
Listening to children’s mathematics in school.

Elizabeth Carruthers

Abstract

England’s Foundation Stage (birth to five) encourages children’s interests to be central in developing the curriculum. As children enter school, in the last year of this stage, political and organisational pressures take over forcing teachers to have uneasy pedagogies.

From a postructural stance the ‘schoolification’ of the child begins and there is a great divide between the mathematics of the child and that of the school. The literature on transitions exposes curricula dissonance not only in England but across Europe, Australasia and North America. Dialogues from teachers highlight their confusion about how and when to teach calculation and especially mathematical notation. Mathematics becomes more teacher centred with strict objectives.

The data from England’s National Assessments continue to show poor achievement in mathematical problem solving in the Foundation Stage. There needs to be a conceptual shift in the teaching of mathematics to young children in English schools to encompass children’s enquiries. This is from a Vygotskian perspective where there is priority given to social and cultural practices stressing the importance of co-participation. This could identify and enhance children’s mathematical problem solving. There is, however, much challenge for teachers not only in understanding children’s own mathematics that involves children’s agency but at the same time they need to confront the organisational walls of opposition.