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Teacher knowledge for modelling and problem solving.

Pope, Sue (ed.), Proceedings of the British Society for Research into Learning Mathematics (BSRLM). Proceedings of the British congress of mathematics education, BCME-8, University of Nottingham, UK, April 14–17, 2014. London: British Society for Research into Learning Mathematics (BSRLM). 335-342 (2014).

Summary: This article reports on a study that has researched teacher professional learning in lesson study communities that enquired into how we might better support students develop skills in problem solving and mathematical modelling. A rationale for professional development of this type, both in terms of its structure and focus, is presented followed by an illustrative description from the study of a typical research lesson and issues raised in the post-lesson discussion. This is used to provide insight into some of the key issues to consider in developing teacher knowledge for modelling and problem solving.

Classification: M19 D59 B50

Keywords: teacher education; professional development; problem solving; mathematical model building; educational research; lesson study; professional learning communities; case studies; research lessons; post-lesson discussions; collaborative working

<http://www.bsrlm.org.uk/BCME8/BCME8-43.pdf>