant literature.

Key words: Focus groups; Qualitative research; Methodology; Epistemology.
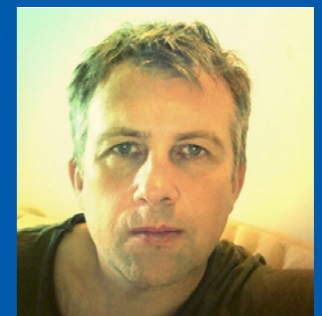
JAMES LEE

• THEORY U FOR STUDENT FINAL YEAR PROJECTS (FYP): EXPERIENTIAL LEARNING, PERSONAL TRANSFORMATION AND INNOVATION
BEATRIZ CARRILLO (Department of China Studies)

Theory U is a theory for profound social change (Scharmer 2007), which purports that successful leadership, depends on the quality of attention and intention that the leader brings to any situation. Two leaders in the same circumstances doing the same thing can bring about completely different outcomes, depending on the inner place from which each operates. Since 2015 Scharmer and colleagues have promoted 'hubs' (place-based communities of change) around the world utilizing the principles of Theory U. They have built these hubs through a (tuition free) MOOC, delivered over 8 weeks one a year. In this course participants learn the principles of Theory U, while they engage in various forms of experiential learning, connecting with people in their communities and organizations, as well as with the global online hubs linked to the course. These experiences are meant to lead participants to create a 'prototype' to 'explore the future by doing'. My aim is to create a 'hub' at XJTLU and invite students to do the MOOC to support their FYP. I would like to extend an invitation to staff and students from all departments to participate in this project.

Key words: Theory U; communities of change; Final Year Projects; Social change

BEATRIZ CARRILLO

• PREPARING PROFESSIONAL EXAM PAPERS USING LATEX TOOL
FRANCIS TING (Department of Electrical and Electronic Engineering)

LaTeX has been a well-known tool for preparing highly technical documents such as a report, thesis, engineering book, etc. In the case of preparing exam paper, this tool is by far the best ever known that can produce a consistent outlook with detailed and beautiful formatting. This is possible by adopting a professionally crafted exam template. I shall share with all my exam template that I have improved over years. I will demonstrate how this LaTeX template can help in creating exam papers with ease and quickly. As no time is spent over formatting, users will save their precious time substantially. Also working with LaTeX is the most enjoyable moment, and I would like to share this experience with all my colleagues.

Key words: LaTeX; Exam paper template.

FRANCIS TING

• GAMIFYING LEARNING: PERSPECTIVES AND EXPERIENCES IN EAP CLASSES
LING XIA and MARK SINNOTT (Language Centre)

Gamification refers to the use of game elements and game design techniques in non-game contexts. In recent years, gamification has been a significant emerging business practice to improve user engagement. Because contemporary university students are usually digital natives who may expect to be highly engaged, researchers and educators have also been suggesting the incorporation of gamification into university educational contexts to transform students' learning experiences. By using key features of game design, along with game elements such as points, leaderboards, badges, avatars, rewards and progress levels, gamification has the potential to empower and engage the learner, enhancing motivation whilst sustaining a positive atmosphere in the classroom (Figueroa, 2015). This paper proposal will highlight two collaborative online game platforms, showcasing how they have been used successfully in a Year 1 English for Academic Purposes course. Our experiences suggested that gamification can help with warming-up, organizing collaborative tasks, fostering of critical thinking and teaching of key concepts or terminology. This paper proposal also compares them to existing features of ICE and suggests some potential implementations of gamification in a wider context across XJTLU.

Key words: Gamification; Motivation; Education Technology

LING XIA

MARK SINNOTT

• SESSION 3: ROOM 1115

• INNOVATIVELY EVOLVING AN INTER-DISCIPLINARY COURSE TO ENHANCE STUDENT LEARNING
GARETH MORRIS (LANGUAGE CENTRE); RAFFAELE PERNICE (DEPARTMENT OF URBAN PLANNING AND DESIGN); ANN BRANTINGHAM (LANGUAGE CENTRE); GLORIA MOLINERO (LANGUAGE CENTRE)

Not many courses can claim to draw on expertise from one school, two departments and one centre, but this is exactly what the module 'Imagining the City' does. This five credit module offered in semester two of undergraduate students first year at university is supported by staff from Xi'an Jiao Tong-Liverpool University's School of Film and Television Arts, the departments of English, Culture and Communication and Urban Planning and Design, as well as the Language Centre. Presenting students with a greater understanding of the diverse range of forms and ways in which the city can be portrayed this module seeks to provide students with an inter-disciplinary grounding that should serve them well in future years. It also looks to aid their language and study skills development. Now into its fifth year, the module has also undergone some reasonably substantial developments in terms of the syllabus, delivery pattern, content, learning space and staffing. In addition ICT has also played a much greater role with the advancement of time. This presentation will therefore highlight some of the evolutionary changes designed to enhance student learning whilst also illustrating how the course is increasingly innovative.

Key words: Innovative; Inter-disciplinary; Course

GARETH MORRIS

RAFFAELE PERNICE

ANN BRANTINGHAM

GLORIA MOLINERO

• USING CONCEPT MAPPING TO EXPLORE INTEGRATED LEARNING
MONA WELLS (Department of Environmental Sciences); DONALD MEYER (Language Centre)

Concept maps are graphical constructs wherein linking phrases connect concepts to form propositions, referred to as semantic units or units of meaning. In addition to being a graphical tool for knowledge structuring, concept maps are a cognitive tool for sharing and creation of knowledge, including exploration of seemingly disparate ideas. Prior research indicates that concept mapping requires thinking that is not ideally captured by many linear, procedural, or hierarchical learning approaches. Highly dense interconnectedness in a concept map is associated with higher levels of knowledge integration within a given domain. Here we report results from a two-year study at XJTLU across a variety of modules to investigate whether concept mapping assists students in transitioning from declarative knowledge to development of their own ability to integrate knowledge. We will focus on trials in two very different modules that exemplify both successful and sub-optimum examples of outcomes. Generally we find that concept mapping is user-friendly, practical for implementation, and a valuable tool for the future development of interdisciplinary content-based teaching initiatives, particularly those that require integration of distal bodies of knowledge. We will present examples that illustrate our perspectives on the limitations and best applications of concept mapping to stimulate knowledge integration.

Key words: Concept mapping, Knowledge integration

MONA WELLS

DONALD MEYER

ASTRONOMY AND SPACE SCIENCE AS TOOLS FOR TERTIARY EDUCATION AND RESEARCH TRAINING
M.B.N. (Thijs) Kouwenhoven (Department of Mathematical Sciences)

M.B.N. (THIJS) KOUWENHOVEN

Astronomy has been an important factor the development of human civilization since the dawn of times. The science of astronomy aims to answer the biggest questions of science: how did the Universe begin? What is the origin and fate of the Earth? Are we alone in the Universe? Astrophysics has been key to the scientific revolution, all major breakthroughs in physics, and to the development the technology in our daily lives. Given the small number of researchers, astronomy is the best-funded science on Earth. It connects researchers and students worldwide and overcomes cultural and political boundaries. One of the most important functions of modern astrophysics is as a tool for education at all levels. It stimulates the interest of young children in the sciences. It helps students overcome their fear of the sciences and attracts students to university physical science departments. Despite being a small science, astronomy is vastly overrepresented in the daily news, in Hollywood movies, and in popular journals such as Nature and Science, as it fascinates the general public. Here, we present how formal and extracurricular education in astronomy, astrophysics and space science can contribute to strong international reputation and excellence of a research-led University.

Key words: Astronomy; Research-led teaching; Tertiary education; Space science; Fundamental sciences.

GREENING OUR CAMPUS THROUGH RESEARCH-LED LEARNING & TEACHING ACTIVITIES
BING CHEN, (Department of Urban Planning and Design); XUANWEI CAO, (International Business School Suzhou); XIAOJUN ZHANG ILEAD; JIANMEI XIE, (Academic Enhancement Centre)

This Teaching Development Fund (TDF) project aims to support XJTLU students' active learning through research and to instil good citizenship practices (e.g. sustainability literacy and environmentally friendly lifestyle) in them through innovative teaching. Nowadays the principle of Education for Sustainable Development is widely used to underpin university curriculums. To help students understand how sustainability thinking can be applied in practice, we suggest to incorporate an action research – 'Greening Our Campus' – into the curriculum. Students undertaking the module 'Environmental Sustainability' will lead and conduct a series of activities on our campus to test their proposed action plans on energy saving, waste recycling, green transportation and so on, and then verify the effectiveness of these proposals. It is expected that this student-oriented learning-by-doing process would improve students' (and staff's) sustainability literacy and, by reflection, encourage them to change their lifestyles towards greater environmental sensitivity. Moreover, this research-led teaching approach would nurture an active learning environment that can facilitate the transfer of education for sustainable development from XJTLU to local society.

Key words: Research-led; Education for Sustainable Development; Learning-by-doing; Interdisciplinary; Active learning.
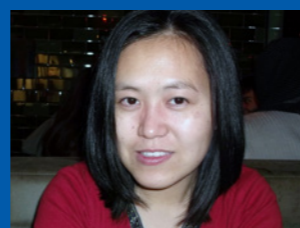

BING CHEN   XUANWEI CAO   XIAOJUN ZHANG   JIANMEI XIE

• SESSION 4: ROOM 1117

• TRIALS OF GAME-BASED TEACHING IN XJTLU
ZHENG CHEN (Department of Environmental Sciences)

Playing Games is in human nature. Kids learn fast and unknowingly when gaming, adults too. The application of game-design elements and principles in teaching non-game context is called "gamification", or game-based teaching. The concept "game-based teaching" has been propagated for dozens of years, but not widely conducted in higher education. One of the main obstacles is the methodology to develop a game for education purposes. Here I will present two practices of game-based teaching for two modules: LAN104 and ENV308. The first one is a group interaction game for LAN104, developed based on a real environmental accident happened in USA and aims to demonstrate the complex stakeholder interactions in solving environmental problems. Another one is an on-line board game for ENV308, developed by Centre for Systems Solutions in Poland. The later game have been practiced many times all over the world to deliver knowledge on agriculture and river management. In the coming trials, students' responses to game-based teaching will be recorded and discussed, more results will be presented in the talk. Please stay tuned.

Key words: Game-based teaching; Environmental Science; Sustainability
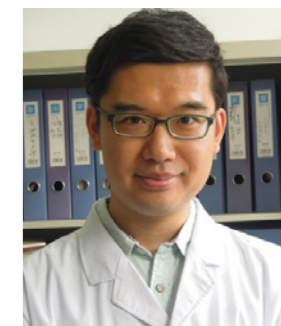
ZHENG CHEN

• JOINT DELIVERY: DEVELOPMENT AND PRACTICE
MINGHAO ZHANG (Language Centre)

MINGHAO ZHANG

To address the issue that many students encountered difficulties with language and study skills in the studies of their subject areas, joint-delivery (JD) modules involving the Language Centre (LC) cooperating with other departments first came into practice 4 years ago. This innovative teaching approach has enabled LC staff members to draw on their expertise in language pedagogy to provide students with scaffolding of academic English and study skills both inside and outside the classroom at points where students actually need to employ these skills to engage in academic study. The aim of this session is to present updates on the significant development of JD modules over the past 4 years through statistical evidence, video clips demonstrating cooperative teaching between departmental and LC staff, and testimonials from both staff members and students involved in JD modules.

Key words: Joint Delivery, Innovative Teaching

MANAGING STUDENT PARTICIPATION: TEACHER STRATEGIES IN AN EFL COURSE
AIRONG WANG (Language Centre)

In this presentation, by referring to one of my published papers, I aim to explore teacher strategies for managing student participation in class. Conversational Analysis was adopted to analyze the teacher's verbal language output collected from a task-based virtual EFL course. A student questionnaire was used to complement the findings. The results show that teacher strategies are influenced both by specific tasks and by the nature of the learning environment.

Key words: Teacher strategies; Managing student participation

AIRONG WANG

HOW CAN EAP SKILLS ENHANCE STUDENTS' ACADEMIC STUDY?
BIN ZOU (Language Centre)

This study investigates how EAP skills students learnt in Year One and Year Two at the Language Centre enhance their academic study in Year Three and Year Four at XJTLU and the University of Liverpool. Participants included students and academic staff in Year Three and Year Four from various academic departments at the two universities. Research methods consisted of questionnaires and interviews. The results reveal respondents' perceptions of students' strengths and weaknesses of EAP skills utilized in note taking, understanding lectures, reading, writing, group discussions, team work and delivering presentations in academic study. While the findings demonstrate some positive results, some negative factors are also discovered. The research also finds a close correlation between the ability to carry out group discussions, deliver presentation and communicative skills. Additionally, Compared with findings at XJTLU, it shows that students in Liverpool have a higher evaluation for English and study skills learned in EAP class. Case studies, critical thinking and teamwork skills are found to be integrated well and engineering students have a better command of these skills. Finally, suggestions are provided for improvement of EAP lessons in the future.

Key words: English for Academic Purposes (EAP); Academic study; XJTLU, University of Liverpool (UoL)

BIN ZOU

XJTLU EDUCATIONAL TECHNOLOGIES SHOWCASE
April 7th, 9:30-11am
Central Building Room 1106

Join us at this exciting event to learn about future directions in educational technology provision at XJTLU, and discover how colleagues are utilising a wide range of technologies to enhance their teaching and provide students with innovative and engaging learning and assessment opportunities.
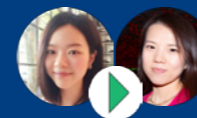
Featured speakers

DEVELOPMENT AND USE OF FLIPPED CLASSROOM-STYLE VIDEO RESOURCES
- YING CHANG (Urban Planning and Design)

FACILITATING PEER-BASED ASSESSMENT OF GROUP PROJECTS WITH WEBPA
- CHIA-LIN CHEN (Urban Planning and Design)

DEVELOPMENT OF VIDEO RESOURCES SUPPORTING FLIPPED CLASSROOM DELIVERY
- LUQING HAN & QIWEI ZHANG (Language Centre)

FOSTERING IN-CLASS STUDENT ENGAGEMENT AND INTERACTION WITH ACTIVE RESPONSE
- THEODOROS KANTIDAKIS (Biological Sciences)

DEVELOPMENT OF LABORATORY EQUIPMENT DEMONSTRATION VIDEO RESOURCES
- SHAOFENG LU (Electrical and Electronic Engineering)

ONLINE QUIZZES TO FOSTER ENGAGEMENT AND TRACK STUDENT PROGRESS
- BORIS TEFSEN (Biological Sciences)

LARGE-SCALE, VIDEO-BASED ASSESSMENTS
- JIE WANG (Chinese Cultural Teaching Centre)

PODCASTS FOR SHARING, REFLECTION AND ASSESSMENT
- JIAXIN XU (Language Centre)

FACILITATING IN-CLASS COLLABORATIVE ACTIVITIES WITH PADLET
- RUI XU (Language Centre)

Questionnaire
Education
Conference Undergraduate
Colloquium Enhanced
Higher Funding
Certificate Centre
Support Blended
Leading Awards Staff Prize
Educational Training
Summer Fund

Professional
Technology
Learning Teaching
Academic
Research
Annual Pedagogy
Enhancement Development
Continue
Module Study
Fellowship Postgraduate

UNIVERSITY MAP

Legend	Building
FB	Foundation Building 基础楼
CB	Central Building 中心楼
SA	Science Building A 理科楼A
SB	Science Building B 理科楼B
SC	Science Building C 理科楼C
SD	Science Building D 理科楼D
EE	Electrical and Electronic Engineering 电子与电气工程楼
EB	Engineering Building 工科楼
PB	Public Building 公共楼
IR	International Research Centre 国际科研中心
IA	International Academic Exchange and Collaboration Centre 国际学术交流中心
HS	Humanities and Social Sciences Building 人文和社科楼
ES	Emerging and Interdisciplinary Science Building 新兴科学楼
DB	Design Building 设计楼

ABOUT AEC

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