



## **International Network of Educational Institutes (INEI)**

### **Summer Term Seminar (Mini) Series**

**Date:**

Wed, 17 May, 10-11am, UK time      Dr Jie Gao, IOE *and* Dr Yann Shiou ONG, NIE

**Speaker 1:** Dr Jie Gao – IOE, UCL’s Faculty of Education and Society

***Using Participatory Research Methods to Explore Young Children’s Perspectives on School Readiness***

School readiness is a contestable concept (Dockett & Perry, 2002), on which the current dominant discourses are mainly underpinned by research of adult stakeholders' perspectives (O’Farrelly et al., 2020). The paucity of research foregrounding children's perspectives has rendered the conceptualisation and operationalisation of school readiness more representative of adults' agenda rather than children's needs (Bingham & Whitebread, 2012).

This longitudinal study aimed to foreground young children’s voices in reconstructing school readiness to support transition from preschool to primary education in Chinese contexts. To 'track' children's transition experiences, we collected data at two time points: during the last month of preschool and towards the end of first semester of Year 1 in primary school. Informed by the Mosaic Approach (Clark, 2017), during each round of fieldwork, we conducted a) participatory and playful activities with young children to explore their experiences and perceptions on school readiness; b) semi-structured interviews with their parents, preschool and primary school teachers to contextualise children's perspectives and meaning-making. The reconceptualisation of school readiness from children’s perspectives can inform the corresponding operationalisation (e.g., assessment and interventions) and contribute to the ongoing reforms in curriculum and pedagogy to promote continuity from preschool to primary school education in China and beyond.

**Biography**

Dr Jie Gao is a Senior Research Fellow and Lecturer (Teaching) in IOE, UCL’s Faculty of Education and Society. Her research background lies in psychology of education,



with research interests mainly including parenting, children's play, agency, well-being and motivation theories. She is also interested in research on innovative methodologies, particularly those of mixed-method approaches, such as Q-methodology. Her current research projects mainly focus on children's voices in early childhood education and care; children's transition from preschool to primary education; development and evaluation of parenting programmes; and teacher continuing professional development.

**Speaker 2:** Dr Yann Shiou ONG – NIE, Singapore

### ***Fostering Productive (Inter)disciplinary Engagement in STEM/Science***

In the recent science curriculum update in Singapore, science teachers are urged to: 1) provide STEM learning experiences as application of science learning and 2) develop students' "ways of thinking and doing science" i.e. scientific practices as part of the goals of science education. In this short talk, I will outline my current research efforts aimed at supporting science teachers in these two aspects. Firstly, the development of an integrated STEM classroom observation protocol, based on the productive disciplinary engagement framework by Engle and Conant (2002), that foregrounds principles for designing integrated STEM activities that engage students in a productive and interdisciplinary way as they work towards their solution to a STEM problem. Secondly, the development of a scientific practices survey instrument for evaluating lower secondary students' grasp of practices in the investigating, explaining, and evaluating spheres of scientific activity as well as and the "I think...because" question format for evaluating primary and secondary students' scientific reasoning.

### **Biography**

Dr Yann Shiou ONG is an Assistant Professor at the Natural Sciences and Science Education (NSSE) Academic Group, National Institute of Education (NIE), Nanyang Technological University (NTU), Singapore. Yann Shiou received her PhD in Curriculum and Instruction at the Pennsylvania State University, USA (2018) and her MSc in Science Education (Distinction) at the University of Bristol, UK (2011), and has a certification in physics teaching in Singapore. She is a science educator and researcher with an interest in epistemic practices in science/STEM. Her current research projects involve developing an integrated STEM classroom observation protocol for primary and secondary classrooms as well as developing a scientific practices survey instrument for lower secondary students.