



BUPT-QMUL Joint Teaching and Learning Centre

UK-China Transnational Education (TNE) Conference 2022: Technology-Enhanced Teaching and Learning

Homepage: <u>https://www.qmul.ac.uk/bupt/jtlc/events/items/uk-china-stem-transnational-education-tne-conference-2022-technology-enhanced-teaching-and-learning.html</u>

29th June 2022

Queens' Building LG1, Mile End, Queen Mary University of London, E1 4NS How to find us and campus map: <u>https://www.qmul.ac.uk/about/howtofindus/mileend/</u>

Join online via MS Teams: Click here

Program:

8:45-9:15 Registration
9:15-9:30 Welcome speech
9:30-9:50
Atm Alam, Queen Mary University of London
Title: Short vs. long video lectures: which one is more engaging?
9:50-10:10
Kok Choi Kong, Queen Mary University of London and Guojun Huang, Nanchang University
Title: QMUL-NCU joint teaching project
10:10-10:30
Rupert Ward, University of Huddersfield
Title: Personalised Learning Fitness: Getting Learning Fit
10:30-10:50
Muhammad Imran, University of Glasgow
Title: Overcoming the challenges of remote delivery of teaching using connectivity solutions and
immersive learning

10:50-11:10 Coffee break

11:10-11:30

Yitong Liu, Beijing University of Posts and Telecommunications

Title: Teaching wireless communication with real wireless communication signals

11:30-11:50

Ian Wakeman, University of Sussex

Title: Starting a Joint Institute during a pandemic: Technologies instead of flying

11:50-12:10

Xinning Zhu, Beijing University of Posts and Telecommunications Title: Information and Communication Engineering Knowledge Graph Platform for University Intelligent Education

12:10-12:30

David Higgitt and Sophie Lu, Lancaster University

Title: Embedding Technology-Enhanced Learning in TNE: Experience of Lancaster-Beijing Jiaotong Partnership

12:30-13:00 Breakout session

13:00 Wrap up for morning session

13:00-13:50 Lunch break/Networking

13:50-14:10

Stephanie Fuller, Queen Mary Academy Title: Updating graduate attributes at Queen Mary: a co-created approach

14:10-14:30

Irene Pinzuti, Queen Mary University of London Title: Breaking the language barrier: English support to JP NCU students

14:30-14:50

Chantal Tucker, Queen Mary Academy Title: Engaging students with Reading Lists Online

14:50-15:10

Bindu Chib, Queen Mary University of London Title: Student, Know Thyself! (Non-Technical Skills- Awareness Training)

15:10-15:30

Chao Liu, University College London Title: Why learning is important as an entrepreneur?

15:30- 16:00

Breakout session

16:00 Closing

Presenters and abstracts:

Atm Alam, Queen Mary University of London

Title: Short vs. long video lectures: which one is more engaging? Abstract:

The Covid-19 pandemic has disrupted Higher Education globally, necessitating a rapid transition from predominantly face-to-face teaching and learning models, to widespread deployment of synchronous and asynchronous digital delivery (live and pre-recorded video lectures and tutorials). However, the length of video lectures can affect student engagement due to several reasons. On social media, short videos are appreciated by most people because the short video is how many people, especially younger people, consume information with entertainment. Having inspired from the popularity of short-form videos on social media, which are often highly engaging and entertaining, as well as our recent observation of data analytics from BlackBoard Collaborate and Echo360 over the last two years during the Covid-19 pandemic, a social media like short-video lecture (SML-SVL) framework based on a single topic is proposed for an enhanced student experience and engagement in online video lectures. This talk will present the framework using the concept and principles of social media design in the education context with their opportunities and challenges.

<u>Kok Choi Kong, Queen Mary University of London</u> and Guojun Huang, Nanchang University Title: QMUL-NCU joint teaching project

Abstract:

In line with the 2030 strategy, we always aim to be inclusive with staff and students. With this in mind, I pioneered and piloted a joint-teaching venture with a Nanchang University (NCU) academic to co-deliver my pharmacology module to the UK Higher Education (HE) standards. Before the pandemic, we co-delivered the module face-to-face, with each of us in charge of half of the student cohort (\sim 125 students each). To ensure the NCU colleague delivers the module up to the UK HE standards and to help his teaching development in incorporating UK pedagogical approaches, I provided constant mentoring and support in all aspects of the teaching, particularly in assessing and providing meaningful feedback to students. This joint teaching was well-received by students and feedback score for the NCU colleague was equivalent to that of QMUL staff. When delivery was shifted online due to the pandemic, we experimented a hybrid teaching with me delivering the lectures remotely and my NCU colleague facilitating the class in Nanchang in real time. Using this arrangement, my module has been the only module within the Nanchang JP that has been able to continue running in-class Clicker questions during the pandemic, thus keeping students engaged despite the challenging online teaching. This joint-teaching venture has been run successfully for three consecutive years. The aim of this session is to share my experience in delivering the project.

Rupert Ward, University of Huddersfield

Title: Personalised Learning Fitness: Getting Learning Fit Abstract:

The world is changing, as is learning. Approximately 1.5 Billion learners moved fully online during the pandemic and we have seen from this the challenges and limitations of our current global educational models. Professor Ward will explain one of the key lessons we can all learn from this experience, that if we want to learn more effectively we need to improve our collective learning fitness, and that to do this we require a different, more personalised, approach to learning. His talk will discuss how, by applying analogies from physical fitness, we can use technology enhanced learning and learning analytics more effectively and develop more capable lifelong learners.

Muhammad Imran, University of Glasgow

Title: Overcoming the challenges of remote delivery of teaching using connectivity solutions and immersive learning

Abstract:

The talk will present some implemented examples of how technology has come to our rescue during pandemic in order to maintain good student experience in Engineering education. Technologies providing immersive learning experience (XR, Videos etc) as well as the use of tele-robotics to have access to some lab facilities are two examples of such innovations. Challenges and lessons learnt will be shared with the audience.

Yitong Liu, Beijing University of Posts and Telecommunications

Title: Teaching wireless communication with real wireless communication signals Abstract:

The course of "Communication System Modeling and Simulation" in BUPT adopts portable SDR to utilize real signals existing everywhere around, allowing students to comprehend the application of communication theory in practical engineering. No matter where the students are, they can observe the real wireless signals around them such as Wi-Fi, 5G, NBIOT, AM/FM and so on. While in the classroom, teacher can send signals for students to practize carrier/timeing synchronization and the signal demodulation. We create a game similar to hide-and-seek in which students can either locate signals or identify modulation format. More importantly, under the background of the epidemic, online students are able to conduct experiments synchronously with the recorded signals in I/Q format during the offline class. Besides, in the assessment, students are asked to confront each other using the knowledge they have learned in this course. The defender has to protect signal transmission, and the attacker has to jam or decipher others' signals, with their best efforts. Consequently, the novel teaching reform of this course has significantly improved the understanding in communication theory and the practical ability in the field of communication.

Ian Wakeman, University of Sussex

Title: Starting a Joint Institute during a pandemic: Technologies instead of flying Abstract:

The Sussex AI Institute at Zhejiang Gongshang University had its first cohort of students in September 2020, an obviously challenging time in which to build relationships. In this talk, I will discuss how we utilized technologies and other approaches to create a close working relationship between our staff and students, when our Sussex colleagues hadn't the luxury of having time teaching in-country before the pandemic.

Xinning Zhu, Beijing University of Posts and Telecommunications

Title: Information and Communication Engineering Knowledge Graph Platform for University Intelligent Education

Abstract:

Data-driven intelligent technologies are currently widely exploited to improve the education practices of universities. We conduct a three-year project focusing on developing an Education Auxiliary Platform based on Knowledge Graph involving 21 courses of Information and Communication Engineering. The automatic construction pipeline of knowledge graph based on machine learning approaches is proposed, upon which the website of Education Auxiliary Platform is created. The services provided by the platform include: 1) Multi-perspective knowledge retrieval system to show the fine-grained knowledge contained in each course and potential knowledge relationships among arbitrary courses, which provides teachers a comprehensive and deep understanding of student learning trajectory tracking and optimal teaching path evolution; 2) A Teaching Assistant Robot based on Natural Language Processing to chat with students to answer their questions about courses automatically, which greatly improves the learning experiences of students; 3) An personalized online exercise system to automatically track the students mastering of the key concepts. The Education Auxiliary Platform has provided services to more than 1000 undergraduate students of BUPT. The service scale and coverage of the platform would be constantly expanded in the long term.

David Higgitt and Sophie Lu, Lancaster University

Title: Embedding Technology-Enhanced Learning in TNE: Experience of Lancaster-Beijing Jiaotong Partnership

Abstract:

If the disruption, chaos and uncertainty imposed by the covid pandemic has a silver lining, it is the breakthrough of technology-enhanced learning models hitherto viewed with scepticism by students, faculty and regulators. In the context of UK-China TNE, surviving the rapid pivot to online delivery in the first half of 2020 has enabled increasing sophistication of remote teaching and learning and consideration of a digital strategy that can retain innovation into the postpandemic era. Lancaster University College at Beijing Jiaotong University is a large Joint Institute with almost 2000 students and a mixed portfolio of programmes including STEM subjects, business and design. While individual faculty have deployed a range of strategies and software tools to engage students, quality assurance has focused on defining expectations and minimum requirements for online teaching, providing appropriate training in learning technologies and pedagogy and strategies to enhance student engagement. Surveys of student's perceptions of online learning reveal more resilience than has often been assumed and empathy with the challenge faced by instructors. Effective curation of online resources is important. The ability to facilitate conventional laboratory practicals through remote coordination with technical staff has been demonstrated. The development of inter-campus collaborative initiatives (including UG Research Conference, COP26 Science Festival and access to a wider range of guest lecturers) have been accelerated.

Stephanie Fuller, Queen Mary Academy

Title: Updating graduate attributes at Queen Mary: a co-created approach Abstract:

At Queen Mary we are undertaking an update of graduate attributes, in order to better support our graduates' employability and their development as active global citizens. A cross-professional and interdisciplinary team of academics, professional services staff and students have come together to develop a process for updating graduate attributes at QMUL. The approach recognises the discipline specific nature of attributes and allows academics to 'surface' attributes from within their curricula, whilst ensuring these are aligned with employer needs and Queen Mary's values, and co-creating these attributes with students. This presentation will introduce the framework that the team has designed, the principles underlying the approach and discuss our our next steps.

Irene Pinzuti, Queen Mary University of London

Title: Breaking the language barrier: English support to JP NCU students Abstract:

Students joining the Nanchang Joint Programme are selected based on their Gaokao scores, but they cannot be selected based on their English proficiency. This could create issues for students to successfully complete a degree taught in English if their understanding is suboptimal. For example, some students with less advanced spoken and written English skills, but good academic and study skills, might be disadvantaged. To advance and further develop English skills, Academic and Clinical Skills module is supported by English tutorials, in which all students can improve their written and spoken English skills with the help of an English native speaker teacher. A review of the efficacy of these tutorials was done, analysing the written performance of year 3 students

from different cohorts. The analysis showed that over time, the written English performance, in terms of essay writing skills, improved, suggesting that these tutorial activities can be beneficial to the students.

Bindu Chib, Queen Mary University of London

Title: Student, Know Thyself! (Non-Technical Skills- Awareness Training) Abstract:

The presentation will showcase non-technical skills that the personal development program will introduce on the QMUL-BUPT joint program, and explain why these were selected and how they will be delivered. The goal is to encourage students to reflect on their own tendencies, for the showcased skills, and initiate a personal growth plan.

Chao Liu, University College London

Title: Why learning is important as an entrepreneur? Abstract:

Learning is essential to our existence. Just like food nourishes our bodies, information and continued learning nourishes our minds. However, learning as an entrepreneur is quite different from learning as a student, in our case learning at JP. As a graduate from the Internet of Things Engineering in 2016, I am currently a lecturer at UCL and also an entrepreneur running 3 companies in London. In today's presentation, I will share things I have learnt as a student studying at JP and as an entrepreneur in London, and how should you prepare for your future business or career.

Organiser:

BUPT-QMUL Joint Teaching and Learning Centre, https://www.qmul.ac.uk/bupt/itlc/

Email: <u>bupt-qmul-jtlc@qmul.ac.uk</u>

Conference chair:

Dr Ling Ma (ling.ma@qmul.ac.uk)

Committee members:

Dr Michael Chai, Dr Atm Alam, Dr Yan (Cindy) Sun, Mr Andy Watson