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Teachers' management of meaning construction in the mathematics classroom.

Anthony, Glenda (ed.) et al., Teachers of mathematics: recruitment and retention, professional development and identity. Papers based on the presentations at the 10th international congress on mathematical education (ICME 10), Copenhagen, Denmark, July 4–11, 2004. Linköping: Svensk Förening för MatematikDidaktisk Forskning (ISBN 978-91-973934-7-8/pbk). Skrifter från Svensk Förening för MatematikDidaktisk Forskning (SMDF) 8, 101-112 (2010).

Summary: The five studies presented here focus on aspects of teachers' management of the construction of meaning in the mathematics classroom: the ways they handle the epistemological features of mathematics, deal with pupils' work and errors as well as the communicative patterns they adopt. The results show that the teachers tended to treat the epistemological features of mathematics in a unified manner; their interventions during the pupils' engagement with a mathematical task were very directive, and the communication patterns they followed did not provide space for the mathematical meaning to be negotiated. These findings suggest that the classroom management of the subject matter is likely to distort the mathematical meaning constructed by the pupils, and that it is dialectically related to the communicative practices employed.

Classification: C70 C30 D70

Keywords: teachers' role; meaning construction; students' work; students' errors; classroom management