

Developing Counting at Newton Primary School

A case study from Early Years



Overview

Stephanie Mason is the Reception/Year 1 teacher at Newton Primary School. Stephanie took part in East Midlands West maths hub Counting Project in 2017/18. The project helped her class gain confidence in all areas of counting. She explained:

“My class now really enjoy counting and have the confidence to talk to others about it.”

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/setting 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 Newton Primary School

We began as a class using the counting collections provided by the hub. The children were given time to simply investigate the boxes independently before teaching took place. Small groups were then taught to count by moving the objects and placing them into a line. Afterwards, we introduced the children to estimating how many items they thought were inside the box before opening it to count and check. To extend the counting collections further for Reception, the children were later asked to match the number of objects they counted to the correct number card or numeral on a number line. Eventually, the children moved onto writing their number using a whiteboard pen onto their box. They also made their own collections.

The Year One pupils quickly moved onto collections containing between 20 and 50 objects. To begin with they simply wanted to take the objects out of their box one at a time and count them in ones. After trying this, the children understood that there are easier, more reliable ways to count larger quantities. They were taught to place their objects into groups of ten using plates or ten frames. This helped the children count up

in tens and continue counting in ones when there were some left over. Seeing the objects in groups of tens and ones also really helped the children to understand writing the two digit numbers too.

What the children did...

The children thoroughly enjoyed the counting activities we taught them. They have grown in confidence and ability throughout. They have been given the skills to count accurately and been given the opportunity to talk to others about their learning. One area the children found difficult to begin with was estimating but after focussing on counting collections weekly, the children now show a deeper understanding of this.

The children also love being teachers. I often ask the children to help check their peers work. Once one child has completed their task and written how many they think are in the box, a friend comes along and checks. I also ask them to show or explain why they agree with their answer or why they do not. This helps me assess the children's reasoning skills as well as counting.



Stephanie explained:

“Myself and my Teaching Assistant really love this approach to counting and we like the fact that we are able to adapt it to the children's interests and continue to develop it to ensure it challenges all children's abilities.”



“Are we doing counting today? I love it!”
Jacob (Reception)

Summary and next steps

Newton Primary School developed a new and clear approach to teaching counting and learned a huge amount. The resources were a great support and really engaged the children. The activities shared linked to so many objectives and having the theory, behind how children learn to count, made assessment easy. Newton Primary School are continuing to develop their approach to teaching early maths by sharing ideas with KS1 teachers and adapting planning to allow weekly counting activities to take place.

If you are interested in engaging in similar work with East Midlands West maths hub...

Contact us:

[Twitter.com/EM_mathshub](https://twitter.com/EM_mathshub)

mathshub@george-spencer.notts.sch.uk