Mathematical Moments: Spatial reasoning with two year olds

Model your thinking when arranging things

In this example from a private day nursery, a practitioner uses the mathematical opportunities that arise as the setting prepares for a mealtime. Keya uses spatial words (‘next to’ and ‘in front’) alongside gestures (pointing) to share her thinking with two and a half year old Toby.

It is nearly lunchtime, Keya asks Toby to help get ready for lunch. Toby nods and smiles and holds his hands up, fingers splayed, suggesting to Emily that he is ready to carry the things they need. Keya passes two folded table cloths into Toby’s arms. As Keya and Toby put the tablecloths on the tables, Emily says aloud: “The red cloth on the round table and the yellow cloth on the washing up table.”

Keya asks Toby if he can put the washing up bowls on the washing up table and Toby nods, swiftly getting the bowls and placing them in a row of three, side by side. Meanwhile Keya puts the bowls, plates, cups and cutlery on a low shelf so that the children will be able to get them for themselves. As she does this, she says aloud, “I am putting the bowls first then I am putting the plates next to the bowls. The cups are going next to the plates and the spoons are going at the front so everyone can reach them”. Toby listens to Keya and watches her arrangement as he finishes positioning the washing up bowls. Keya takes the opportunity to ask for Toby’s opinion: “Did I do a good job, Toby?” Toby nods and holds Keya’s hand. Keya sees that Toby is interested, so tells him again where she placed the things on the low shelf, bending to point to each as she does. “Where shall I put the big spoon?” Toby points to the left of the trolley and Keya checks by pointing and saying: “next to the plates?”, Toby nods and Keya puts the big spoon next to the plates.