

The Everyday and the Academic in the Mathematics Classroom: Confrontation or Conciliation?

Eva Jablonka, Luleå University of Technology

Abstract

Including particular aspects of everyday out-of-school practices as resources for mathematical activities is a common practice in mathematics teaching. However, the tension between everyday and academic practices cannot be easily resolved. The relationship between these two domains of practice is a topic that has been extensively discussed in mathematics education, for example in terms of the authenticity of contexts, the functions of horizontal and vertical mathematisation, mathematical modelling, 'realistic mathematics education' and word-problems. Although many argue for including contexts from everyday practices, some are suspicious of the potential to create a bridge between everyday practices and formal, academic mathematics through the use of contextualised tasks.

The talk will draw on episodes from classroom discourse in different countries, which document the interactions between teachers and students who are engaged in solving tasks that relate mathematics to everyday practices. These episodes illustrate the practical challenges teachers face when trying to facilitate students' access to the formal structure of mathematics through the everyday. The students often face a dilemma when confronted with contextualised tasks: should they make extensive or only little reference to their everyday knowledge? In the talk, these issues will be discussed in terms of the recontextualisation of out-of-school practices for didactical purposes. It aims at describing how some of the students' difficulties are related to the ways in which the recontextualisation operates in classrooms.