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The beginnings of algebraic thinking.

Bergsten, Christer (ed.) et al., Challenges in mathematics education. Proceedings of MADIF3, The 3rd Swedish mathematics education research seminar, Norrköping, Sweden, January 23–25, 2002. Linköping: Svensk Förening för MatematikDidaktisk Forskning (ISBN 91-973934-0-X). Skrifter från Svensk Förening för Matematikdidaktisk Forskning (SMDF) 2, 107-117 (2003).

In the presentation, a learning-model for the arithmetic-algebra development is described and illustrated by data from their experimental teaching. Of crucial importance in this development are the steps from knowledge in action into knowledge in words, and from the latter into symbolic language knowledge. The model, which is based on a constructivist approach, emphasises that this development is a long term process, and that it is a challenge to mathematics educators to change established teachers' traditional views on the teaching of algebra.

Classification: C30 B50 H20 D20