Oxford School Improvement

NUMICON CASE STUDY

St Joseph’s RC Primary School

School Profile

Deputy Head Teacher: Siobhan Horisk
Town: London
LA: Camden
Pupils on roll: 213
Ofsted: Outstanding, March 2014
Free School Meals: 29.6%
English as an Additional Language: 43.8%

How long have St Joseph’s Primary School been using Numicon?
St Joseph’s RC Primary School started using Numicon in 2010. The school initially heard about Numicon when it was recommended to support a pupil with Down’s Syndrome. They quickly realised its potential for teaching maths throughout the whole school. St Joseph’s now use Numicon from Reception to Year 6.

What impact has Numicon had on Pupils’ understanding of maths?
Deputy Head Teacher, Siobhan Horisk, explains how Numicon helps children understand that ‘the value is in the exploration, rather than the correct answer.’ With Numicon, mathematicians are encouraged to find ‘creative ways through things’, something that starts in Key Stage 1, ‘so that by the time they are in Year 6 and getting ready for secondary school and they face a problem, there is the expectation that they will struggle with it, but that’s ok.’

Siobhan adds that Numicon is great for memorable learning because ‘using the apparatus means that they get to do it and feel it and get a sense of the relationships between aspects of maths. Children are not going to know how to do something until they have experienced it and worked through the problems.’

How supportive do teachers at St Joseph’s find the Numicon teaching materials?
Head Teacher, Helen Tyler, says that ‘Teachers love the teaching materials because they’re really clear and easy to follow. And they work.’ Siobhan Horisk adds that the ‘diagnostic resources in Numicon written teaching materials are really useful to support teachers in being able to go and find the activity that’s right for a child.’

How do your teachers assess children’s progress with Numicon?
Numicon fits well with the assessment policy at St Joseph’s because it allows teachers to learn about children through watching and questioning. Siobhan explains that ‘being able to see how children think, where they get stuck, what the barriers are and just ask and offer the resources and the right next steps – Numicon is brilliant for that. Whether they’re in Year 6 or nursery, seeing what they do with the Numicon Shapes is fascinating.’

Find out more at: www.oxfordprimary.co.uk

This case study has been published with kind permission and help from Siobhan Horisk, Deputy Head Teacher, St Joseph’s RC Primary School.
What about Pupil Premium?
St Joseph’s RC Primary School were regional winners in the Pupil Premium Awards 2014, going on to be named the overall runner up in the prestigious national competition. The award recognises the school’s hard work to raise attainment for disadvantaged pupils. St Joseph’s use Pupil Premium to fund an Inclusion Manager who, as part of her role, trains support staff to use Numicon to its best advantage and carefully monitors any emerging gaps in maths. The school also use their funding to work closely with Pupil Premium parents, running parent workshops, including one on using Numicon at home.

What do parents think of Numicon?
St Joseph’s tell us that ‘because the children are so enthusiastic about Numicon parents are curious about it. When they see it, things that perhaps they didn’t understand at school make sense for them. It’s that lightbulb moment. Parents want to help; it’s about empowering them.’

What has been the trend of improvement since using Numicon?
Numicon has had a huge impact on results at St Joseph’s RC Primary. Siobhan Horisk points out the ‘steep upwards trajectory’. She explains that it has been ‘a rapid journey and Numicon is a big part of that. It’s not about fixing things in Year 6, it’s the really solid foundations.’ Their Key Stage 2 results demonstrate this trend:

<table>
<thead>
<tr>
<th>Year</th>
<th>Level 4+</th>
<th>Level 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>85%</td>
<td>56%</td>
</tr>
<tr>
<td>2011</td>
<td>96%</td>
<td>52%</td>
</tr>
<tr>
<td>2012</td>
<td>100%</td>
<td>58%</td>
</tr>
<tr>
<td>2013</td>
<td>100%</td>
<td>71%</td>
</tr>
</tbody>
</table>

What impact has Numicon had on the School’s Ofsted report?
St Joseph’s have recently been rated Outstanding by Ofsted, with inspectors noting that ‘pupils make superb progress in mathematics’.

What would St Joseph’s RC Primary School say to other schools?
Head Teacher at St Joseph’s, Helen Tyler, says that ‘I’ve never seen a resource have the impact, and such an immediate impact, on learning as I have done with Numicon. It’s really exciting!'