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Taking advantage of incidental school events to engage with the applications of mathematics: the case of surviving the reconstruction.

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, 175-184 (2013).

Summary: This paper reports on one aspect of a 2 year research and development project aimed at enhancing primary and secondary teachers' instructional practices in numeracy. The project made use of Goos' model of numeracy as a basis for assisting teachers to plan for teaching and also to reflect upon the effectiveness of their practice. As part of the project, teachers were challenged to develop learning experiences which were relevant to their own students' lived-in worlds. One teacher took advantage of a major, potentially disruptive, building development within her school to design a sequence of lessons in which students were challenged to adapt to the changes that were associated with the construction. The chapter concludes by discussing the changes to the teacher's disposition towards incorporating events from the students' lived-in worlds into her teaching practice.

Classification: M10 B50 D40 D30

Keywords: teaching practice; professional development; numeracy; learning experience; real-life problems; modelling

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