

**EYPP – Call for Evidence, Early Years Pupil Premium
Case Study 10**

What?	Working together in a geographical cluster to raise achievement in mathematics
Why?	Primary schools and the local nursery school and children's centre in the area identified low attainment in mathematics and a need for a collaborative approach to raising achievement.
Where and when?	All primary schools and the nursery school and children's centre in Manor Park, Newham, London. The initial focus on mathematics began during the academic year 2013-2014 and is ongoing. This followed a similar approach in which all local schools and PVI settings focused on Communication and Language.
Who?	A universal offer for all children, with targeted support as necessary and support for families.
How?	<p>The nursery school and children's centre built on the previously successful project model used for the development of communication and language to plan the project, led by an external early years maths specialist:</p> <ul style="list-style-type: none"> • Initial meeting for leaders and managers in all local schools to agree model, content and commitment and identify two practitioners to lead on project in each school • Initial visit to all schools, with a joint audit of mathematical provision across EYFS • Planned training sessions, each with gap tasks and feedback. • Final visit to each school and dissemination event. <p>The initial input gave practitioners opportunities to reflect on the own understanding of mathematical development – with a particular focus on how children learn about number.</p> <p>The mathematical environment audit provided each school with a baseline for development. Photographic evidence of changes in the environment became key in sharing achievements and developing a supportive, collaborative approach.</p> <p>Each school developed an action plan, using the following format and covering maths resources zones, indoor provision and outdoor provision:</p> <p>Outcomes: Maths learning environment enhanced; children accessing resources and engaging in mathematical experiences; adults referring to maths in the environment.</p> <p>Success Criteria: Children show greater progress in <i>Numbers and Shape, Space and Measure</i></p>

	<p>Changes in the environment were immediate e.g. from no school having number lines and height charts in use in all EYFS classes both indoors and outdoors at the start of project to 100% at the end of the project. Similarly all schools introduced or developed appropriate maths resource zones.</p> <p>However, the biggest change was the confidence of practitioners in supporting children maths learning i.e. actually understanding <i>how</i> children’s knowledge of number develops. The focus on practitioners use of and modeling mathematical language impacted on children’s own understanding and use of mathematical language.</p> <p>Additionally, the nursery school and children’s centre developed a maths introductory workshop as a universal offer for all families, and this was shared for use, in all primary schools. Many primary schools developed additional parent workshops.</p>
<p>The Evidence of Impact</p>	<p>Example of data from primary school closest to the nursery school and children’s centre, which has no onsite nursery provision:</p> <ul style="list-style-type: none"> • % children functioning at Age Related Expectations (ARE) on entry to reception year : 29% for numbers and 9% for shape, space and measures • % children functioning at ARE or above on exit to year 1: 65.1% for numbers and 65.2% for shape, space and measures • Year on year increase, at end of year following project: 52.5% children at expected or exceeding in 2013 for numbers and 60% for SSM, with 65.1% for numbers and 65.2% for SSM in 2014 – an increase of over 12% in number in one year. <p>Qualitative data from the nursery school. The environmental audit show enormous changes in provision, and the focus on use of mathematical language has increased e.g.:</p> <p>Mud kitchen: “Little spade.” “That’s tiny.” “This worm is really long.” “It’s going to grow bigger and bigger. It’s very small now.” “Do you think it will reach the sky?” “Let’s look at it again later.”</p>
<p>Where to find out more</p>	<p>Julian Grenier, Headteacher Sheringham Nursery School and Children’s Centre julian.grenier@sheringham-nur.newham.sch.uk 020 8553 2479</p>

