

ZMATH 2008b.00125

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Progressive discourse in mathematics classes - the task of the teacher.

Johnsen Høines, Marit (ed.) et al., Proceedings of the 28th international conference of the International Group for the Psychology of Mathematics Education, PME 28, Bergen, Norway, July 14–18, 2004. Bergen: Bergen University College. Part II, 495-502 (2004).

Summary: This paper uses data from two mathematics lessons to explore the nature of progressive discourse and examine critical features of teacher actions that contribute to mathematics classrooms functioning as communities of inquiry. Features found to promote progressive discourse include a focus on the conceptual elements of the curriculum and the use of complex, challenging tasks that problematised the curriculum; the orchestration of student reporting to allow all students to contribute to progress towards the community's solution to the problem; and a focus on seeking, recognizing, and drawing attention to mathematical reasoning and justification, and using this as a basis for learning.

Classification: C50 C70 D40 A60

Keywords: arithmetic; elementary geometry; discourse analysis; teacher student relationship; problem solving; teaching methods; abstract reasoning; thinking; curriculum
emis:proceedings/PME28/RR/RR272.Groves.pdf