



Developing Expertise in Teaching

December 5, 2018 (Wed)



2:00 pm - 5:45 pm

Rm 223, Knowles Building, HKU
*Researchers, educators, school
leaders and teachers of all subjects
are welcome!*

This symposium brings together researchers from an Alliance of Universities in Australia, Hong Kong and the U.S. to exchange ideas on how to develop teacher expertise in teaching. Specifically, the presenters will describe different approaches to enhancing teacher learning and promoting teachers' development of pedagogical content knowledge (PCK). The symposium will be of interest to researchers, teacher educators, teacher professional developers, school leaders and teachers who are interested in teacher professional development.



Monash University

Amanda Berry
Professor of STEM Education

Rebecca Cooper
Senior Lecturer



*Understanding the Development of Teaching Expertise
through Pedagogical Content Knowledge*



Stanford University

Janet Carlson
*Associate Professor, Graduate School of Education
Director, Center to Support Excellence in Teaching (CSET)*

Using a Core Practice Approach to Develop Teaching Expertise

The University of Hong Kong

Kennedy Chan
*Assistant Professor, The Faculty of Education,
Division of Mathematics and Science Education*



*Using Video to Professionally Develop Pre-service Science
Teachers' Expertise in Teaching*

Three local schools will share their experiences of professional development at CSET, Stanford University, at the end of the Symposium.

- **HKUGA College**
- **Fanling Kau Yan College**
- **St. Paul's Co-ed College Primary School**

**For enquiries, please contact
The Office of Research,
Faculty of Education, HKU
at hkchow@hku.hk**

*To register, please click [here](#) or
scan with your mobile:*



Developing Expertise in Teaching

December 5, 2018 (Wed)

Speakers and Abstracts

Amanda Berry is a Professor of STEM Education and Associate Dean (Research) in the Faculty of Education, Monash University. The main focus of Amanda's research has been the development and application of methodologies and tools for capturing and representing the complex nature of teachers' classroom practice. Amanda's recent work has focused on teacher learning about STEM education, in particular, the development of teachers' STEM pedagogy and practices through participation in interdisciplinary communities of practice.

Rebecca Cooper is a Senior Lecturer in the Faculty of Education, Monash University. She works with pre-service and in-service science teachers and her research interests include the development of pedagogical knowledge and pedagogical content knowledge throughout teachers' careers; improving the quality of science teaching to increase student engagement; and working with teachers to better understand the development of scientific literacy with students.

Understanding the Development of Teaching Expertise through PCK

High quality teaching is a multifaceted and complex enterprise that is developed over time, through experience and systematic reflection on experience. Supporting the development of teachers' specialist knowledge of teaching begins in preservice teacher education, and needs to be carefully scaffolded and supported through preparation into early teaching and ongoing learning. This presentation explores approaches to developing teaching expertise as pedagogical content knowledge (PCK) in teacher preparation, including implications for those who teach and mentor pre-service teachers.

Using a Core Practice Approach to Develop Teaching Expertise

Research tells us what teaching practices facilitate richer and more meaningful learning by students. Using those practices well takes time and opportunities to learn. The core practice approach includes a learning cycle that drives professional learning experiences for teachers to become more expert in their use of key pedagogical practices.

Janet Carlson is an Associate Professor (Research) and the Faculty Director of the Center to Support Excellence in Teaching (CSET) at Stanford University. Her work is focused on educational partnerships to solve persistent problems of practice by improving the quality of instruction, keeping equity at the center of the work, and developing leading teachers.

Kennedy Chan is an Assistant Professor at the Division of Mathematics and Science Education at the University of Hong Kong. His research areas include teacher professional knowledge and use of video in teacher education. He is an awardee of several teaching awards including the University Early Career Teaching Award and Student-led Teaching Feedback award and an invited participant of PCK summit II.

Using Video to Professionally Develop Pre-service Science Teachers' Expertise in Teaching

The purpose of this presentation is to describe the design of a video-based science methods course that aims to enhance pre-service science teachers' expertise in teaching science. Specifically, it discusses how authentic classroom video clips are used to represent complex teaching practices for decomposition and approximation by pre-service teachers to facilitate their expertise development.