

<i>School Improvement Plan – Numeracy</i>				
Baseline data	<p>Standardised test data was collated and analysed for Mathematics using Drumcondra CD.</p> <p>Questionnaires were administered to all parents to ascertain attitudes to maths, strengths and weaknesses in maths and parents knowledge and input.</p> <p>Questionnaires were administered to all pupils from 1st class upwards.</p> <p>Teachers conducted a review of all aspects of maths in the classroom under working well, needs attention and worth trying. These reviews were discussed at a meeting during Croke Park hours. This data was gathered during Term 3 of 2012.</p> <p>The information and findings were collated in Term 1 of school year 2013/214.</p>			
Targets	<p>π To develop a cohesive whole-school plan to the teaching of Problem Solving.</p> <p>π To create a culture and practice of mathematical problem solving, correct use of maths language and an ability to self-assess independently in all classes.</p> <p>π To improve communication with parents with regard to their child and maths.</p>			
Summary of main areas requiring improvements	<p><i>Year One: Resourcing</i></p> <p><i>Year One: Familiarisation</i></p> <p><i>Year One: Methodologies</i></p> <p><i>Year Two: Language</i></p> <p><i>Year Two: Modelling/Attitudes</i></p> <p><i>Year Two: Assessment</i></p> <p><i>Year Three: Differentiation</i></p> <p><i>Year Three: Parental Communication</i></p> <p><i>Year Three: Review</i></p>			
YEAR ONE 2013-2014				
Improvement Targets	Required Actions	Who?	When?	Resources?
	<ul style="list-style-type: none"> Audit to be carried out of existing 	<ul style="list-style-type: none"> All class teachers. 	<ul style="list-style-type: none"> November 	<ul style="list-style-type: none"> PDST suggested resource

<p><i>Resourcing</i></p>	<p><i>maths resources in each classroom. A copy of this audit will be given to all teachers.</i></p> <ul style="list-style-type: none"> • <i>A Maths resources wishlist to be created by each class level to encourage the teaching of numeracy in a concrete form.</i> • <i>A bank of resources to be ordered for each class level based on the wishlist and budget.</i> • <i>PDST manuals based on the strands of; Fractions, Place Value and Shape and Space to be printed and distributed to each class level to encourage the use of new and existing resources.</i> 	<ul style="list-style-type: none"> • <i>Secretary</i> 	<p><i>2013</i></p> <ul style="list-style-type: none"> • <i>November 2013</i> • <i>End of Dec 2013</i> • <i>Jan 2014</i> 	<p><i>list</i></p> <ul style="list-style-type: none"> • <i>Catalogues</i> • <i>PDST manuals</i> • <i>Wishlists from teachers</i> • <i>Notes from courses attended on numeracy.</i>
<p><i>Familiarisation</i></p>	<ul style="list-style-type: none"> • <i>Teachers to use Whole School Maths plan, class long term plans and PDST manuals to create glance cards for each class level.</i> • <i>These glance cards will be binded and displayed in teachers files for use during maths lessons and</i> 	<ul style="list-style-type: none"> • <i>All class and support teachers</i> • <i>Class Teachers</i> 	<ul style="list-style-type: none"> • <i>Jan-March 2014</i> 	<ul style="list-style-type: none"> • <i>Whole School Plan available on website and in Teachers' Folders</i> • <i>PDST Manuals</i> • <i>Personal Planning Folders</i> • <i>Planet Maths Teachers' Resource Folders</i>

	<p><i>planning times. They will encourage all teachers to adhere to and be familiar with the topics, language and assessment for their class level.</i></p> <ul style="list-style-type: none"> • <i>Establish a Problem Solving Display every term to which oral maths will be drawn from.</i> 	<ul style="list-style-type: none"> • <i>Class Teachers</i> 	<p><i>Each term commencing Jan 2014.</i></p>	
<i>Methodologies</i>	<ul style="list-style-type: none"> • <i>Focus on the Problem Solving Methodology of Concrete – Pictorial – Abstract.</i> • <i>Continuous Professional Development to be encouraged through Croke Park time.</i> • <i>A copy of each of the three existing PDST manuals to be distributed from 1st to 6th class levels and stored in classrooms.</i> • <i>Explore the idea of maths trails using the environment at least once a term.</i> 	<ul style="list-style-type: none"> • <i>All class and support teachers</i> • <i>All class and support teachers</i> • <i>Secretary to distribute and ensure the class groupings have a copy each.</i> • <i>Class Teacher with pupils.</i> 	<ul style="list-style-type: none"> • <i>2013-2016</i> • <i>2013-2016</i> • <i>Termly commencing in</i> 	

			Sept 2014	
YEAR 2 2014-2015				
Improvement Targets	Required Actions	Who?	When?	Resources?
Language	<ul style="list-style-type: none"> • Create Maths language glance card that will run from Junior Infants to 6th class. • Throughout lessons ensure that the correct language is being used. • Source Problems that use a variety of different maths terms so that the children will come to know the different ways to solve a problem. • Introduce the concept of RIDE: read, underline, draw and evaluate. • Poster to be displayed in every classroom. 	<ul style="list-style-type: none"> • Class Teachers • Class Teachers & Support teachers 	<ul style="list-style-type: none"> • Sept 2014 • 2014-2016 • Sept 2014-2016 	<p>These to be displayed in Teachers file and in the Whole School Maths Plan.</p> <p>Problem Solving Books</p>
	<ul style="list-style-type: none"> • Teachers will attend any courses 	<ul style="list-style-type: none"> • All class and support 	<ul style="list-style-type: none"> • 2013-2016 	Whiteboards

<p><i>Modelling/ Attitudes</i></p>	<p><i>offered by the Education Centre in relation to Numeracy esp courses in Problem Solving.</i></p> <ul style="list-style-type: none"> • <i>Model the concept of RUDE daily on the board.</i> • <i>Teachers will assign 10 minutes daily to oral maths in relation to problem solving. The problems will be called out and children will answer using a number fan or their copies. Thereafter, the problem will be discussed by whole class and drawn on the board to promote further learning and interaction.</i> • <i>Problem Friday: The children on a Friday will have 30 mins to do some problem based questions. Either individually, pairwork or teamwork.</i> • <i>Meaningful feedback will be recorded in the children's copies/books.</i> • <i>Positive feedback is reinforced,</i> 	<p><i>teachers</i></p> <ul style="list-style-type: none"> • <i>All class and support teachers</i> • <i>All class and support teachers</i> • <i>All Class Teachers</i> 	<ul style="list-style-type: none"> • <i>2014-2016</i> • <i>2014-2016</i> • <i>Weekly commencing Sept 2014</i> 	<p><i>Problem Solving Books</i></p> <p><i>Numbers Fans/Target boards</i></p>
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	<p><i>children's efforts relative to all ability levels and will be acknowledged through the Star Chart.</i></p> <ul style="list-style-type: none"> <i>The children in the senior room will create Maths Trails for the children in the junior room to give a sense of purpose and achievement to each child designing and creating the trails.</i> 	<ul style="list-style-type: none"> <i>All Teachers</i> <i>All Teachers</i> <i>All children in the senior room</i> 	<p><i>Sept 2014</i></p> <p><i>Sept 2014</i></p> <p><i>Jan 2015</i></p>	
<i>Assessment</i>	<ul style="list-style-type: none"> <i>The children will be given termly tests including a problem solving section. These tests will be analysed to see if the concepts are being understood clearly.</i> <i>Children will engage in self assessment, which will allow teachers to address the concerns of children with less</i> 	<ul style="list-style-type: none"> <i>Class Teachers</i> <i>Children themselves</i> 	<p><i>Each term commencing Sept 2014.</i></p> <p><i>This will commence Nov 2014.</i></p>	

	<i>positive dispositions towards maths. {Traffic Lights, Smiley Faces, Where in the tree etc}</i>			
Monitor & Review	<ul style="list-style-type: none"> π <i>Teacher observation is a key tool which will be used in monitoring the progress of the numeracy strategy. Key observations will be noted and discussed at whole staff level during CPD time and staff meetings.</i> π <i>Personal reflection section on the cuntas míosúils will be used to gauge feedback from class and support teachers.</i> π <i>Specific time will be allocated to the discussion and progress of the numeracy programme during In School Management meetings, Staff meetings and planning times.</i> π <i>Continuing professional development will be sought and staff encouraged to attend, to further develop teacher knowledge and skills and to disseminate best practice.</i> π <i>Parental feedback will be sought at parent/teacher meetings.</i> π <i>Standardised Drumcondras will be administered in the 3rd term from 1st class upwards and results will be analysed to further develop the numeracy plan. 'Pupils' scores will be tracked over the three years to identify areas of need and patterns.</i> π <i>Parents will be re-surveyed in June 2015.</i> π <i>Children will be re-surveyed in June 2015.</i> π <i>Meaningful recording will be evidenced within books/copy books.</i> π <i>Self assessment will be evident in copies/books.</i> 			
Success Criteria/Evaluation	<ul style="list-style-type: none"> π <i>Teacher Observations will be noted and collated.</i> π <i>Class conferencing between teachers and pupils to gauge their ability to self assess and provide feedback.</i> π <i>Review of children's assessments, work samples, maths trails and projects.</i> 			

Strengths	Concerns
<ul style="list-style-type: none"> π <i>84% of children like Maths (Parent Questionnaire)</i> π <i>84% of parents believe that the Maths being taught to their children is pitched at the</i> 	<ul style="list-style-type: none"> π <i>Maths language and problem solving are areas of concern for parents</i> π <i>46% of children require help to complete their maths homework.</i>

<p>correct level.</p> <p>π 68% of parents believe that they get good information from the school about their child's maths progress.</p> <p>π In the moths standardized tests the average school score is above 65th percentile, where the national norm is at the 50th percentile.</p> <p>π Every class average of standard scores was above the national average in the Drumcondra Maths Test.</p> <p>π There is no child of the school population below the 10th percentile.</p> <p>π Maths rich environments.</p> <p>π Active learning methodologies used often.</p> <p>π A broad range of assessment tools are being used.</p> <p>π Early interventions using Drumcondra Early Numeracy</p> <p>π Modelling of language particularly when problem-solving</p> <p>π Use of acronyms to attempt problems: ROSE</p> <p>π Maths games</p> <p>π Maths week activities</p> <p>π Mental maths is given a specific time slot</p> <p>π Use of the Ready Set Go Maths Programme in junior classes in conjunction with Planet Maths.</p> <p>π A collaborative approach between class teachers and support teachers is ensured.</p> <p>π Pupils estimate well in the Measures strand unit.</p> <p>π Lots of extension work available for gifted pupils.</p>	<p>π Strategies are laid out in the school plan but not adhered to.</p> <p>π Children are not involved in their own assessment of learning and for learning</p> <p>π Overuse of teacher correction.</p> <p>π Differentiation – especially for children with learning difficulties</p> <p>π Differentiation of homework, taking into account the range of abilities within a class.</p> <p>π Resources; are bottom heavy in the school with an over-emphasis on equipping the junior classes.</p> <p>π There is no specific set of resources in each classroom at all times</p> <p>π Opportunities are not always granted to children to explain how they got the answer to a problem, discuss alternative ways of approaching a problem or giving oral descriptions of group solutions.</p> <p>π There is not an equal emphasis placed on all strands.</p> <p>π There is no common approach to the teaching of tables.</p> <p>π There is a shortage of interventions in senior classes for children who are struggling.</p> <p>π ICT is underused to support teaching and learning.</p> <p>π Lack of perceptual counting</p> <p>π Maths Trails are never devised or used in the school.</p>
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