

ANALYSING MATHEMATICS LECTURER PRACTICE: A POSSIBLE ROUTE TO PROFESSIONAL DEVELOPMENT



Mike Thomas

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Date: 14 February, 2012

Time: 3.30 pm to 4.30 pm

Venue: NIE7-03-16 (Journal Room)

Abstract

Research into the teaching of mathematics at university is a relatively new but growing field of study. In this talk we describe the application of Schoenfeld's framework for decision-making based on analysing an individual's resources, orientations and goals (ROG) to the practice of five mathematics lecturers. In particular we explain how videos of lectures and subsequent group discussion were employed to describe the ROG underlying several in-the-moment decisions and the teacher-mathematician tension that the lecturers experienced. In addition the potential for lecturer professional development arising from the process will be presented.

About the speaker:

Professor Thomas is in the Mathematics Department at The University of Auckland, where he has been Head of the Mathematics Education Unit at various times. His research field is mathematics education and he has particular interests in the use of technology to improve learning, developing theories of advanced mathematical thinking, the learning and teaching of calculus and undergraduate mathematics, school and university teaching, and the connections between mathematics education and cognitive neuroscience. These fields are often interdisciplinary in nature, calling on ideas from a number of differing domains, but always emphasising the mathematics. He enjoys collaborative research and works with leading researchers such as David Tall from the UK, Alan Schoenfeld from the USA, Tommy Dreyfus from Israel, and Ferdinando Arzarello from Italy. He is currently leading an international ICME survey team considering the mathematical difficulties inherent in the transition from school to university. He has given invited research talks at leading universities in a number of countries and is on the editorial boards of *Mathematics Education Research Journal* and the *International Journal of Mathematical Education in Science and Technology* as well as a new international book series entitled *Interweaving Mathematics Pedagogy and Content in Teaching*.

All are Welcome!

For more information, please contact Dr Jaguthsing Dindyal, at jaguthsing.dindyal@nie.edu.sg