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Ng, Kit Ee Dawn

Teacher readiness in mathematical modelling: are there differences between pre-service and in-service teachers?

Stillman, Gloria Ann (ed.) et al., Teaching mathematical modelling. Connecting to research and practice. Dordrecht: Springer (ISBN 978-94-007-6539-9/hbk; 978-94-007-6540-5/ebook). International Perspectives on the Teaching and Learning of Mathematical Modelling, 339-348 (2013).

Summary: Since its introduction in the Singapore mathematics curriculum in 2003, there have been limited efforts at incorporating modelling tasks in schools. One key factor for this relates to the unpreparedness of Singapore teachers for modelling tasks. It is believed that the majority of the teachers have yet to experience the role of a modeller and hence have difficulty acknowledging the potentials of the use of modelling tasks in their classrooms. This chapter presents findings on the initial modelling experiences of pre-service teachers in primary mathematics education in Singapore. The findings will be compared with those from a previous study involving in-service primary mathematics teachers. Implications from the findings of this study will be drawn with respect to the focuses and challenges of teacher education in mathematical modelling.

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