



*Emo National School, Emo ,Co. Laois*

*Roll Number: 13643Q*

School Self-Evaluation Report  
For Numeracy

Evaluation period: 1<sup>st</sup> September 2014 to 31<sup>st</sup> May 2015

Report issue date: *June 2015*

## School Self-Evaluation Report

### 1. Introduction

#### 1.1 The focus of the evaluation

A school self-evaluation of teaching and learning was undertaken during the period 1/09/14 to 30/04/15. Numeracy was selected as the curricular area to be focused on in Year 2, in accordance with Literacy and Numeracy for Learning and Life (Circular 56/2011) The staff wished to investigate ways pupil achievement in Maths could be improved.

#### 1.2 School context

Emo National School is a rural co-educational Catholic school .In Emo NS we strive to enable children to reach their potential .We recognise the role of teachers, ancillary staff , parents, and clergy as partners in this process, all aiming to achieve what is best for each individual child/pupil. This is a vertical co-educational primary school. There are currently 218 pupils. There are thirteen teachers 8 classroom teachers, 1 LS , 1 shared LS and 2 resource teachers including an Administrative Principal . There are also 4 full-time Special Needs Assistants. Pupil attendance in the year 2013/2014 was 96%. School attendance this year up to the 31<sup>st</sup> March was 96%.

We have many worthwhile initiatives ongoing in our school which add to the children's enjoyment of learning in this school including shared maths games with parents, Mathletics ,school iPods and parent information evenings with invited speakers .

#### Standardised Testing

The school administers Drumcondra tests in Mathematics and English from First to Sixth Class, NRIT to First and fifth classes and MIST test to Senior Infants. The junior and senior infant teachers keep an Assessment Profile for their pupils which is a useful assessment of learning.

The overall average Maths scores for the last two years are as follows:

School Average in Maths	2013	2014
Standard Score	113	115

We have also completed NRIT tests for all pupils from 2nd to 5th class. An NRIT test allows us to assess pupil's general ability independently of their reading. The average NRIT score for four of the classes in this school is 106. This would indicate that the pupils are performing well above their ability in Maths.

## **2. The findings**

### **2.1 Process**

We used a number of approaches to better inform us as to how our school was doing in respect of numeracy. We completed a teacher review, a parent and pupil questionnaire, analysed our standardized tests including our NRIT tests. We also completed a problem solving rubric with a selected number of children.

### **2.2 Teacher Review**

Firstly we completed a review of mathematics with teachers in the school. Teachers looked at the following during this review:

#### **Attainment of curriculum objectives**

Teachers are happy that the curriculum objectives are being attained by the majority of pupils. The regular assessment tests point to this fact. Teachers affirmed that their lessons are well structured, linked to the curriculum and that the objectives are shared with the pupils. WALT (We are learning to ) and WILF( What am I looking for ) are in use in all classes . Measures are in place to ensure that all teachers are familiar with the curriculum for their class level and that this familiarity is maintained if teachers change classes or if new teachers join the staff.

#### **Learning Environment**

Generally, classrooms are very well resourced. Teachers are happy that they have their resources and concrete materials organised and readily available in advance of each Maths lesson that is taught. However, at the beginning of the next school year, teachers will review the concrete materials available to their class and add to the store of materials if necessary.

ICT is used as a tool by teachers and/or pupils to support learning. Mathletics is a valuable resource and is in use in all classes from 1<sup>st</sup> to 6<sup>th</sup>. ICT is used to support teaching and learning for children with special needs.

## **Pupil's Engagement in Learning**

All pupils participate in lessons. Teachers are happy that pupils are interested in the lesson content and that the pupils work purposefully during lessons. For the most part teachers are happy that pupils are properly challenged in their learning. Teachers felt that there's a need for agreement on what type of Maths homework is assigned.

## **Teaching Approaches**

Teachers are happy that a range of teaching approaches are used in their classrooms. Strategies are agreed for teaching Mathematical operations. There is an agreed approach to numeral formation in the junior classes. There a whole-school approach to presentation of written work. Teachers are happy that their questioning is clear and includes lower and higher order questions. The varying needs and abilities of pupils are catered for through the use of differentiation. However, teachers identified a need to have a more comprehensive approach to the teaching of problem solving and measures. There is a need for a common approach to the teaching of tables.

## **Preparation for Teaching**

Teachers long –term plans are linked to their fortnightly schemes which they submit electronically in advance. Teachers have clearly noted in their plans how they differentiate for specific pupils with learning difficulties. However some teachers observed that they needed to differentiate more for the higher achievers.

## **Management of Pupils**

Teachers are happy that pupil's efforts are affirmed and that they have high and realistic expectations of the pupils. Teacher pupil and pupil – pupil interactions are very positive. Each class uses a variety of organisational styles, e.g. pair work, group work and whole class work. Children with special needs are provided with access to all strands of the mathematics curriculum. We identified the usefulness of the school providing advice to parents on engaging their children in maths related activities in the home

## Assessment

Assessment results are analysed • at school level • at class level • for individual pupils where particular concerns arise. Results of assessment are used for • screening purposes • for diagnosis of learning difficulties • to identify aspects of Numeracy in need of re-teaching.

Our analysis of the standardised scores showed whole school areas of strength. They also showed that children scored lowest in problem solving and measures.

### 2.3 Parent Questionnaire

We completed a review of mathematics with parents using a questionnaire. Some of the main findings were:

- 82% of parents say their children like maths
- 76% say that they receive good information on their children's progress from the school through reports and tests
- 96% help their children with maths
- 89% engage their children in informal practical maths activities
- 23% of parents do not play maths games with their children at home
- 78% would benefit from guidance
- Feedback:
  - ❖ Mathematics is a fantastic resource
  - ❖ Extra support is really appreciated
  - ❖ Harder problems requested for the children of higher ability
  - ❖ Parents like to know if a child is finding difficulty in any area.
  - ❖ Parents would like an information night on homework.
  - ❖ A few people mentioned that extra everyday life skills might be covered in Maths eg; school-bank drafts, etc
  - ❖ Parents asked for suggestions regarding games/puzzles that are fun but helpful.
  - ❖ More problem based learning in school

### 2.4 Pupil Questionnaire

We completed a review of mathematics with pupils using a questionnaire. Some of the main findings were:

- 6% ask for help with maths homework
- 83% do other maths activities at home at some point or other

- 18% of the pupils don't like maths
- 11% of the pupils don't know if they like maths
- 87% of pupils sometimes, always or often ask for help with maths homework

## **2.5 Review of standardised test results**

We completed a review of standardised tests. We looked at the children's answers in respect of the different content areas.

We identified the following content areas as areas of strength:

- Implementing
- Recall
- Data
- Shape and Space
- Number/ Algebra
- Reasoning
- Connecting

The children scored lowest in the tests in the following areas.

- Measures
- Problem Solving
- Difficulties with Data in specific classes (5th and 6th)

## **2.6 Problem Solving Rubric**

We also completed a problem solving rubric with a sample group of children in three different classes (1st, 3rd and 5<sup>th</sup> classes). The children were given a problem and asked to complete the task. Afterwards our LS and RT teachers interviewed the children to ascertain how they approached the problem. We found that out of the 18 sample children 11 of the children were at stage A or B with regard to using problem solving strategies. This means that they had some understanding but were unable to complete the task correctly. The remaining children were graded as either a C or a D. This means they had the correct answer and a strong or exceptional understanding of problem solving strategies.

We will use this rubric for ongoing assessment of our targets.

### **3.1 Progress made on previously-identified improvement targets**

1. Termly Maths tests are administered and reported to parents. Tests scores are filed in assessment folders.
2. A questionnaire was administered to 1<sup>st</sup>-6<sup>th</sup> class pupils.  
We purchased Maths resources and organised to store them centrally on a strand by strand basis.
3. Language cards were created with emphasis on the language of operations.
4. We reviewed our Maths scheme in the junior end of the school and introduced a new Maths scheme from junior infants to second class.
5. We organised Continuous Professional Development (CPD) in the area of oral mental Maths with Anne Goggins.
6. We took on and implemented oral mental Maths strategies arising from our CPD with Anne Goggins.
7. We improved the Maths environment in the school.
8. We completed a teacher reflection on Maths.
9. We introduced new Maths games for Junior and Senior Infants (Orchard games)
10. We introduced in-class learning support for Maths.

## **4. Summary of school self-evaluation findings**

4.1 Our school has strengths in the following areas:

- Classrooms are well resourced and teachers are happy that they have plenty of concrete materials available in advance of each Maths lesson.
- ICT is a tool that is used to support learning and Mathletics is a valuable resource and used in all classes from 1<sup>st</sup> to 6<sup>th</sup>.
- Strategies are agreed for teaching operations and numeral formation and there is a whole-school approach to the presentation of written work.
- Teachers differentiate for specific pupils with difficulties and this differentiation is clear in teacher planning.
- Each class uses a variety of organisational styles. Group work and pair work are in use in all classes throughout the school.

- Our whole school standardised test results across numeracy indicated that the following content areas are areas of strength ; implementing, recall, data, shape, and space, number/ algebra, reasoning, connecting. We also have a very favourable comparison between our overall standard score for Maths and our overall NRIT score.
- The vast majority of parents report that their children like Maths (82%) and they were very positive about the introduction of Mathematics .
- 76% of parents say that they receive good information from the school about their child's progress in Maths.
- 89% of parents say that they engage their children in informal practical maths activities.

#### **4.2 The following areas are prioritised for improvement:**

- Our teacher review, pupil score analysis (Drumcondra tests) and problem solving rubric identified problem solving as an area that needs improvement. Teachers felt that there was need for an agreed whole school approach to support children's problem solving strategies. All teachers expressed an interest in CPD in relation to problem solving. In keeping with the feedback from parents, they will be informed of any new strategies.
- Our pupil questionnaire showed that 71% of children liked Maths. We will introduce specific measures to try to improve on this figure.
- Our teacher review and pupil score analysis (Drumcondra tests) identified measures as an area that needs improvement.

Our School Improvement Plan will identify targets and actions relevant to these priorities. A summary of this plan will be published on our website .

#### **4.3 The following legislative and regulatory requirements need to be addressed:** Our next policy to be updated will be our LS/RT policy.



**Appendix to School Self-Evaluation Report:  
legislative and regulatory checklist**

Issue	Relevant legislation, rule or circular	Is the school fully meeting the requirements of the relevant legislation, rule or circular?	If no, indicate aspects to be developed
Time in school - Length of school year - minimum of 183 days - Length of school day 4 hours 40 minutes (infants); 5 hour 40 minutes (1 <sup>st</sup> -6 <sup>th</sup> classes)	Circular 11/95	School year <input checked="" type="checkbox"/> Yes    No  School day <input checked="" type="checkbox"/> Yes    No	
Arrangements for parent/ teacher and staff meetings	Circular 14/04	<input checked="" type="checkbox"/> Yes    No	
Implementation of national agreement regarding additional time requirement	Circular 0008/2011	<input checked="" type="checkbox"/> Yes    No	
Standardisation of school year	Circular 0034/2011	<input checked="" type="checkbox"/> Yes    No	
Valid enrolment of pupils	Section 9(1), 15(2) and 23 Education Act 1998 Sections 20 and 21, Education (Welfare) Act 2000 Rules 55, 64, 108 and 123, Rules for National Schools Circular P24/02 Staffing arrangements for the 2013/14 school year Circular 13/2013	<input checked="" type="checkbox"/> Yes    No	
Pupils repeating a school year	Rule 64 Rules for National Schools, Circular 11/01 Circular 32/03	<input checked="" type="checkbox"/> Yes    No	
Annual returns to the National Educational Welfare Board (NEWB)	Education and Welfare Act 2000	<input checked="" type="checkbox"/> Yes    No	
Development of school plan	Section 21, Education Act 1998	<input checked="" type="checkbox"/> Yes    No	
Engagement with SSE process	Circular 39/2012	<input checked="" type="checkbox"/> Yes    No	
Appointments to posts of responsibility	Circular 16/73, Circular 07/03, Circular 053/2011	<input checked="" type="checkbox"/> Yes    No	
Time for literacy and numeracy - assessing and reporting literacy and numeracy achievement	Circular 0056/11, Circular 0066/2011, Circular 0018/2012	<input checked="" type="checkbox"/> Yes    No	

Issue	Relevant legislation, rule or circular	Is the school fully meeting the requirements of the relevant legislation, rule or circular?	If no, indicate aspects to be developed	
Exemption from Irish	Circular 12/96	✓Yes No		
Implementation of child protection procedures	Circular 0065/2011 Please record the following in relation to child protection	✓Yes No		
	<ul style="list-style-type: none"> <li>▪ Number of cases where a report involving a child in the school was submitted by the DLP to the HSE</li> </ul>			0
	<ul style="list-style-type: none"> <li>▪ Number of cases where a report involving a child in the school was submitted by the DLP to the HSE and the school board of management informed</li> </ul>			1
	<ul style="list-style-type: none"> <li>▪ Number of cases where the DLP sought advice from the HSE and as a result of this advice, no report was made</li> </ul>			0
<ul style="list-style-type: none"> <li>▪ Number of cases where the DLP sought advice from the HSE and as a result of this advice, no report was made and the school board of management informed</li> </ul>	0			
Implementation of complaints procedure as appropriate	Complaints Procedures, Section 28 Education Act Primary Boards of Management Information Manual November 2007  Please record the following in relation to complaints	✓Yes No		
	<ul style="list-style-type: none"> <li>▪ Number of formal parental complaints received</li> </ul>			0
	<ul style="list-style-type: none"> <li>▪ Number of formal complaints processed</li> </ul>			0
<ul style="list-style-type: none"> <li>▪ Number of formal complaints not fully processed by the end of this school year</li> </ul>	0			
Refusal to enrol	Section 29 Education Act 1998  Please record information in relation to appeals taken in accordance with Section 29 against the school during this school year	✓Yes No		
	Number of section 29 cases taken against the school			0
	Number of cases processed at informal stage			0
	Number of cases heard			0
	Number of appeals upheld			0
	Number of appeals dismissed			0

Issue	Relevant legislation, rule or circular	Is the school fully meeting the requirements of the relevant legislation, rule or circular?	If no, indicate aspects to be developed	
Suspension of students	Section 29 Education Act 1998  Please record the following information in relation to appeals taken in accordance with Section 29 against the school during this school year	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
	Number of section 29 cases taken against the school			0
	Number of cases processed at informal stage			0
	Number of cases heard			0
	Number of appeals upheld			0
	Number of appeals dismissed			0
Expulsion of students	Section 29 Education Act 1998  Please record the following information in relation to appeals taken in accordance with Section 29 against the school during this school year	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
	Number of section 29 cases taken against the school			0
	Number of cases processed at informal stage			0
	Number of cases heard			0
	Number of appeals upheld			0
	Number of appeals dismissed			N/A

## **Appendix to School Self-Evaluation Report: Policy checklist**

Policy	Source	Has policy been approved by the board of management?	If no, indicate aspects to be developed.
Enrolment policy	Section (15)(2)(d) Education Act 1998	✓Yes No	
Code of behaviour <sup>1</sup> including anti-bullying policy	Circular 20/90 NEWB <i>Guidelines</i> Section 23, Education Welfare Act 2000 <i>Anti-bullying Procedures for Primary and Post-primary schools</i> 2013, and Circular 45/13	✓Yes No	
Attendance and participation strategy <sup>2</sup>	Section 22 Education Welfare Act 2000 Equal Status Acts 2000-2011	✓Yes No	
Health and safety statement	Section 20 Health and Safety Act 2005	✓Yes No	
Data protection	Data Protection Act 1988 Data Protection (Amendment Act) 2003	✓Yes No	
Internet acceptable use policy	National Council for Technology in Education (NCTE) Guidelines, 2012 at <a href="http://www.webwise.ie">www.webwise.ie</a>	✓Yes No	
Special educational needs policy <sup>3</sup>	Education Act 1998 Equal Status Acts 2000- 2011 Education (Welfare) Act 2000 Education for Persons with Special Educational Needs Act (EPSEN) <sup>4</sup> 2004 Disability Act 2005	✓Yes No	
Relationships and sexuality education (RSE) policy	Relationships and Sexuality Education: Policy Guidelines (1997)	✓Yes No	
Substance use policy	National Drugs Strategy and Department of Education and Skills Guidelines	✓Yes No	
Child protection policy	Circular 0065/2011	✓Yes No	
Parents as partners	Circular 24/91	✓Yes No	
Public service agreement – special needs assistants	Circular 71/11	✓Yes No	
Other			

<sup>1</sup> Under the provisions of the Education (Welfare) Act (2000) (section 23) the school's code of behaviour should conform to the specifications stated.

<sup>2</sup> Under the provisions of the Education (Welfare) Act (2000) (section 22), the school's attendance strategy should conform to the provisions stipulated.

<sup>3</sup> Section 9 of the Education Act (1998) requires a school to "use its available resources" to identify and provide for the educational needs of those "with a disability or other special educational needs."

<sup>4</sup> The EPSEN Act requires that schools be inclusive of and provide an appropriate education for pupils with special educational needs

