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Mathematical communication: teachers' recognition of the singularity of students' knowledge.

Ubuz, Behiye (ed.) et al., CERME 8. Proceedings of the eighth congress of the European Society of Research in Mathematics Education, Antalya, Turkey, February 6–10, 2013. Ankara: Middle East Technical University (ISBN 978-975-429-315-9). 3075-3084 (2013).

Summary: This paper discusses the role of collaborative work in the development of social interactions in the classroom and how teachers value such interactions in the development of the modes of communication, as well as in the interaction patterns centered on student' individual knowledge. Data are collected in the context of collaborative work involving a researcher and three teachers participating in this study. The development of the interaction among the students themselves and between them and the teachers, along with the recognition of the students' singular mathematical knowledge determined the adoption of reflexive and instructive modes of communication and also the extraction and discussion patterns in mathematical communication.

Classification: C50 C70 D40

Keywords: mathematical communication; modes of communication; interaction patterns; teaching practices; collaborative work