

Carrick Primary School



Mathematics and Numeracy Policy

Numeracy Co-ordinators:

Mrs S Keenan - Key Stage 2

Mrs E Grant - Foundation Stage/Key Stage 1

March 2016

This Policy is an agreed statement of the intention of all teachers in Carrick Primary School in relation to the teaching and learning of Mathematics and Numeracy.

Reviewed & Amended March 2016

Carrick Primary School

School Vision Statement

Forward Together: "Ar agháidh le cheile".

Mission Statement

In Carrick Primary School we aim to provide a safe, caring and stimulating environment, in order to realise and celebrate the academic and non-academic potential of all our pupils. We expect our pupils to work hard and for parents to assist us in helping children to learn and to become lifelong learners.

School Aims

We aim to:

- develop and strengthen each pupil's understanding and love of Catholic values by promoting the Catholic ethos throughout the school;
- create a safe, enjoyable learning environment, in which effective learning is facilitated and quality teaching is provided;
- implement all aspects of the Northern Ireland Curriculum;
- help our pupils to develop a positive attitude towards life and a love of learning;
- value, respect and nurture every child in our care;
- encourage pupils to respect themselves and others and to support and care for one another;
- equip our children with the necessary life skills to enable them to participate in a fast changing society; and
- involve the parents, Board of Governors and wider community in the life of the school and in the holistic development of the children in our care.

In operating our Mathematics and Numeracy Policy, we will adhere to the statutory legislation and Catholic ethos, and will fulfil our statutory duty under the Northern Ireland Curriculum, by having regard to the Code of Practice for Special Educational Needs, the Special Educational Needs and Disability Order and the Supplement to the Code of Practice.

Carrick Primary School Mathematics and Numeracy Policy

In Carrick Primary School we have agreed to adopt the following definition of Numeracy as defined by the Northern Ireland Curriculum:

"Numeracy is the development and application of Mathematics across the curriculum and in real life situations. Numeracy skills should help children to make informed and responsible choices and decisions throughout their lives".

The term Numeracy brings with it connotations of real life applications and the use of Mathematics as a natural tool throughout the school. It should be seen as being linked to all subjects. Numeracy is both a key skill and a life skill. We see Mathematics as being synonymous with Numeracy throughout the school.

In Carrick Primary School we value every pupil and the contribution they make. We believe that every child should experience success and should be encouraged to develop their skills in accordance with their level of ability. We aim to equip our children with the necessary life skills to allow them to participate fully in the society in which they live.

Aims

1. To develop within our pupils a positive attitude towards Mathematics and Numeracy through promoting the subject in a relevant and interesting manner.
2. To develop the children's confidence, pleasure and success in the subject.
3. To give children an appreciation of Mathematics and Numeracy as a creative subject, of its structure and pattern, and of its value to the environment.
4. To develop within our pupils an understanding that Mathematics and Numeracy has relevance across the curriculum and value in real-life situations.
5. To develop the pupils' logical thinking and their understanding of mathematical relationships by involving the pupils in well planned investigations and process activities.
6. To plan and develop the use of Numeracy language which reflects the children's ability and experience.

7. To foster the children's Thinking Skills and Personal Capabilities.
8. To provide our pupils with opportunities which develop their understanding of Number, Measures, Shape and Space, Handling Data and Processes.
9. To develop our pupils' ability to make mental calculations and to visualise number and its use throughout all areas of Mathematics.
10. To make appropriate use of ICT to promote teaching and learning in Mathematics and Numeracy.

Classroom Management

It is every teacher's duty to ensure that his/her classroom is managed well. We feel that the following elements should be incorporated: -

- Approaches to classroom management should be varied to allow for individual, pairs, group and whole class teaching.
- Grouping of pupils should be flexible. Pupils may be placed in ability or mixed ability groups according to the topic and the demands placed upon the pupil. Where possible pupils should be given opportunities to develop both their own and group working skills and communication skills. There should also be opportunities for pupils to work independently.
- Children should, where appropriate, be encouraged to communicate and discuss their findings with other children and adults.
- Classroom assistants will be encouraged to support the teacher in the delivery of Mathematics and Numeracy.

Continuity and Progression

1. Mathematics and Numeracy is regarded as a core subject of the school curriculum.
2. The school Mathematics and Numeracy scheme reflects the Northern Ireland Curriculum.
3. The content of the scheme encourages active learning for our pupils, and facilitates a structured and sequenced set of experiences for each pupil as they progress through the Key Stages.
4. In order to ensure continuity and progression the school has formulated schemes of work for each year group. This planning is further enhanced by the development of half termly plans for each year group and by teachers' short term plans.
5. It is important that there is a consistency of mathematical language used throughout the school.

Teaching Strategies

In order to develop our pupils' Mathematical and Numeracy skills, it is important that our pupils encounter a range of experiences.

AfL

Assessment for Learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go next in their learning and how best to get them there.

AfL involves the following key actions:

- Sharing learning intentions;
- Sharing success criteria;
- Giving feedback to pupils;
- Effective questioning ; and
- Encouraging pupils to assess and evaluate their own and others' work.

Other Strategies

- Investigations
- Problem Solving
- Recording
- Discussions
- Games
- Use of apparatus
- Learning through Play/Active Learning
- ICT/Interactive White Boards
- Mental Maths
- TS & PC

Thinking Skills and Personal Capabilities involves the following key actions:

Strand 1: Managing Information;

Strand 2: Thinking, Problem Solving and Decision Making;

Strand 3: Being Creative;

Strand 4: Working with others; and

Strand 5: Self Management.

Thinking Skills and Personal Capabilities are an integral part of Numeracy and Mathematics. By developing thinking skills we aim to engage pupils in better quality thinking and go beyond the acquisition of knowledge and to deepen children's understanding. Developing personal capabilities provides opportunities for pupils to take the initiative work together and become more self-directed in their learning.

Role of Homework

The purpose of the homework is to:

- Reinforce work done in school;
- Give parents an insight into the type and range of activities in which children are engaged in at school; and
- Allow pupils to further investigate a topic.

Resources

The school uses the New Heinemann as its primary resource. This is also supplemented by other schemes and by teacher-generated resources, games and ICT software. Each teacher has his/her own resources within their own classroom.

It is important that resources are readily available and accessible to children to help develop their mathematical skills. In the years 2012-2013/2013-2014 the initial budget for the new school facilitated the requisition of a wide range of mathematical resources for all classes. An inventory of resources has been drawn up and been retained by the Co-ordinators.

Role of ICT

ICT is seen as an integral part of Mathematics and Numeracy and is used to help enhance our pupils' understanding. The role of ICT is as follows:

- To consolidate our pupils' learning;
- To further develop our pupils' Numeracy skills;
- To provide our pupils with a variety of stimuli, therefore developing their use of mathematical processes;
- To provide our pupils with a variety of challenging learning situations;
- To promote pupils' enjoyment of Mathematics and Numeracy;
- To provide pupils with opportunities to take part in co-operative activities.

Opportunities should be sought in mathematics to use ICT to develop the children's learning.

Use of Calculators

Calculators, like computers, are a means of consolidating our pupils' Numeracy skills. It is necessary that our pupils are given the opportunity to develop their calculator skills in Key Stage One and Two. It is the intention that calculators should be used as a checking device rather than a child's first means of calculation. However, we believe that pupils do need to develop skills in relation to using calculators.

Role of Parents

The school views parents as one of its greatest resources and good relationships between parents and staff are nurtured as much as possible.

- Parents are made to feel welcome to discuss their concerns about their children's progress.
- It is school policy to report on pupils' progress on two occasions during the school year. In the first term of the school year parents are invited to

meet with teachers to discuss their children's progress. Parents are also provided with a written report at the end of the school year.

- Teachers are available for consultations with regard to individual difficulties in Mathematics and Numeracy if they arise.

Assessment

Assessment is an integral part of the N.I. Curriculum. It provides information that has a key role in knowing how pupils are performing and helping schools to improve outcomes. It plays a crucial role in improving learning and raising standards.

The school employs the use of NINA (computerised assessment) from P.4 -P.7 in September/October each year. It also employs the use of Progress in Maths 7-11 standardised tests from P3-P7 inclusively. This testing is carried out in May each year. Year 4 and year 7 pupils are formally assessed in Mathematics and Numeracy and these levels are submitted to C.C.E.A.

We in Carrick School have devised an internal end of year Mental Maths test for P1-P7. In September of each year N.R.I.T. is administered to P4 and P6 year groups. The results of P.I.M., N.R.I.T., NINA and Mental Maths are recorded in Assessment Manager and Public R.M. to help teachers develop their planning for the coming year.

Staff Development

It is the policy of the school that teachers and classroom assistants are encouraged to continually develop their knowledge and skills through collaboration and in-service training. Teachers are also encouraged to make use of the Internet and Interactive White Boards as part of their development. The Co-ordinators retain details of all Numeracy Training.

Special Needs

It is each teacher's duty to be aware and address, where possible, the specific needs of less able and/or very able pupils. It is each teacher's responsibility, in consultation with the SENCO, to develop Individual Education Plans. Children's progress will be monitored regularly. Appropriate resources and support will be accessed to help meet the needs of the less able and more able children.

Numeracy Partnership

The Numeracy Partnership Programme was introduced in Carrick in 2010. It is a structured programme of intervention for pupils who experience difficulties with numeracy. It addresses the core components of numeracy and encourages learning through success. Some members of staff have been trained in this programme and pupils from P2-P7 can avail of this support.

Evaluations

As professionals, teachers are expected to evaluate their approaches to the teaching of Mathematics and Numeracy. Teachers evaluate half-termly planners, end of year class action plans and target setting. Co-ordinators review their one year and three year action plans.

Criteria for Target Setting

The following elements may contribute to the setting of targets.

- Teacher's professional judgement;
- Results of NINA (computer-based assessment) [P4-P7]
- Results of Standardised Tests P.I.M.: [P3-P7]
- N.R.I.T. (P4 & P6);
- Previous Half-Termly results;
- Annual Mental Maths Assessment/Results.

Conclusion

This policy was reviewed in March 2016 by the Numeracy Co-ordinators in consultation with staff, pupils, parents and governors. It will be reviewed every two years to ensure that the information contained is appropriate and amendments will be made where necessary.

Signed: Mrs Anne Cassidy (Principal)

Signed: Mr Michael Keenan (Chairperson of Board of Governors)

Date: 7th March 2016