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Developing statistical numeracy: the model must make sense.

Stillman, Gloria Ann (ed.) et al., Mathematical modelling in education research and practice. Cultural, social and cognitive influences. Cham: Springer (ISBN 978-3-319-18271-1/hbk; 978-3-319-18272-8/ebook). International Perspectives on the Teaching and Learning of Mathematical Modelling, 363-373 (2015).

Summary: Teaching statistical numeracy in middle school classrooms requires high quality instruction that promotes opportunities to use mathematics in modelling problem situations. In this chapter we report on a professional development session that involved nine teachers from six rural and remote high schools in Queensland, Australia. Results indicate that some teachers focused on the mathematics they would teach, limiting numeracy opportunities, while others focussed on making sense of the problem by modelling, thereby promoting statistical numeracy. This research suggests that ongoing learning opportunities where such differences become the point of professional discussions are needed to support teachers' understanding and appreciation of the role of modelling in promoting statistical numeracy.

Classification: K40 M10

Keywords: modeling; statistical numeracy; data analysis

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