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**Representations and reasoning strategies of grade 3 students in problem solving.**

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). 383-392 (2013).

Summary: We analyse the representations used by grade 3 students and how they relate to mathematics reasoning on a mathematical problem. Data were collected through audio and video recording in the classroom as well as students' written productions. Students that use schematic representations are those who have more success in solving the problem, in contrast with those that use pictorial and symbolic representations. The reasoning of some students shows interesting instances of making generalizations and working in a systematic way.

*Classification:* D52 E52 F32

*Keywords:* representations; mathematical reasoning; reasoning strategies; problem solving