

**ZMATH 2016c.00142**

**Saló i Nevado, Laia; Portaankorva-Koivisto, Päivi; Pehkonen, Erkki; Varas, Leonor; Hannula, Markku; Näveri, Liisa**

**Chilean and Finnish teachers' conceptions on mathematics teaching.**

Bernack-Schüler, Carola (ed.) et al., Views and beliefs in mathematics education. Results of the 19th MAVI conference, Freiburg, Germany, September 25–28, 2013. Wiesbaden: Springer Spektrum (ISBN 978-3-658-09613-7/pbk; 978-3-658-09614-4/ebook). Freiburger Empirische Forschung in der Mathematikdidaktik, 43-53 (2015).

Summary: This paper analyses the cases of two Chilean and two Finnish elementary teachers' reflections on their own professional development during a research project where they learned about and used open-ended problems to teach mathematics. The data indicates that during the project the teachers increased their pedagogical content knowledge, subject matter knowledge and motivational components. Teachers claim they give more room for pupils' ideas and rely on pupils' learning in pairs or in groups. Furthermore, they allege that also the weakest pupils seem to be involved with problem solving.

*Classification:* C29 B50 D50

*Keywords:* teachers' conceptions; professional development; open-ended problems; pedagogical content knowledge; subject matter knowledge; motivation; problem solving

doi:10.1007/978-3-658-09614-4\_4