

School Improvement Plan Fossa N.S

Problem Solving in Maths.

School Improvement Plan Co-Ordinators	Pat Clifford Linda O Donoghue Rosemary Moynihan Fiona Hallissey Laura Lynch Michael Finnegan
<p>TARGETS</p> <ol style="list-style-type: none"> 1. Develop a greater understanding of mathematical language 2. Understanding the skills required to solve the problem 3. Use of environment to enhance their mathematical experience and reinforce understanding 4. Increase collaborative work as a problem solving exercise 5. Expand the learning experiences of all pupils through the increased and varied use of ICT 6. We will endeavour to create a greater sense of enjoyment, success and confidence for all children through new initiatives outlined in this plan. 	
ACTIONS	WHO
<p style="text-align: center;">Actions for Target One:</p> <p>1. A glossary of mathematical language will be compiled and distributed to 5th and 6th class teachers. Teachers will place an emphasis on teaching the specific language pertaining to the strand they are teaching.</p> <p>2. All teachers will be directed to focus on the maths language glossary that pertains to their class (Fossa School Maths Policy) in order to ensure a continuity of language throughout all the classes.</p> <p style="text-align: center;">Actions for Target Two:</p> <p>3. All teachers will be motivated to transfer the skills relating to Gleeson’s comprehension strategies to solving maths problems. Prediction, visualisation, determining importance, clarifying and questioning.</p> <p>4. A poster of visual strategies (Strategies 1 to 7) will be presented to all classes</p> <p style="text-align: center;">Actions for Target Three:</p> <p>5. Teachers will engage with ‘Maths Eyes’ website and introduce the pupils to the associated resources.</p> <p>6. Teachers from all classes will familiarise themselves with the concept of Maths Trails.</p> <p>7. Teachers will guide their pupils to develop their own class maths trails through the use of ICT.</p> <p style="text-align: center;">Action for Target Four:</p> <p>8. Teachers will engage their pupils in a variety of learning experiences to facilitate talk and discussion through pair work, station teaching, group work thus leading to an enhanced</p>	<p>All Teachers teaching 5th and 6th classes and associated SET teachers</p> <p>All Teachers</p> <p>All Teachers</p> <p>All Teachers</p> <p>All Teachers</p> <p>All Teachers</p> <p>All Teachers</p> <p>All teachers</p> <p>All Teachers</p>

<p>collaborative learning experience</p> <p>Actions for Target 5</p> <p>9. A list of mathematical apps will be compiled for each class. Teachers will identify suitable maths apps for their class that can be saved on the school's iPads.</p> <p>10. All teachers will be familiar with the school plan on Problem Solving Skills Focus Tasks which outlines a range of problem solving activities for each class for each month. This programme is based on the nrich website.</p> <p>11. Teachers will endeavour to engage regularly with the maths warm up activity based on the wodb.ca web site; 'Which is the Odd One Out'</p> <p>12. Teachers from the junior classes will initially expose their classes to Bee Bot Technology to begin the process of programming.</p> <p>Actions for Target Six:</p> <p>13. Mrs O Donoghue will take responsibility for supporting teachers to engage with practical and fun maths to foster an environment that will allow all children experience some success at maths.</p>	<p>All Teachers</p> <p>All teachers</p> <p>All Teachers</p> <p>Junior Teachers</p> <p>Mrs O Donoghue</p>
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Monitoring Strategies for Actions:

Action 1: Mr Clifford will ensure that 5th and 6th class teachers have a copy of the mathematical language glossary relative to their class.

Action 2: Mr Clifford will regularly remind teachers at staff meeting and informal discussion of the importance of engaging with the language of maths scheme which is part of school policy to ensure continuity of language.

Action 3: Miss Hallissey will remind teachers through informal discussion, internal email and staff meetings of the importance of transferring the skills associated with comprehension strategies to solving maths problems in a strategic manner.

Action 4: Mrs Moynihan will ensure that all teachers display coloured visual posters to help children follow a distinct formula which will help to make problem solving less daunting and more manageable for pupils.

Action 5: Mr Clifford will provide all classes with a range of visual prompts to encourage teachers engage with the maths eyes website.

Action 6: Mr Clifford will share documents with all staff members to help them familiarise themselves with maths trails and encourage teachers to engage their pupils in this process

Action 7: Mr Finnegan will provide guidance to all staff members to get children to develop their own maths trails through the use of ICT

Action 8: Mrs O Donoghue will monitor that all teachers are exposing their pupils to a variety of learning experiences that focus on talk and discussion in relation to maths. This will be done through class visitations informal discussion and at staff meetings.

Action 9: Mr Finnegan will compile a suitable list of mathematical apps for all classes and oversee that an SNA will download the requested apps from this list onto the school iPads

Action 10: Mr Clifford will present all teachers with a copy of a yearly plan based on Problem solving Skills Focus Tasks which outlines specific problem solving activities for each class for all months from October to May. An appraisal of these activities will be discussed at ISM and Croke Park meetings.

Action 11: Miss Lynch will provide staff with advice and guidance regarding engaging with the wodb.ca website and in particular with the warm up class activity based on ‘Which is the Odd One Out’

Action 12: Miss Hallissey, Miss Lynch and Mr Finnegan will provide the pupils from junior and senior infants with the experience of using Bee Bot technology as a programming lesson. These lessons will be recorded and made available on our school app.

Action 13: Mrs O Donoghue will present the pupils in our school with another survey in October 2019 to ascertain what changes if any are recorded in relation to our pupils’ attitude towards maths.

EVALUATION APPROACHES

Targets 1 and 2: Classes will be provided with the opportunity to seek solutions to initiatives such as Maths Problem of the Week. This could be done at class level or during assembly time where a group of children were asked outline the various stages and thought processes that led to the final arrival of a solution.

Target 3: Obtain feedback from the teaching staff in relation to the time and preparation associated with exposing children to the environment as a maths resource for teaching. Allot time during Croke Park meetings to discern pupils’ attitudes towards practical maths particularly the reluctant maths learners. Assess results in relation to problem solving recorded throughout the year in Busy at Maths Assessments and from the Drumconrda Results at the end of year.

Target 4: All teachers will incorporate collaborative learning into their short term plans in relation to teaching maths. (Pair work, group work, station teaching, whole class learning)

Target 5: Assess the range of ICT experiences teachers incorporate into planning for maths lessons.

Target 6: A survey of attitudes by pupils in relation to maths and in particular problem solving will be presented to pupils in October 2109

EVALUATION TOOLS:	NECESSARY ADJUSTMENTS THROUGHOUT IMPLEMENTATION PROCESS:
<ul style="list-style-type: none"> • Teacher Observation <ul style="list-style-type: none"> • Peer assessment • Self-assessment • Standardised Tests (Senior Infants to 6th) • Busy at Maths Termly Assessments (Junior Infants to 6th) • Repeat Pupil Survey 	<p>Regular reflection at termly staff meetings regarding methodology and teaching ideas implemented in the classroom. Relevant adjustments will be made based on challenges and successes.</p>

This document was reviewed by staff on February 26th 2019

