Scoil Ursula N.S.

• Title: Maths Policy

• Introductory Statement and Rationale

- a. <u>Introductory Statement:</u> All members of the teaching staff of Scoil Ursula were involved in preparing this document. More specifically, the plan was drawn up by a focus group comprised of teaching staff from each class grouping, overseen by the Principal. In drawing up this document a planning template provided by the Department of Education, the Primary School Mathematics Curriculum and the old school plan were consulted. It was disseminated to the wider school community through the Board of Management and ratified by the board on the 9th of May, 2011.
- b. **<u>Rationale</u>**: The staff of Scoil Ursula felt it was important to review the existing School Plan for maths and to use the primary school curriculum to inform teaching and learning principles and to ensure a spiral approach to the learning of maths.

• Vision and Aims

a. <u>Vision</u>: Everyone is capable of some maths. Basic maths is necessary for living with ease in our surroundings. Scoil Ursula cherishes all pupils equally and it envisages instilling in them a positive attitude towards maths and aiding them in achieving their full potential.

Aims:

- to develop a positive attitude towards mathematics and an appreciation of both its practical and its aesthetic aspects
- to develop problem-solving abilities and a facility for the application of mathematics to everyday life
- to enable the child to use mathematical language effectively and accurately
- to enable the child to acquire an understanding of mathematical concepts and processes to his/her appropriate level of development and ability
- to enable the child to acquire proficiency in fundamental mathematical skills and in recalling basic number facts

Curriculum Planning

<u>1. Strands and Strand Units:</u>

- In order to ensure that all teachers are familiar with the curriculum for their class level, each teacher will be required to have their long term maths plan completed based on the strands and strand units of the primary curriculum.
- In order to ensure that this familiarity is maintained if teachers change classes or if new teachers join the staff, each teacher will be required to complete their maths plan using the whole school format.

2. Approaches and Methodologies:

All children are provided with an opportunity to access all strands of the maths curriculum. In the mainstream classroom teaching maths on a daily basis using appropriate methodologies ensures this. For those with specific mathematical needs the classroom teacher and the resource teacher will collaborate in planning for the needs of these children.

The following approaches and methodologies are used throughout the year:

Guided discussion:

The teacher encourages the child to clarify his/her thinking and gain self-confidence and self-esteem in maths through use of discussion skills and correct use of mathematical language.

Hands-on approach/Active Learning:

Scoil Ursula believes that a hands-on approach is essential if children are to understand mathematical concepts. This is achieved by using concrete materials, working individually, in pairs and in groups. (see attached list of resources).

Collaborative and Co-operative Learning:

This learning strategy is promoted in the following ways:

- Encouraging the children to listen
- Encouraging the children to take turns
- Seeing that others opinions are important
- By enabling a child to clearly express their opinion.

3. Assessment and Record Keeping

Assessment is used by teachers to inform their planning, selection and management of learning activities so that they can make the best possible provision for meeting the varied mathematical needs of the children in Scoil Ursula.

The following are other assessment tools used by teachers:

- Teacher observation
- Worksheets and work in copies
- Extension and enrichment activities based on the strand unit being taught
- Ongoing teacher-designed tests. Test results are kept and analysed by the class teacher
- Problem solving exercises that use a variety of mathematical skills
- National standardised tests are introduced in 2nd class. Children are formally assessed in October of each year using Sigma-T. The results of each child's tests will be kept in their school file which is stored in Mrs. Thompson's room. Results of the standardised test are communicated to the parents at the parent-teacher meetings.

Following assessment teachers may do the following:

- Give further help to individuals who need it
- Discuss concerns with parents and encourage parents to help children
- Discuss situation with forwarding teacher at the end of school year
- Consult with the special needs team who will provide support in accordance with Sigma-T results and when requested by class teacher

4. Children with Different Needs

The maths programme aims to meet the needs of all children in the school. This will be achieved by teachers varying pace, content and methodologies to ensure learning for all children. Records are stored in line with the schools policy on record keeping.

5. Equality of Participation and Access

Each class teacher will ensure that both boys and girls will be given equal opportunities to participate in class discussions, use of manipulatives and presentations in the maths lesson.

In so far as possible, the teacher will plan that all children have access to the use of services, amenities and facilities in the school environment.

Provision is provided, as and where necessary, for the following

- Members of the Traveller community
- Children experiencing any form of disadvantage
- Children with disabilities
- Families with literacy problems
- Families for whom English is not the first language

This is done through consultation with class teacher and learning support and resource teacher.

Organisational Planning

6. Timetable

All teachers are aware of the allocation given to mathematics daily. The following is the time allocation for maths:

In so far as possible teachers will ensure the provision of learning support within the mainstream class setting. However, if the need arises, children may be withdrawn from the classroom for learning support. Where possible, in a multi-class situation, teachers will endeavour to plan the maths programme so that both classes are on the same topic.

7. Homework

- The staff acknowledges that the purpose of assigning maths homework is to consolidate what has been taught in class. In as far as is appropriate to the strands in the curriculum mathematics homework will reflect the active learning approach.
- It is necessary to give maths homework nightly as this is deemed important to reinforce the learning that has taken place during the day. The homework reflects the class work of the day using a combination of oral and written maths.
- Homework is differentiated taking into account the range of abilities within the class. Communication between class teacher and learning support/resource teacher ensures that children attending resource/learning-support are not going home with two sets of mathematics homework.

8. Resources and ICT:

Mathematics resources/materials in the school are:

- In general stored centrally but with some resources distributed to classrooms. There is an inventory of maths equipment in the school. It is kept in the cookery room. The Deputy Principal is responsible for it.
- Teachers will report missing or broken items to the Deputy Principal who in turn, will

endeavour to replace them.

- At our staff meetings, items that are needed are identified and provision made for replacement of same. Each class has a store of mathematical equipment suitable for the class level and is kept in the classroom. All other maths equipment is stored in a central area.
- Resources are managed in the following way: Each teacher has access to the central storage area. Equipment that is removed is logged in a book under teachers name stating equipment removed.
- Equipment for computational maths such as: hundred squares, counters, multiplication squares, deans blocks will be kept in classrooms. Equipment such as weighing scales, metre sticks, trundle wheels and clocks can be shared.
- Teachers in class groupings organise among themselves when to do certain topics in maths so that equipment will be readily available.
- The selection of materials, equipment, games, textbooks, supplementary books are chosen after discussion among teachers and pertaining to curricular needs.

Teachers are encouraged to familiarise themselves with the curriculum guidelines regarding the use of calculators in the classroom. Children are encouraged to use calculators only as an aid to particular maths lessons and shouldn't be overused.

- There is a list of software/videos/DVDs available in the school to support the various strands/strand units in mathematics. The software is stored in the staffroom. It is easily accessible to all teachers. The post holder of ICT (Ms McHugh) is in charge.
- Ms McHugh researches new software, which in turn is demonstrated to staff as needs arise at staff meetings to assess whether or not it should be purchased.
- The staff shares opportunities for enhancing pupil learning in mathematics through using the Internet. All staff members have a list of useful websites.
- There is a code of practice to ensure safe Internet usage. Appropriate hardware & software has been installed to ensure this safety. All teachers familiarise themselves with material on websites prior to use by the children and there is ongoing monitoring of these sites.

9. Individual Teachers' Planning and Reporting

- Teachers write up their long and short term plans having familiarised themselves with the curriculum documents and the whole school plan.
- The Cuntas Míosúil serves in reviewing and developing the whole school plan/individual teacher preparation for following years as a progression and continuity aid. Cuntas Míosúils are kept in the principal's office for reference. Individual teachers keep their own copy.

10. Staff Development

• Teachers have access to current research, reference books, resource materials, websites, associations dealing with mathematics through educational websites and educational publications. The Deputy Principal takes responsibility for monitoring developments and sourcing/obtaining materials.

Opportunities are provided to facilitate sharing this information, at staff meetings and meetings of teachers of similar class groupings.

- There is a variety of maths courses available to teachers at the local education centre which teachers are encouraged to attend.
- Occasionally, teachers will give a short presentation before staff meetings to share the skills/expertise acquired at these courses and provide handouts.
- Opportunities for team-teaching are identified and managed following consultation between class teachers and learning support staff.

11. Parental Involvement

- Parents are made aware of the content of the mathematics programme and the approaches/methodologies used in this school at parent teacher meetings, both formally and informally.
- Parents can support the teaching and learning of mathematics in our school through monitoring homework and test results throughout the year.

<u>12. Community Links</u>

- Teachers are made aware of particular members of the community who could make a contribution to the mathematics programme will avail of this at their discretion.
- There are agencies/organisations such as: engineering firms, financial institutions and auctioneering firms that could be of assistance to the mathematics programme available in the local area.

• Success Criteria

This plan will make a difference to the teaching and learning of mathematics in our school using the following criteria as teachers' preparatory work will be based within the parameters of the whole school plan and procedures outlined in this plan will be consistently followed as well as teacher conferencing in the area of mathematics.

- We will know that the plan has achieved its aims through
 - Feedback from teachers/parents/pupils/community
 - Inspectors' suggestions/report
 - Feedback from second level schools
- The plan will enhance pupil learning as all pupil needs will be met and differentiated for and assessed.

• Implementation

a. <u>Roles and Responsibilities:</u>

The school principal & staff will be responsible for the implementation and evaluation of the policy. Any feedback received will be recorded and any problems that arise will be taken into account for the purposes of evaluation and review.

b. <u>Timeframe:</u>

The maths plan will be implemented from the beginning of the School Year 2011-2012.

• Review

It will be necessary to review this plan on a regular basis to ensure optimum implementation of the mathematics curriculum in the school.

a. <u>Roles and Responsibilities:</u>

The following people will be involved in the review of the plan

- Teachers
- Pupils
- Parents
- Post holders/plan co-ordinator
- BoM/DES/Others

The plan will be reviewed in 2014. This will provide the plan co-ordinator/school with the opportunity to report on findings and to take feedback from staff.
Ratification and Communication
The Board of Management ratified this policy on the of
The board of Management fathled this policy on the of
Signed:, (Chairperson, BOM)
Scoil Ursula N.S. does not have adequate resources to disseminate all of its policies to all the concerned members of the wider school community. The policy is communicated to the members of the BOM and is available to the wider school community through the parents' representatives on the BOM. All Scoil Ursula policies are available for inspection in the school and on scoilursula.com