

School Improvement Plan for Numeracy

June 2015

(2015-2018)

Baseline data

Children's Responses: 49.5% of children from 1st to 6th classes give a correct response for Problem Solving.

Teacher Responses: Children's over reliance on asking the teacher to give them the correct answer

- Children's inability to connect maths with real life situations
- Children don't see application of the maths they learn in school outside of school apart from Time and Money
- Evidence of senior class pupils who still need and would benefit from concrete materials to aid learning
- Over 60% of senior pupils reported that they don't like word problems.

Parent Responses:

Even though 80% of parents reported that their child applies maths to everyday life, this is in conflict with children's feedback that they only apply maths learning in two areas, principally, time and money.

- 57% of parents reported that their children needs help with problem solving and word problems.
- Parents identify the following points: need to focus more on problem solving, puzzles, ideas for games and websites, maths trails, emphasis on everyday situations e.g best value for money when shopping versus price.

WSE Report:

- It is recommended that in-class support should emphasise differentiated group teaching of numeracy
- There are opportunities to enhance problem solving skills through differentiated group work

Strengths identified

- SIGMA T scores are above the national norm averages in all classes
- Operational strategies are refined
- Aistear as a means to reinforce mathematical language in a child friendly and fun way
- Good standard of maths in relation to the national average
- Team Teaching
- Upskilling and CPD
- High motivation of children and teachers
- Maths Recovery
- Online homework in 5th class

	<ul style="list-style-type: none"> • Use of IWB • Numicon materials/Number Buddies 		
Summary of main areas requiring improvements	<p>An emphasis on the teaching and learning in Problem Solving Application of Maths to real life Acquire more concrete materials and use more concrete resources for the teaching of Maths</p>		
Improvement Targets (2015-2018)	<ol style="list-style-type: none"> 1. Increase the number of children who can cite 3 other applications of Mathematics outside of school besides time and Money from 20% to 60% over 3 years 2. To increase the percentage of children numbering work in their Maths copy in 1st to 6th classes from 60% to 80% over 3 years 3. To increase the percentage of children dating their work in 1st to 6th classes from 26% to 50% over three years 4. To increase learning opportunities for high achievers in 5th and 6th classes from 0% to 25% over 3 years, specifically in enrolment in Mathlete Challenge/Khan Academy. 5. To increase the percentage of children in 1st to 6th classes giving a correct response in SIGMA T problem solving from 49.5% to 55% over 3 years. 		
	Year 1	Year 2	Year 3
Required Actions	<ul style="list-style-type: none"> • To enrol pupils in 5th and 6th class in Mathlete's Challenge in Khan Academy to challenge high achievers through ICT. • To conduct a monthly check by class teachers to ensure that numbering and dating of work is occurring 1st to 6th classes • An annual copybook analysis to be 		

	<p>carried out by the Learning Support team (1st to 6th Class).</p> <ul style="list-style-type: none"> • To introduce four maths trails per class per year in all classes (Junior Infants to 6th classes). • To introduce Maths Eye projects in classes twice yearly (Junior Infants to 6th classes) to stimulate observation of Maths in the environment. <p>To address the area of problem solving skills, engage in the following initiatives:</p> <ol style="list-style-type: none"> 1. Greater use of ICT 2. Use of board games 3. Open ended puzzles 		
	<p><u>Monitoring/Evaluation</u></p> <p>When?</p> <p>Monthly discussion among staff members surrounding progress in the area of oral language development, including their speaking and listening skills</p>	<p>Who?</p> <p>Class teachers</p>	<p>How?</p> <p>Teacher discussion</p> <p>Teacher Checklists</p> <p>Teacher Observation of children's oral presentations and observation of speaking and listening skills</p> <p>Staff meetings/discussions</p>

**Success Criteria / Measurable Outcomes
(2015-2018)**

- Standardised test results in Problem Solving will be analysed at year end - to track performance & see an increase in test score data.
- Teacher tracking of children's maths progress in ICT games in 5th & 6th to ensure they are progressing to the next level.
- Teachers to conduct monthly review of copies in 1st & 6th class to ensure that work is dated and numbered. End of year copybook analysis by Resource/Learning support team (1st-6th) 1st to 6th classes, six children per class.
- Maths coordinator to re-survey pupils (1st-6th) to measure increased awareness of maths in the environment.
- Maths coordinator to survey pupils (infants -6th) after Maths Trails to elicit enjoyment of; attitude towards & skills acquired.