

Numicon Impact Study Report

We have collated Numicon research data from our authors, Local Authorities and schools that have trialled Numicon, as well as from customers that have implemented the Numicon approach in school. The data provides a clear picture of the benefits Numicon is bringing to teachers and children in the UK and overseas.



Highlights

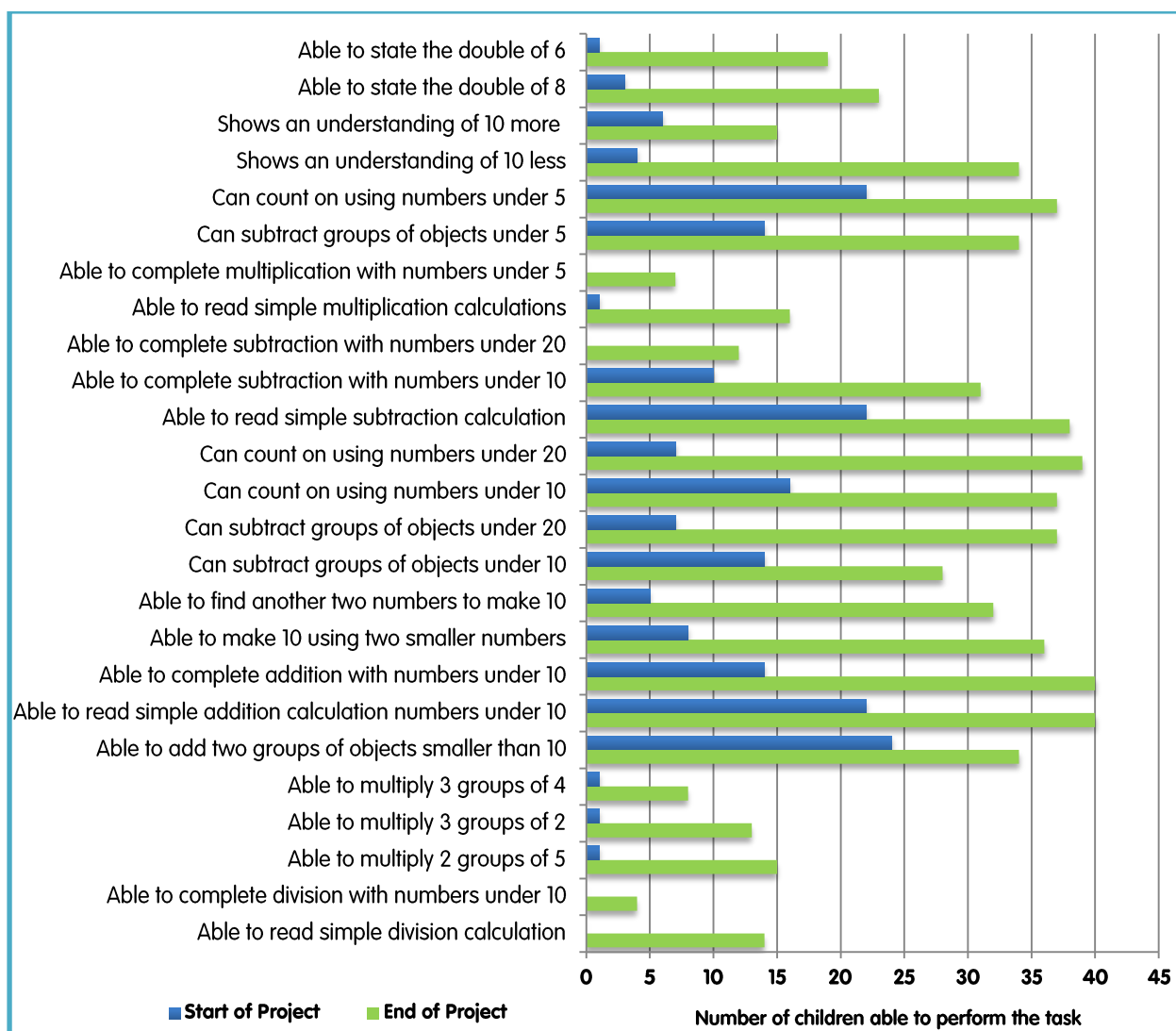
- ❖ Local Authorities running the Numicon Intervention Programme found that children's mathematical ability across a range of activities increased significantly. It was also noted during the Cambridge trials of Numicon that children's mathematical self-confidence greatly improved.
See figure 1 or [read more online](#)
- ❖ Year 1 and 2 teachers commented that Numicon supported children in learning specific concepts that in previous years had been difficult or in some cases not understood- in particular, number bonds to 10 as rapid recall (instead of calculations,) one more and one less, odd and even, understanding subtraction as difference, as well as 'take away,' inverse operation, repeated addition and its link to multiplication.
Leicestershire LA research [read more online](#)
- ❖ Early Numicon trials reported a 47% increase in students achieving Level 3 at KS1 after using Numicon and a 72% increase in students achieving Level 5 at KS2, having used Numicon in KS1. (Peacehaven Infants and Hodder Junior School results).
See figures 2 and 3 [read more online](#)
- ❖ A recent customer survey showed that 98.9% of customers that have attended Numicon Professional Development courses said that the training was effective (37.9%) or very effective (60.9%). Comments included that Numicon PD courses were **inspiring**, gave teachers **confidence**, great ideas for classroom practice and really **enthused them to get started** with the approach.
See figure 4
- ❖ 'Significant improvement' was reported by the majority of teachers for the impact on children's mathematical achievement and enjoyment of maths, when using Numicon.
See figure 5, 6 and 7

Cambridge Local Authority Research

Cambridge Local Authority conducted trials in the use of Numicon in the form of a 10-week Wave 3 intervention programme. The reported results summarised in the table below, show notable progress for the vast majority, together with greatly improved mathematical self-confidence in the children.

The combination of a new self-confidence and an understanding of very basic number ideas is providing these children with the best possible platform for their future success.

Figure 1: Cambridge Intervention Programme Results



Early Numicon Trials- gathering evidence for Numicon

When comparing three infant school cohorts over five years the Numicon authors found that using Numicon led to a **47% increase** in children achieving Level 3 in KS1 maths and a **72% increase** in the number of those children later achieving Level 5 at KS2.

Figure 2: Peacehaven Infant School Key Stage 1 SATs results

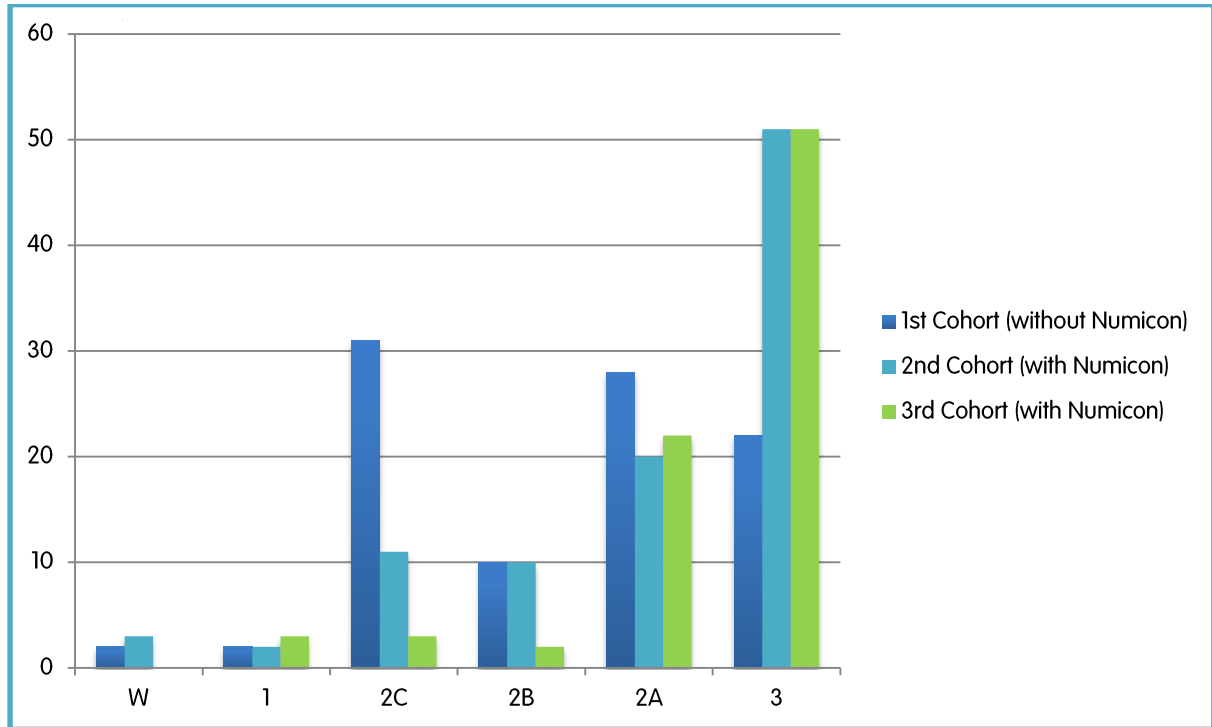
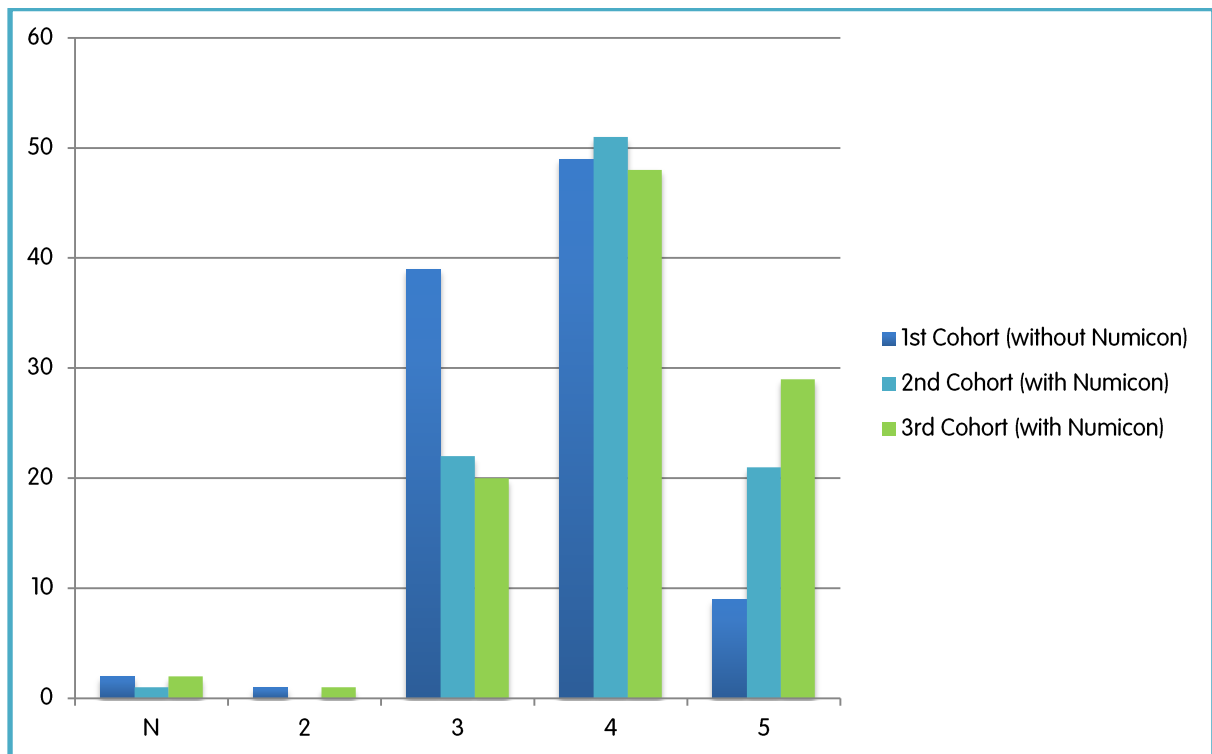


Figure 3: Hoddern Junior School Key Stage 2 SATs results

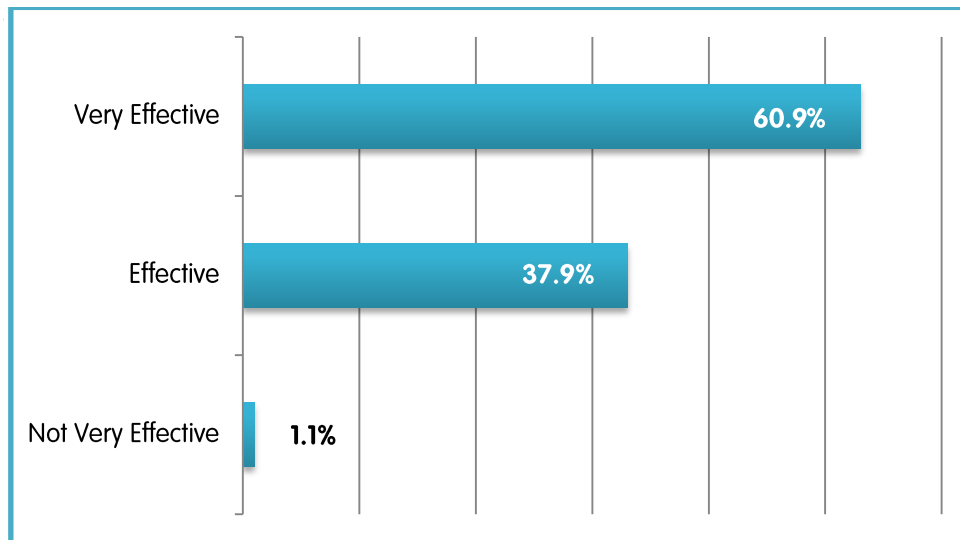


Results from our 2011 Customer Survey

We asked existing Numicon customers what impact they felt that the Numicon approach had made in their schools.

1. How effective did you find the Numicon Professional development that you received?

Figure 4: Impact of Numicon Professional Development

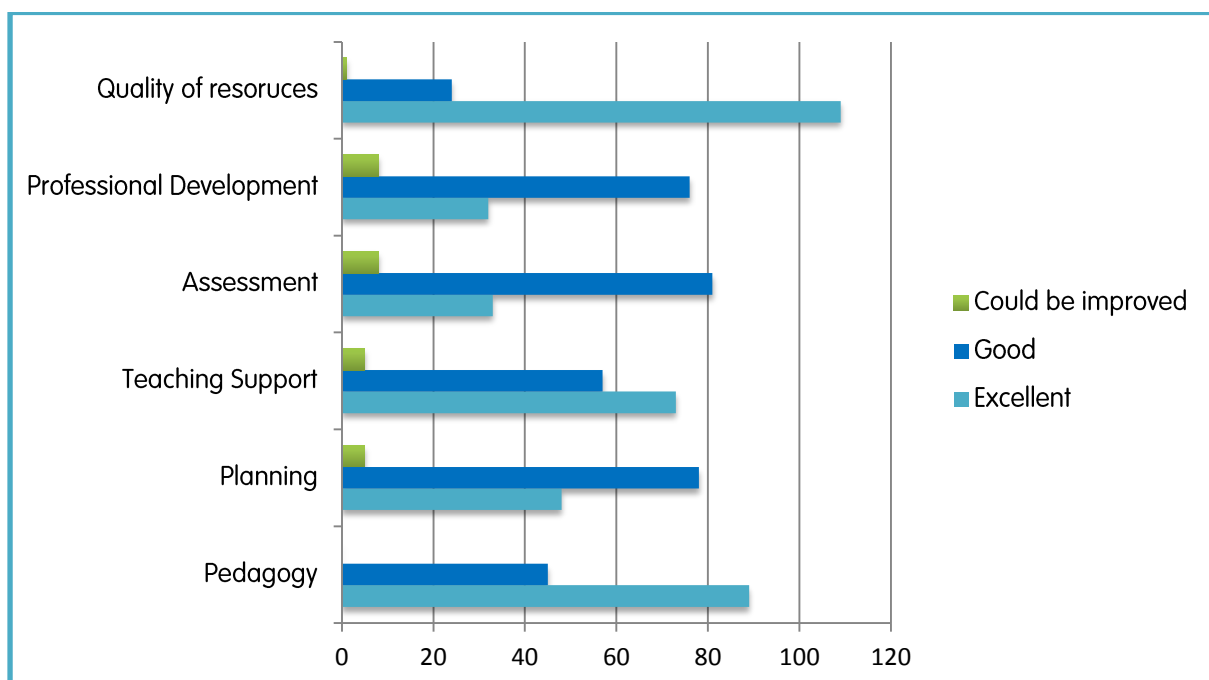


"A great introduction to a new concept. Excellent- clear and inspiring."

"Wish we could have had longer; really informative- thank you!"

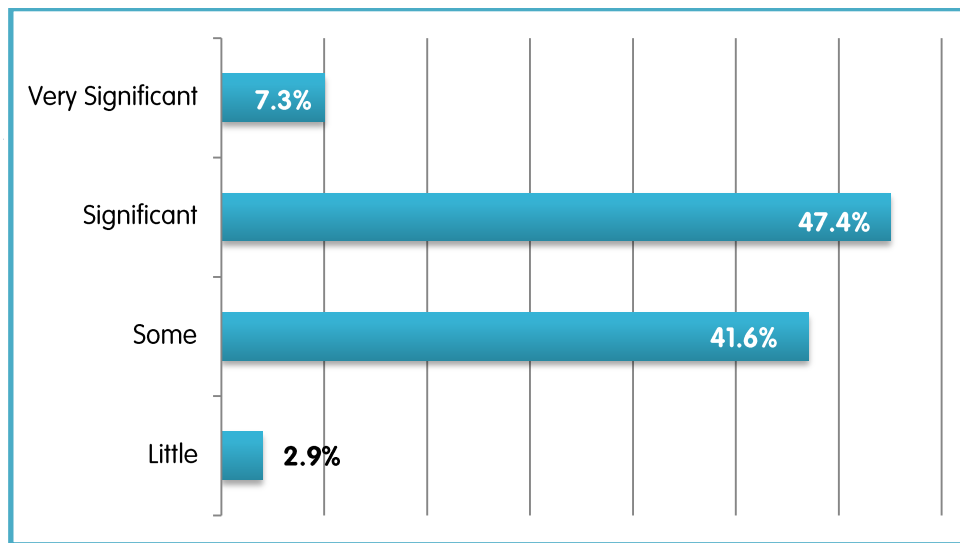
"The speak was easy to listen to; the session was well explained and demonstrated very clearly."

2. How would you rate the Numicon Resources based on the following criteria?



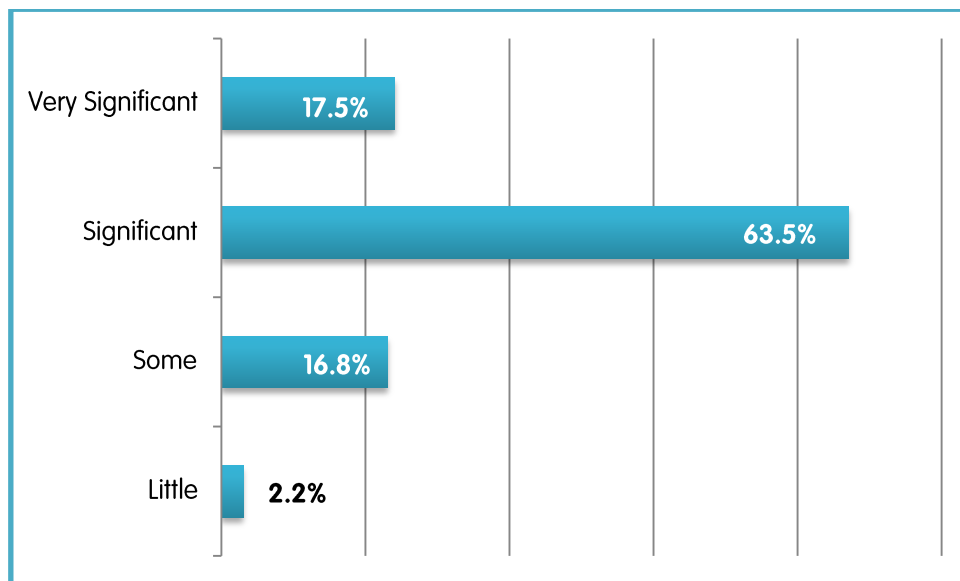
3. What impact has the Numicon approach had on Pupil's achievement?

Figure 5: Numicon impact on achievement



4. What impact has the Numicon approach had on Pupil's enjoyment of maths?

Figure 6: Numicon impact on enjoyment



Comments from children

"Our children write a self-assessment as part of their annual report, this year several commented 'I am good at maths'. This is a welcome change since they have been using Numicon"

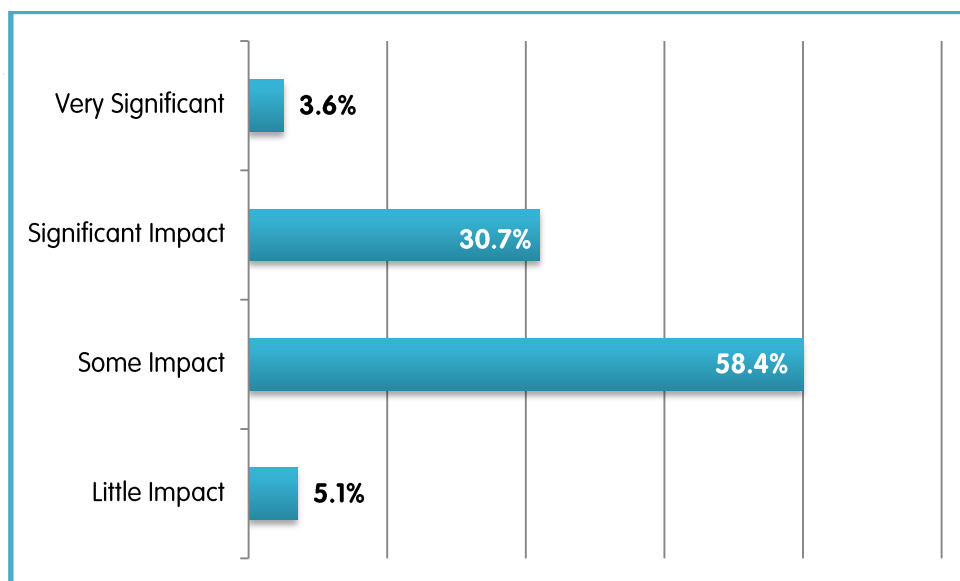
"I like it 'cos I can see patterns in the numbers"

"I used to be bad at maths, now it's my best"

"We can do maths now!"

5. What impact has Numicon had on the quality of maths teaching in your school?

Figure 7: Numicon impact on teachers



What teachers say about Numicon...

"Numicon is a highly visual resource which can be used to explain 'abstract' concepts in a clear way."

"The children I am using Numicon with are loving it & it quickly became apparent how much they were benefiting from using it."

"Numicon is definitely a brilliant programme for all levels of children"

"Numicon enables children to really 'see' how numbers and the number system work"

"Numicon is the best Number system I have ever found, in 26 years of teaching"