

**EYPP – Call for Evidence, Early Years Pupil Premium
Case Study 11**

What?	Building Firm Mathematical Foundations in the Early Years
Why?	<p>2013 baseline assessments showed that in 'number' only 32% of children were working at age expectation, whilst 58% were working below and 10% were significantly below. In Shape, Space and Measure only 25% of the cohort were working at age band expectation, with 67% working below and 8% working significantly below.</p> <p>In 2013 the previous cohort had achieved a GLD of 38.9%, with only 59.3% of children achieving expected or exceeding in Number. A need for high quality targeted maths teaching was identified.</p>
Where and when?	<p>Friars Primary School and Nursery is a two form entry school based in Shoeburyness, near Southend in Essex. At 57.8% the number of children in the school entitled to free school meals is well above the national average. In this cohort, 30% of the group were entitled to free school meals. Friars is a school that is 0.11 points above the National School Deprivation Indicator. (National: 0.24, Friars: 0.35, July 2014)</p>
Who?	<p>The approach was used to deliver targeted maths teaching to all children, based on their current levels of mathematical understanding.</p>
How?	<p>The 'Magic Maths' approach was developed, where children were flexibly grouped according to their mathematical experience and took part in 10 minute directed teaching sessions daily. In addition to the core group, an extension group, a less experienced group and a small group who were operating significantly below expectation who needed intensive support (working towards 30 -50) were identified. Magic Maths always included a starter of body counting; counting aloud and then a game, rhyme and active maths activity to promote core concepts, and especially number and counting.</p> <p>The Magic Maths display wall was created and became a space where children could display their mathematical mark making. Additionally, maths was identified and celebrated throughout the provision, for example through the introduction of portable maths toolkits which included resources such as clipboards, rulers, tape measures and number cards.</p> <p>Alongside the Magic Maths session which all children accessed, there was a real focus on developing maths through planned play, spontaneous play and daily routines. All adults became mathematical role models, modeling positive attitudes to maths, problem solving and the correct use of mathematical language. They focused on extending mathematical learning through play inside and out, by not only questioning but modeling, introducing ideas, enhancing, commenting and wondering aloud.</p>

	<p>The mathematical enabling environment was audited, and numerous commercial resources were removed to make way for more open ended, low cost or no cost stimulating resources. Numicon became a key resource used by all staff, often used in Magic Maths to develop children’s mental image of number. Its daily use at register times introduced key concepts relating to place value and calculation.</p> <p>Practitioners ensured that the type of activities children experienced at magic maths time were on offer during free flow time.</p> <p>Observations showed how children would return to these activities and demonstrate application of embedded learning as they re-enacted a previous session with their friends.</p>
<p>The Evidence of Impact</p>	<p>Children’s progress from on entry to EYFS profile, was analysed by the EYFS leader using the Bath and North East Somerset Council tool: ‘Guidance on Demonstrating Progress in the EYFS’.</p> <p>This tool showed that in Maths 89% of children made rapid progress from their starting points, with 11% making typical progress.</p> <p>The 2014 EYFS data showed there was an increase of 19% in terms of children achieving or exceeding the ELG for Number, whilst in Shape, Space and Measure there was an increase of 12.6%. Those children who did not meet the ELG still made progress from their lower starting point.</p> <p>The soft data is the children’s attitude and excitement about mathematical learning and their application of their skills reflected through display, observations, photos and children’s comments.</p> <p>The carefully planned transition to year one ensured Magic Maths is still a daily occurrence.</p>
<p>Where to find out more</p>	<p>Elaine Bennett EYFS/Year One Leader, Friars Primary School and Nursery EBennett@friars.southend.sch.uk Guidance On Demonstrating Progress in the EYFS 2014 (Baths and North East Somerset Council)</p>