Pedagogical Content Knowledge (PCK) Revisited

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Abstract: The construct Pedagogical Content Knowledge (PCK) recognises and attempts to expose a unique form of professional knowledge that teachers possess and use in classrooms as they go about helping students to learn particular content. The construct offers teachers the means by which to articulate the nature of this knowledge amongst colleagues and for researchers in education rich avenues for exploring ways to improve educational outcomes. However, while its introduction by Lee Shulman in 1986 gave acknowledgement to this special form of professional knowledge that teachers possess, the exact nature of PCK has proved elusive. For researchers investigating PCK it is critical that they have a sound conceptual framework from which to work, and so researcher attention has turned recently to the development of more precise and useful models of PCK. This workshop allows participants to explore their own interpretations of PCK and those emerging from recent research in the field.

September 23, 2015 (Wednesday)
17:45 – 19:30
Room 206, Runme Shaw Building, HKU
(Chair: Dr Kennedy Chan)

About the speaker:
Dr Anne Hume is a senior lecturer in science education at undergraduate, graduate and post-graduate levels at the University of Waikato, in Hamilton, NZ. She is also an Assistant Director at the Technology, Environmental, Mathematics and Science (TEMS) Education Research Centre leading the Science Research Group and former Chairperson of the Mathematics, Technology and Science Education Department in the Faculty of Education. Before taking up her current position in early 2005, Anne was an evaluator with the New Zealand Education Review Office for 4 years, following 25 years secondary teaching, 16 of those as head of a science department. She has had extensive experience in the wider science education scene in New Zealand, including membership of: the board of the Royal Society of New Zealand; the writing team for the 1993 Science in the New Zealand Curriculum, and the science expert panel for the National Certificate of Educational Achievement (NCEA). From 1993-94 she was President of the New Zealand Science Teachers’ Association, and in 1993 she was awarded a New Zealand Suffrage Medal for contributions to science education. During her teaching career Anne published a range of papers and students’ texts in the field of science education for teachers and students, and continues to publish extensively in her academic career. Recent research involvement included membership of the Science Learning Hub development team (STER Centre, University of Waikato) and the Curriculum Implementation Exploratory Studies (CIES) project; work on reflective journals and other strategies to promote student teachers’ learning through development of their pedagogical content knowledge (PCK); and environmental sciences education as consultant to the NIWA (National Institute of Water and Atmospheric Research) Nga Waihotanga Iho Estuary Toolkit project (code AQCC082) and the Coastal Adaptation to Climate Change project (code CO1X0802). In 2011 she was a researcher in the TLRI funded project Promoting pedagogical content knowledge (PCK) development for early career secondary teachers in science and technology using Content representations (CoRes). She was also Principal Investigator for an FEDU research grant from 2010-2011 entitled CoRe Follow Up with First Year Chemistry Teachers and for a second FEDU funded project entitled Getting to the CoRe of the Matter in 2014, which investigated the review, development and evaluation of a whole-school primary science programme featuring inquiry teaching and learning. Anne serves as an Associate Editor on the Research in Science Education (RISE) journal and on the Editorial Boards of the International Journal of Science Education and NZ Science Teacher journal. Recently Anne was appointed to an adjunct senior lecturer position at the University of Fiji.

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