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On guessing the essential thing.

Gravemeijer, Koeno (ed.) et al., Symbolizing, modeling and tool use in mathematics education. Dordrecht: Kluwer (ISBN 1-4020-1032-X). Mathematics Education Library 30, 233-256 (2003).

This paper relates to the ongoing discussion in the domain of psychology of (mathematics) education about the consequences of the 'situated cognition' paradigm for the issues of generalization and transfer of learning. This chapter focuses on the nature of generalizing. A first issue that is examined is the relationship between principles, laws, and definitions, on the one hand, and the circumstances in which they are validly applied. In this respect, a distinction is made between formal and situated generalizations across the following three areas: (a) where the generalization takes place, (b) values associated with generalizing, and (c) how generalizations relate to particular instances. A second part to be published elsewhere elaborates on transfer of learning. These papers articulate the claims through an in-depth analysis of an interview with Clio, an 11-year old girl working with problems involving the graphical representation of motion.

Classification: C33 D23

Keywords: the 'situated cognition' paradigm; transfer of learning; graphical representation of motion; situated generalizing