Institutionen för pedagogik och specialpedagogik

Förskolebarns strävanden att kommunicera matematik

av

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AKADEMISK AVHANDLING

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Abstract

Title:	Preschool children's efforts to communicate mathematics
Author:	Marita Lundström
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The aim of this study is to explore and describe preschool children's use of mathematics in their communication with others. This study is limited to examining situations in which children communicate with other children and adults. Moreover, the aim is to deepen the understanding of how preschool children use mathematics to convey mathematical meanings with other children and adults in preschool. The research questions is: How do children communicate mathematics? In what kind of situations does mathematics occur in their communication? What mathematical content is communicated?

The theoretical framework is selected from a sociocultural perspective, which is a collective term for theories which assume that language's original function is communicative and that it is a means of social interaction. From a socio-cultural perspective, language, culture and children's actions are seen as essential elements of childhood development and learning. Prerequisites for this development include children's participation in creating an interaction with their environment.

In order to study preschool children's mathematical communication, this study is based in ethnographic methodological traditions. The results show that preschool children communicate mathematics through: linguistic expressions, semiotics, linguistic tools and bodily expressions. Children communicate mathematically in situations when: they are making comparisons, when they are comparing changes, and when they are trying to give descriptions about the world which surrounds them. It also shows that preschool routines, material support and activities stimulate mathematical communication. When teachers are supportive and engaged in children's communication their mathematical knowledge can also be developed and deepened.