Early Math in a Preschool Context: Spontaneous Extension of the Digital into the Physical

# Details

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## Sample

188 children aged 3,5 to 6,5 and their teachers in a total of 14 preschools in Sweden.

## Implications For Educators About

* STEM Education
* School innovation
* Other

# Abstract

The paper presents a systematic examination of data from two early math interventions, involving 188 children aged 3,5-6,5 and their teachers. The aim is to cast light on how a digital early math game can be spontaneously extended into the physical environment by children and by teachers. Questions were: i) how the math content was extended to the physical room, ii) which elements of the game and the interventions inspired and provided affordances for the extensions iii) implications for children’s learning of early math. The analyses revealed a great variety of ways in which children and teachers – acting on their own or together – brought the game out to the physical room. Among the underlying factors for this were everyone’s experiences with the game, familiar narratives, and simple game design in terms of rules and visual features. Finally, positive influences on early math learning from the extensions were identified.

# Outcome

"Our observations and analyses reveal a variety of ways in which the children and teachers – acting on their own or together – extended MG into the wider preschool environment.... Our two original concerns appeared to be disconfirmed: namely that (i) the mathematical concepts that children engage with on the computer might never make their way off the computer and into the children’s everyday lives, and that (ii) physical activities with respect to early math might get lost." (Authors, 147)