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**Mathematical modeling: Implications for teaching.**

Lesh, Richard (ed.) et al., Modeling students' mathematical modeling competencies. ICTMA 13. Proceedings of the 13th international conference on the teaching of mathematical modelling and applications, July 22–26, 2007. London: Springer (ISBN 978-1-4419-0560-4/hbk; 978-1-4419-0561-1/ebook). 481-490 (2010).

Summary: In this paper we present the main implications of Modeling in the teaching of Mathematics where empirical data was obtained from the use of mathematical modeling for teachers through Courses of Continuing Education. The objectives of the research were to verify the possibilities and difficulties in establishing modeling as a teaching methodology. The experiment was conducted in four Courses given to 105 teachers. The main difficulty in terms of teachers' education was their lack of experience with tasks of this nature. It is rather rare for teachers' Mathematics training programs to include any orientation regarding Modeling, whether in the use of the process or its formal teaching. In spite of the difficulties, research has shown that the adoption of mathematical models in teaching can lead to better achievements for teachers and students, becoming one of the chief agents for change.

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*Keywords:* mathematical modeling; preservice teacher education; Brazil

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