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To search for mathematics in the vocational teaching and learning – an overview of theories and methods.

Bergsten, Christer (ed.) et al., Developing and researching quality in mathematics teaching and learning. Proceedings of MADIF 5, the 5th Swedish mathematics education research seminar, Malmö, Sweden, January 24–25, 2006. Linköping: Svensk Förening för MatematikDidaktisk Forskning (ISBN 91-973934-4-4/pbk). Skrifter från Svensk Förening för MatematikDidaktisk Forskning (SMDF) 5, 94-102 (2007).

Summary: In 1994 a new curriculum was introduced in Sweden. All students at upper secondary school have to take the introductory mathematics course A, including those students enrolled in vocational programmes. Data show that many pupils fail on this course. I am interested in looking for signs of the teaching and learning of mathematics in the vocational subjects in the Swedish upper secondary school. During the last decades there has been research in the use of mathematics in different vocations. As this field is close to mine I am looking at methods used by these researchers to answer their research questions to help me find an adequate method for my research. This article also gives an overview of the content of mathematics in the compulsory school and course A and from documents talking about linking mathematics to vocational subjects.

Classification: D27 D37

Keywords: quality teaching; learning; educational research; vocational education; upper secondary; invisible mathematics; transfer; visible mathematics; activities; mathematics in the workplace; collaboration of researchers and teachers