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## Abstract

In this paper we aim to highlight how teachers' ways of experiencing mathematics teaching for preschoolers is reflected in their teaching acts. The specific research question is how one teacher's way of experiencing the task of teaching numbers to preschool children change when participating in a professional development project informed by Variation theory principles. We analyze the teaching of one teacher participating in a professional development project during one preschool year with particular interest in how principles for teaching numbers in preschool are implemented in the teacher's teaching. Observations from authentic teaching situations and an interview with the teacher are data for analysis. From a variation theoretical analysis, we draw conclusions of how the teacher's ways of experiencing mathematics teaching to preschoolers is reflected in her teaching acts and what challenges there are to implement theory-driven mathematics education in preschool.

## Camilla Björklund

Camilla Björklund is Professor in Education at the University of Gothenburg, Sweden. Björklund is involved in research projects within the field of mathematics learning and teaching in early childhood education, which are characterized by practice-oriented research questions and designs. Research areas of interest are mathematics learning and teaching in the early years of preschool and primary school, and teachers' professional pedagogical development. She has frequently published scientific reports and books for teacher students and practicing teachers, particularly within the field of teaching about numbers and arithmetic in the early years.

## Anna-Lena Ekdahl

Anna-Lena Ekdahl has a PhD in Didactics, she works as lecturer at Jönköping University, Sweden and visiting associate at WITS School of Education, University of the Witwatersrand, Johannesburg, South Africa. Ekdahl is particularly interested in teaching and learning numbers and additive relations in preschool and early primary years. She is involved in intervention projects in Sweden and in South Africa. Projects are characterized by practice-oriented research questions and close collaboration with teachers. Results from projects have been published in scientific papers.