

Art 23: All pupils in Sperrinview have the right to lead a full and decent life with dignity and independence and to play an active part in the community (RRS team 2015)

Art 28: Every pupil in Sperrinview has the right to an education which will be differentiated to meet their individual needs (RRS team 2015)

Sperrinview Special School Numeracy Policy

Rationale

Numeracy/Mathematics is a tool for pupils to use in their everyday lives in order to equip them with the basic skills essential for independent living.

Aims

We aim to:

- provide meaningful experiences which reflect the programme of study in each of the 5 ATs at a level appropriate to the ability of the pupils
- plan and deliver numeracy/maths teaching programmes in an enjoyable learning environment
- introduce mathematical concepts through a practical approach, of which structured play is an important aspect
- enable pupils to use their knowledge of numeracy/maths in everyday life
- develop an understanding of number by enabling pupils to:
 - i count forwards and backwards
 - ii add, subtract, divide and multiply [for the more able pupils]
- develop a knowledge of money and how to use it
- teach the skills associated with budgeting and saving
- encourage the use of current mathematical language
- promote an understanding of handling data
- develop an understanding of shape and space
- develop an understanding of volume and capacity

- encourage the use of ICT to enhance the development of knowledge and skills
- use the numicon programme in order to build an understanding of number and number relationships, developing children' fluency, reasoning and problem - solving.

Organisation and Methodolgy

Numeracy/mathematics is taught and reinforced within each of the classes within school and also in a variety of settings in the wider community:

- on an individual basis
- in small group lessons [size flexibility and composition will be determined by the class teacher]
- paired work [similar ability or less experienced pupils with more experienced pupils]
- whole class teaching

Classroom organisation is determined by several factors:

- the individual needs of the pupils
- the number of pupils
- the nature of the activity
- the diverse range of resources available [human and physical eg standing frames, wheelchairs, work stations etc]

The classroom team consists of a teacher plus classroom assistant[s].

A multi-disciplinary approach is adopted when the needs of the pupils are such that input from the Speech and Language Therapist, Occupational Therapist and/or Physiotherapist is required.

Peripatetic teachers for pupils with a hearing and/or visual impairment support a small number of pupils.

The teachers as the managers of the classroom will co-ordinate this approach.

At the age of 16 students enter the leavers' programme. Numeracy/maths skills which have already been introduced and taught through their journey up the school can now be consolidated and utilised to the pupils' full advantage, enabling them to be as independent as possible.

Developmental milestones are not reached at predictable times; therefore, teaching approaches must be flexible,

These include:

- modelling
- sharing
- guiding
- visual approaches [for pupils within the autistic spectrum]

The emphasis will be on promoting pupils' learning through the provision of quality, concrete, active experiences across the curriculum eg multi sensory experiences, structured play, environmental visits etc.

Teachers' expectations will ensure that all tasks will have clearly identified learning outcomes and are matched to pupils' abilities and interests.

Roles and Responsibilities

The co-ordinator for this subject is Mrs Michele Tolan. The Principal has overall responsibility for the implementation of the policy. The Numeracy team will meet on a regular basis to reflect and evaluate.

Teachers, when planning, will take account of pupils' needs, programmes of study, Q-Skills, Quest, the NI Curriculum and

themes agreed upon. These will be reflected in the Schemes of Work and Individual Education Plans.

Parental Involvement

We recognise the importance of meaningful, regular and positive communication between parents and teachers. Parents are provided with opportunities, formally and informally, to discuss their child's progress and to become familiar with and involved in the work of the school. This happens through:

- Home/School books
- Homework [see Homework Policy]
- Telephone Contact
- Parent/Teacher meetings
- Parent Workshops eg DELTA and ICON to I Can.

Staff Development

The co-ordinator will ensure that staff are updated on all developments pertaining to Numeracy through:

- school based inset,
- EA Southern Region based inset,
- External courses.
- Professional Organisations eg Nasen, PAPA, Sense etc]
- Educational Journals eg British Journal of learning Support, Special Children etc]

External Support

Parents

Local Community

EA Southern Region

Peripatetic Service

Educational Psychology Service

Teachers' Centre

Resources

The guiding principle for the deployment of resources is one of assuring access to the curriculum for all pupils, considering their individual needs. The following list indicates the variety of resources available.

Number Resources

Valiant Roamer [2]

Roamer Mats

Roamer Work Cards

Dominoes

Large Peg Boards

Jump Ten Game

Calculators

Talking Maths Photos

Inset Boards - Numbers [1-10]

Three Bear Family

Magnetic Board Numbers

Number Jigsaws

Mini Motor Early Maths Activities

Counting Buttons

Counting Animals

Counting Cotton Reels

Counting Beads/Laces

Counting Bricks

Giant Number Cards

Number Mat and Numbers

Sorting Trays and Objects

Numicon resources kits

Large foam Numicon tiles

Number bond overlays for base boards

Publications

Early Number

Mathsteps assessment and teaching strategies

Mathsteps Activity Sheets
Maths for Christmas
Maths on Display
Let's Investigate Number
Nursery Needs number
Nursery Needs Opposites
Early number experiences with multi-link
Maths KS1 Number Games
Maths KS1 Curriculum Bank
Three bear Family Attribute Cards
Talking Maths Photos
Things that go together card set
Number mat and numbers
Magnetic numbers and boards
Supermarket wall hanging
Duplo
Lego
Multi-link cubes
Multi-link task cards
Multi-link picture cards [handbook]
Logic people/Logic sets
Lighthouse toys

Measure

Variety of height charts
Rulers
Scales
Balancing sets
Height Charts
Thermometers
A variety of clock faces
24 hour clock
Rain guage
Funnels
Measuring sets [capacity]

Money dominoes
Shopping dominoes
Money dice
Fill a Purse
Decimal Currency dominoes
Coin Stamps
Plastic/cardboard coins
Gummed money
Roamer cards
Egg Timers
Maths Time Kit
Rising Ball Timers
Water Timers
Time Games
Time Jigsaws
Time Lotto
Time Stamps
Folens 1st, 2nd and 3rd Steps To Telling The Time [photocopiable sheets]
Folens 1st, 2nd and 3rd Steps To Counting Money
Measuring Tapes
Maths KS1 Looking at coins
Maths KS1 Counting Pennies
Numicon pan balance

Shape and Space

A variety of inset boards
Posting Boxes
Attribute Sets
Jigsaws
Tessellation Sets
Large shape boards
Shape sets
Building blocks and bricks
Simple shapes [photocopiable sheets]

Shape and size [Oxford Press]
Shape sorters
Folens 1st, 2nd, 3rd Steps to shape
Numicon tiles

Handling Data

Class-made charts
Planning an Effective Maths Curriculum

Software

See ICT Booklet
Numicon software package for IWB - multi users

Internet sites

Various sites applicable e.g.

www.helpkidzlearn.com

www.primaryresources.co.uk

www.tes.co.uk etc

iPad Apps based on number, shape and space, measure, handling data etc

All of these resources will be used as necessary to meet the individual needs of each pupil.

Monitoring and Evaluation

The Numeracy policy will be monitored and evaluated on an ongoing basis through consultation with pupils, staff and parents [also see Assessing, Recording and Reporting Policy].

Review

A sub-committee of the Board of Governors will monitor and evaluate the effectiveness of this policy as part of a timetabled, on-going process.

Signed: _____ Date: _____