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**Prescriptive modelling – challenges and opportunities.**

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, 67-79 (2015).

Summary: This chapter deals with a distinction between two kinds of mathematical modelling purposes and related modelling endeavours, descriptive modelling and prescriptive modelling. Whilst descriptive modelling is usually the focus of attention of practice, research and development in mathematics education, prescriptive modelling – in which the aim is to design, organise or structure certain aspects of extra-mathematical domains – is hardly noticed, let alone investigated in mathematics education. After having presented three concrete examples of prescriptive modelling, this chapter makes a plea for paying attention to its cultivation and investigation in mathematics education contexts. It does so by analysing prescriptive modelling in relation to the so-called modelling cycle and finishes by outlining challenges and opportunities for such an endeavour.

*Classification:* M10

*Keywords:* prescriptive modeling; modeling cycle

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