

# Under Threes Thinking Mathematically?

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Vygotsky (1935) specified that one has to take into account that the child up to the age of three years, 'learns while following his own programme' (page 35). This paper therefore focuses on a small group of children under three and their spontaneous play episodes highlighting the possible mathematical context of these explorations. Through individual case studies the theoretical underpinning comes from a Piagetian schema based perspective. The study took place in a children's centre in England over a four-month period. The staff within the centre collected the data and their diary reflections became a further source of data. Open interviews and targeted questions were the main source of data collection.

Central questions to this paper are:

What are children under threes mathematical interests?

How and what do they learn while following their own programme?

How can adults support young children's mathematical interests?

Some of the main findings of this project were:

- That the early years' practitioners began to view mathematics and young children's learning from a much wider viewpoint.
- The children's daily self - initiated play explorations covered a wide range of mathematical concepts including perimeter, angle, speed, rotation, number, space and measurement.
- The careful choosing of equipment, the setting up of the learning environment and following children's self interests supported their mathematical enquiry.
- The home and setting became a source of joined up thinking about the children's leaning.

Vygotsky, L. (1935) 'Apprentissage et development a l'age prescolaire', *Societe Francaise*, 52(2) 35-45

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