

Developing Counting at Edwalton Primary School

A case study from Early Years



Overview

Laura Paget is the Foundation Stage Lead at Edwalton Primary School. Laura took part in East Midlands West Maths Hub Counting Project in 2017/18. The project has had a positive impact on the children's ability to count and understand value. They are much more confident with number; they are able to talk about their work and explain their thinking very clearly. She explained:

"Children are able to count to a larger number; they are beginning to understand the value of numbers and can draw on their previous knowledge when counting".

The Counting Project at East Midlands West Maths Hub

The project aimed for practitioners to develop provision for counting in Early Years mathematics within their school environment. It was intended that the children in the project settings would display higher levels of involvement in counting activities and communicate their counting strategies in a way that is observable by adults. It was hoped that project settings would develop practice underpinned by a clear knowledge of counting principles (particularly related to cardinality) and that setting practitioners would feel more confident in how to support children's early counting.

What we did at Edwalton Primary School

We set ourselves the challenge of wanting to deepen the children's knowledge of number, especially counting. To begin with we wanted the children to have a secure knowledge of numbers to 10 so this is what we focussed on. We had lots of opportunities to count to 10 within continuous provision. We then introduced the counting collection boxes; lots of boxes with different interesting objects to count. The children became really confident with counting out objects and recording their answers. The children were then challenged with larger numbers. We wanted the children to look closely at quantity. It was important for the children to understand how many a quantity was and how we can make the specific number. For example, when looking at five objects children could see that 4 and 1 more is 5 or that 3 and 2 also makes 5. This helped the children to start subitizing which also helped when counting. Developing our knowledge and understanding of counting has meant that we have been able to look closely at the children who were struggling with aspects of Maths; we could then put in more specific provision to help them.

What the children did...

The children began with counting out objects from a counting collection box. There were many boxes to choose from with different amounts of objects in. The numbers ranged to 10 to begin with but this was soon increased to 20 and beyond. The children were given the freedom to count out the objects as they wished but strategies were taught alongside in structured maths lessons on ways that may help to count. For example, counting objects in a line, moving objects as they count or using a 10's frame. Once they had counted the collection and found how many objects there were, they looked to see which numbers made this numbers e.g. 4 and 3, 3 and 3 and 1. The children then started to record what they had found out. The children became really confident in showing their answers by drawing the amount. Allowing us to utilise our grounds children started to use the woods to make their own counting collection; looking for different objects to put in their pot to count later. Then to extend the children's thinking they started to count objects in groups, investigating which numbers were easier to count in; counting in 2's was much easier than counting in 3's. Children loved counting to 'big numbers', counting confidently to 50 and beyond.



The children really enjoyed the counting collections, especially the bigger numbers. They would ask to get them out and enjoyed recording the answers. The children would also work together to help each other. The children did find it challenging especially when they started to group objects together for counting but they enjoyed the challenge set; no one ever said they couldn't do it. The best parts were when children surprised themselves with what they could do.

"I like the counting collections because we add up numbers with the objects" said Torin.

"I like counting objects; I like it when there are lots. It makes me learn" explained Harry.



Summary and next steps

Edwalton Primary has developed a long term plan for Maths that has a strong emphasis on counting. We have learnt the importance of spending time developing strong foundations in numbers before moving the children's learning on. We will continue to develop our approach to teaching early maths by reviewing what has worked well this year and next year implement this from September.

If you are interested in engaging in similar work with East Midlands West Maths Hub...

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