

ZMATH 2015f.00242

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Conceptualising a university teaching practice in an activity theory perspective.

Nord. Mat.didakt. 20, No. 2, 53-77 (2015).

Summary: I present a theorisation of a university mathematics teaching practice, based on a research study into the teaching of linear algebra in a first year mathematics undergraduate course. The research was largely qualitative and consisted of data collected in interviews with the lecturer and in observations of his lectures. Using *A. N. Leontiev's* ["The problem of activity in psychology", in: *The concept of activity in Soviet psychology*. Armonk, NY: M. E. Sharpe. 37–71 (1981)] activity theory framework I categorised the teaching of linear algebra on three levels: activity-motive, actions-goals and operations-conditions. Each level of analysis provided insights into the lecturer's teaching approach, his motivation, his intentions and his strategies in relation to his teaching. I developed a model of the teaching process that relates goals as expressed by the lecturer in interviews to the strategies that he designed for his teaching.

Classification: C75 D35 H65

Keywords: teaching practice; undergraduate mathematics; activity theory; linear algebra; educational goals