

VIDEOS IN TEACHER PROFESSIONAL DEVELOPMENT

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Over the last decade or so, the leap in video-related technology (that afforded ease of capturing, storing, editing, and transmitting of video data) has prompted a re-visit to the promise of video in teacher education. They allow teachers not only to learn through modeling and feedback, but technologically they better enable inquiry-based approaches. There is, however, as yet a lack of discussion at the theory level in the literature on a number of critical issues in this field. Without clear theoretical orientations, efforts to implement – even successfully – video usage in teacher PD remain as isolated cases without a broader framework to guide replicable and future work in this area. Thus, the aim of this Discussion Group (DG) is to propose and discuss models of video-based PD programmes that are strongly grounded theoretically.

Key Discussion Questions

1. Discuss the design of a successful model of video use in PD for mathematics teachers. Provide evidence of its “success”. Explicate the role of videos in the PD model.
2. What are existing design principles for successful use of video in PD? What is the connection between these principles and existing theories of teacher learning and of video as teacher learning tool? What cross-countries and cultural differences exist?
3. How can we calibrate a video-based PD model in a way that addresses different emphases of knowledge needs of mathematics teachers along relevant knowledge strands (such as the now well-known domains of Mathematics content knowledge, mathematics pedagogical content knowledge, and knowledge of student learning)?

We anticipate that, through the participants’ engagement with these questions, we will be afforded an international perspective with regards to the range of successful video-based PD models for mathematics teachers. In addition, the discussion would enrich mutual appreciation of the cultural norms and values underlying the different scholarly traditions participants bring to bear on this topic, including how key ideas such as “success”, “professional development”, and the “role of video” are conceived in this field.

Tuesday, 16.30-18.00: Planned timeline	Topic	Material / Working format / presenter
1630-1645	Introductory comments - framing the discussion through the Key Questions	Organising Committee (Leong Yew Hoong)
1645-1700	Short Presentation of research I: Using videos to support	Kristin Lesseig, Washington State University

Last names of the organisers

	teacher inquiry and noticing	
1700-1715	Short Presentation of research II: Video-based Unit Study	Leong Yew Hoong, Nanyang Technological University
1715-1750	Discussion: Relate the presentations , and the contributions from the floor, to Key Questions 1 and 2	Chaired by Tanya Evans, University of Auckland
1750-1800	Closing comments – Summarise the presentations and discussions, and identify follow-up questions to investigate	Ho Weng Kin, Nanyang Technological University

Friday, 16.30-18.00: Planned timeline	Topic	Material / Working format / presenter
1630-1645	Short Presentation of research I: The use of videos in professional development of academic staff teaching mathematics at university	Greg Oates (University of Tasmania) and Tanya Evans, (University of Auckland)
1645-1700	Short Presentation of research II: Perception vs reality – using tutorials videos to aid tutor reflection	Heather Lonsdale (Curtin University) and Deborah King (University of Melbourne)
1700-1745	Discussion: Relate the presentations , and the contributions from the floor, to the Key Questions, including Question 3	Chaired by Ho Weng Kin, Nanyang Technological University
1745-1800	Closing comments – identify areas of future research, and potential domains of cross-cultural collaborations	Tanya Evans, University of Auckland