

**ZMATH 2013b.00491**

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**Justification as a teaching and learning practice: its (potential) multifaceted role in middle grades mathematics classrooms.**

J. Math. Behav. 31, No. 4, 447-462 (2012).

Summary: Justification is a core mathematics practice. Although the purposes of justification in the mathematician community have been studied extensively, we know relatively little about its role in K-12 classrooms. This paper documents the range of purposes identified by 12 middle grades teachers who were working actively to incorporate justification into their classrooms and compares this set of purposes with those documented in the research mathematician community. Results indicate that the teachers viewed justification as a powerful practice to accomplish a range of valued classroom teaching and learning functions. Some of these purposes overlapped with the purposes in the mathematician community; others were unique to the classroom community. Perhaps surprisingly, absent was the role of justification in verifying mathematical results. An analysis of the relationship between the purposes documented in the mathematics classroom community and the research mathematician community highlights how these differences may reflect the distinct goals and professional activities of the two communities. Implications for mathematics education and teacher development are discussed.

*Classification:* E53 D33

*Keywords:* educational practices; inferences; evaluative thinking; problem solving; classroom techniques; classroom research; middle school teachers; teaching methods; role perception; mathematical logic; justification; learning practice; proofs; role of proofs

doi:10.1016/j.jmathb.2012.07.001