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**Embodied cognition as grounding for situatedness and context in mathematics education.**

Educ. Stud. Math. 39, No. 1-3, 45-65 (1999).

In this paper we analyze, from the perspective of ‘Embodied Cognition’, why learning and cognition are situated and context-dependent. We argue that the nature of situated learning and cognition cannot be fully understood by focusing only on social, cultural and contextual factors. These factors are themselves further situated and made comprehensible by the shared biology and fundamental bodily experiences of human beings. Thus cognition itself is embodied, and the bodily-grounded nature of cognition provides a foundation for social situatedness, entails a reconceptualization of cognition and mathematics itself, and has important consequences for mathematics education. After framing some theoretical notions of embodied cognition in the perspective of modern cognitive science, we analyze a case study – continuity of functions. We use conceptual metaphor theory to show how embodied cognition, while providing grounding for situatedness, also gives fruitful results in analyzing the cognitive difficulties underlying the understanding of continuity. (Abstract)

*Classification:* C30

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