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Modelling at primary school through a French-German comparison of curricula and textbooks.

Kaiser, G. (ed.) et al., Trends in teaching and learning of mathematical modelling. Proceedings of the 14th international conference on the teaching of mathematical modelling and applications, ICTMA, Hamburg, Germany, July 27–31, 2009. Berlin: Springer (ISBN 978-94-007-0909-6/hbk; 978-94-007-0910-2/ebook). International Perspectives on the Teaching and Learning of Mathematical Modelling 1, 559-568 (2011).

Summary: The teaching of modelling is a place where mathematical knowledge and real world knowledge are transposed in the school institution to become a taught knowledge. We will use a French-German qualitative comparison to propose a theoretical reflection based on Anthropological Theory of Didactic (ATD) to analyse this double transposition at primary school level. The comparison of the curriculum shows the difficulty to designate modelling as knowledge to be taught. The comparison of textbooks illustrates the characteristics of the modelling tasks and the progression of this teaching through the school year. We conclude by pointing the challenges for the production of resources and teacher training.

Classification: M12 U22 D32

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