

St. Eoghan's P.S. Moneyneena



Mathematics Policy 05 - 06

Introduction

We the staff of St. Eoghan's Primary School teach Mathematics because it is enjoyable and an essential tool for life. It is understood by all staff that Mathematics and Numeracy are one and the same, as defined in the DENI School Improvement Programme and the NEELB's Numeracy Policy.

Our Aims are:

- to encourage the effective use of mathematics;
- to develop the ability to think clearly and logically;
- to develop in pupils personal qualities of perseverance, confidence, independence and co-operation with others;
- to enable all pupils to experience success and pleasure through practical activities;
- to enable pupils to communicate effectively through the medium of mathematics;
- to foster an understanding of mathematics through a process of enquiry and experiment;
- to encourage mastery of basic mathematical skills and knowledge;
- to encourage the use of ICT to support the teaching of mathematics;
- to encourage parents to become involved in their children's learning.

Resources

Personnel

While as a staff we recognize the responsibility which each of us has in developing Mathematics, our Co-ordinator, Mary Devlin will be responsible for the development of Mathematics in our school. Staff attend INSET when appropriate and co-ordinator attends Numeracy courses regularly. The school's Numeracy Development Officer Miss Roisin Mc Vey from CASS assisted with the School Improvement Day. Staff meet regularly for curriculum development planning.

Equipment

The co-ordinator will be responsible for ordering, monitoring and maintaining the mathematical equipment. Most of the equipment is stored in the classrooms and larger and less frequently used equipment is stored in a central store. A list of the equipment is included in the appendix.

Printed Matter

The main maths scheme used in the school is Heinemann Maths. In the year 05/06 we have begun to pilot New Heinemann Maths in years 1, 4 and 6. This scheme is supplemented by Apex Maths, Maths Quest, Ready, Set Go – Maths by Eunice Pitt and the Internet. Teachers also make use of timetables, catalogues, plans, menus, reference books and worksheets.

ICT Resources

As already stated, ICT is important in supporting the teaching and learning of Mathematics. Each class has two C2k Network Computers. There are 4 laptop computers and one data projector in the school. There are 5 televisions, two videos and three DVD players which the teachers can use as a resource for teaching and learning. Where appropriate recorded school broad casts are used to assist teaching and learning.

School Environment

The school buildings/grounds, classrooms, assembly hall, corridor and activity room are used to develop topics such as measure, shape & space and data handling. There are a number of playground markings, which help develop the use of mathematics.

Classroom Management

We aim to give our pupils a variety of learning experiences in Mathematics lessons. These will include:

Discussion
Pencil and paper
Mental work
Calculator work
Games and puzzles
Broadcasts
Use of ICT
Use of the environment Problems
Investigations
Practical activities
Estimation

The teaching strategies used will include practical teacher demonstration, individual, paired, group and class teaching. These teaching strategies will match:

- the level of understanding of the pupil;
- the age and ability of the pupil;
- the nature of the topic;
- the available resources.

Continuity and Progression

In our planning we intend to ensure that pupils have experiences across each of the five mathematical areas and through the different levels. Progression is ensured by using the Inter-Board Lines of Development with the content taken from the Programmes of Study.

Continuity is ensured by whole staff agreement on:

- mathematical language and conventions;
- compatibility of teaching approaches;
- development of schemes of work which include progression in I.C.T.
- appropriate teaching strategies;
- classroom organization;
- resources and materials;
- assessment and recording procedures.

Monitoring and Evaluating

Monitoring and evaluating are integral parts of the teaching and learning in our school and are the responsibility of all members of staff. The co-ordinator will oversee the progress we are making towards fulfilling our aims. This will be achieved through:

- the co-ordinator team teaching in each classroom;
- the co-ordinator visiting classes throughout the school;
- evaluation of pieces of work (internal standardization);
- displays of work in a particular AT or area of Mathematics;
- a checklist of which ATs have been taught;
- collecting a cross-section of exercise books;
- informal discussions with staff;
- formal mathematics meetings;
- keeping a record of equipment borrowed from the central store;
- regular reviews of the Numeracy Action Plan;
- review by the co-ordinator of teachers planning.

The evidence, which we gather through these monitoring procedures, will be evaluated regularly in order to inform future planning. We will try to

ensure that the pupils work is of a high standard and that these standards are evaluated, maintained or, in some identified areas, improved. We intend to do this through:

- Class/topic/end of term tests;
- End of Key Stage Assessment results;
- Formative assessment procedures;
- Internal standardization procedures;
- Formal and informal assessment undertaken as part of normal classroom teaching;
- Observation of practical activities;
- Discussion with pupils;
- Standardized test results;
- Quizzes and puzzles;
- Quality marking of pupils work including discussion on areas of weakness and ways of improving. Parents and pupils aware of marking policy.
- Regular, detailed and comprehensive information given to parents about a pupil's achievement and progress.

Mathematics Across the Curriculum

Mathematics contributes to many other subjects of the curriculum. Other subjects can provide the opportunity to develop and enhance mathematical skills and knowledge. Mathematics also makes a significant contribution to the development of more general skills such as communicating, reasoning and problem solving.

Opportunities for developing Mathematics across other subjects are being exploited. ICT is an integral part of the planning and delivery of the Mathematics curriculum. Details of the part it plays in supporting the teaching and learning will be included in the revised Scheme of Work for number.

Home / School Links

Parents will be kept informed of the progress of their children and how to participate in their education. They will also be made aware of issues of interest to them concerning developments within the school or the wider education field. This will be done through parent information evenings and letters to parents.

- Regular written reports; (*Once per Year - June.*)
- Meetings;*formal and Informal meetings with parents.*)
- Interviews; (*Twice a year, Term 1 & Term 2*)
- Informative and helpful remarks when marking work;
- Well chosen homework activities; (see Homework Policy.)
- Open days; displays of work; prize giving; etc.

Differentiation and Equal Opportunities

Staff will provide a differentiated learning environment, which takes account of:

- Gender;
- High and low achievers
- Children with special educational needs.

In line with the Code of Practice, the special needs of individual pupils will be catered for through consultation with parents, pupil, SENCO, Mathematics Co-ordinator and other appropriate agencies. (See Special Needs Policy) To ensure early intervention when needed, we will monitor the progress of all pupils on regular daily basis. (See Monitoring and Evaluating)

The Way Forward

In this academic year, 2005-2006 we are progressing through Year 3 Northern Ireland Numeracy Strategy

Following guidance from CASS, and taking into account the implications of the Improving Schools documents (DENI), we will meet to set targets and put into operation plans for raising standards in Numeracy/Mathematics. An Action Plan is included at the end of this document, setting out our targets, how and when we will achieve them, the personnel involved and how we will monitor and evaluate our success.