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**Using modeling-based learning as a facilitator of parentel engagement in mathematics: the role of parents' beliefs.**

Liljedahl, Peter (ed.) et al., Proceedings of the 38th conference of the International Group for the Psychology of Mathematics Education “Mathematics education at the edge”, PME 38 held jointly with the 36th conference of PME-NA, Vancouver, Canada, July 15–20, 2014, Vol. 4. [s. 1.]: International Group for the Psychology of Mathematics Education (ISBN 978-0-86491-360-9/set; 978-0-86491-364-7/v.4). 265-272 (2014).

Summary: Being part of a larger research project aimed at connecting mathematics and science to the world of work by promoting mathematical modeling as an inquiry based approach, the present study aimed to: (a) describe parents' beliefs about inquiry-based mathematical modeling and parental engagement, and (b) explore the impact of a modeling-based learning environment on enhancing parental engagement. Results from semi-structured interviews with 19 parents from one elementary school classroom revealed strong positive beliefs on their engagement in their children learning, an appreciation of the modeling approach for bridging school mathematics and home, and their willingness to collaborate with teachers. Implications for parental engagement in mathematics learning are discussed.

*Classification:* C20 D40 D30 M10

*Keywords:* modeling; parental engagement; parents' beliefs; modeling-based learning