



Numeracy Policy

1. Introduction

This document is a statement of the aims, principles and strategies for the teaching and learning of numeracy at Maesybryn Primary School, both through the formal teaching of Mathematics and in developing numeracy across all of the curriculum.

Within the context of this policy, numeracy refers to the skills of number, measure and data handling. Mathematics is a subject within the National Curriculum (2008) and includes all of these areas plus shape and space, whilst numeracy was outlined from 2013 in the National Numeracy Framework (replacing numeracy within the Skills Framework 2008). The two were incorporated into the new Programme of Study for Mathematics (2015). Numeracy is a core component of the "Successful Futures" curriculum as outlined in the Donaldson Review.

It is our intention to equip each of our pupils with the skills necessary to ensure that they are able to use numeracy with confidence in the world around them. They will be taught to use and manipulate number and to use data successfully. Above all, our pupils shall be encouraged to enjoy numeracy in all its forms and to use it in all of their learning.

Aims

The aims of this policy statement are;

1. To establish an entitlement for all pupils to learn how to use numeracy in all forms across all of the curriculum;
2. To establish expectations for the teaching of numeracy.
3. To promote continuity and coherence across the school in the teaching of and provision for numeracy.
4. To state the school's approaches to this subject in order to promote public understanding of the curriculum.
5. To foster a love and respect for mathematics.
6. To develop skills that can be used for lifelong learning and in the world of work.

Targets

- By the end of Year 2, we aim to ensure that the performances of most of our pupils lie within the range of Outcomes 5 to 6. A significant minority of pupils should achieve Outcome 6.
- By the end of Key Stage 2, we aim to ensure that the performances of most of our pupils lie within the range of levels 4 to 5. A significant minority of pupils are expected to achieve Level 5.
- We expect nearly all pupils to make the expected two level gain from Year 2 through to Year 6 and for a significant minority to exceed this.
- We are proud of all our children's achievements at the end of both Key Stages. Historically, county and national performance indicators are exceeded but we recognise that for some pupils, progress lies outside of the targets set above. For these children we aim for them to make progress against their individual education programmes (IEP) and to make year-on-year progress from their initial baseline score. This is especially true of those children in our LA Special Classes.
- We expect all children to use their numeracy skills across the whole curriculum and for standards to be consistent in all activities and not just in focussed lessons.

School-based targets for individual children are vitally important and play a major role in our school motivation and reward system. All pupils will have on-going numeracy targets throughout their time at Maesybryn. Children at Maesybryn are valued as individuals and teachers strive to recognise and celebrate the talents and personal goals of each child in their class when agreeing targets.

Entitlement and curriculum provision

The time allocated for Numeracy is in line with recommendations for Foundation Phase and Key Stage 2. This amounts to roughly 6 hours per week at both Key Stages of direct Mathematics teaching. This includes Big Maths sessions and other mathematics such as Abacus or Badger Maths.

In addition, it is expected that all other subjects and areas of learning contribute to pupils' learning in numeracy. All subject schemes of work have been written with reference to the numeracy framework and teachers will plan and assess against this framework using the Incerts assessment package.

The school has developed a curriculum with numeracy at the heart and these skills are developed in all subjects, using Cornerstones as our base.

Staff Development and Training Opportunities

To develop staff confidence and competence in teaching Numeracy across the curriculum:

- The Numeracy Leader or a designated member of staff will attend appropriate CSC INSET courses as deemed appropriate through consultation with the Head Teacher.
- Whole-school training needs are identified as a result of the school's monitoring and evaluation programme. Recent training has included Big Maths and Physical Numeracy.
- Other training needs are identified through performance management and other programmes, such as induction of newly qualified teachers.
- The Numeracy Leader will arrange for relevant advice and information from courses to be disseminated and where appropriate to be included in improvement planning and turned into practice.
- The Numeracy Leader leads or arranges school-based training in consultation with the Senior Management Team.
- The School Improvement Plan outlines whole-school training needs, training relevant to Key Stages, training for new members of staff, the Numeracy Subject Leader and training identified for other individual members of staff.
- The School makes best use of, and places value upon, in-school expertise. Time is built into the staff development calendar for information gained from training to be disseminated appropriately.

Guidelines for Staff

1. At Maesybryn, we believe that the teaching of Numeracy should not be isolated to formal Mathematics lessons. It is an integral part of the work in nearly all other subjects and should be embraced by them. It is a vital and exciting part of all cross-curricular themes. This corresponds completely with the Numeracy Framework and the new "Donaldson Curriculum".
2. All staff are enthusiastic in their approach to teaching Numeracy and attempt to instil into every child a positive attitude towards learning. Materials and ideas presented aim to promote enjoyment and interest. It is our intention that the learning process should be enjoyable to both child and teacher. Intervention and monitoring should be understanding and sensitive.
3. Certain areas of number development are given special attention. Number bonds, multiplication facts and place value are specifically taught on a regular basis as they are the basic tools for numeracy. Problem solving is also given priority and children are encouraged to explore number patterns as often as possible. Daily numeracy activities are present in each class in the form of CLIC sessions.
4. Opportunities are always given for the purposeful use of paper and pencil activities. Children are encouraged to use algorithms confidently in their mathematics and to

develop a sense of responsibility for their own learning. The school has embraced the principles of “Big Maths” and these are having a positive impact on standards. Rapid recall of number facts is essential for raising standards in mathematics across the school.

5. A variety of approaches for the acquisition of these skills is encouraged and it is felt that the teachers’ own individual styles will enrich the child’s learning experiences as they progress through the school.

Inclusion

Maesybryn Primary is an inclusive school and meeting the needs of all our pupils is a central aim of our school. We aim to celebrate our cultural diversities whilst developing an ethos of social inclusion for all members of the school community.

To enable each child to work towards their potential, tasks should be planned taking into account the needs of the individuals within the group. Differentiation for children with special educational needs is as important as for those deemed to be more able and talented.

Children with special educational needs have support and individual programmes are set in place for them through liaison with the ALN Co-ordinator and the class teacher. (Please refer to the School Policy for Additional Educational Needs Provision). These feature within each child’s IEP.

Pupils who are identified as More Able and Talented will receive a differentiated curriculum and be encouraged to work towards a higher level than their peers. Additional support groups are provided to extend their skills of problem solving.

Access is given where appropriate, for pupils to develop and apply their skills in Information Technology to their studies in Numeracy.

Assessment in Numeracy

Assessment in numeracy follows the School Assessment Policy. On-going assessment is through the use of teacher assessment and the use of Incerts to record levels of attainment in Mathematics and numeracy. We aim to emphasise children’s achievements and what steps are required for future progress.

Tangible evidence of the children’s work is kept wherever appropriate. The Numeracy Leader aims to build up a portfolio of work and photographic evidence to help class teachers plan for future lessons. Staff moderate this work against cluster portfolios and examples from CSC and the Welsh Government.

When children arrive in Nursery and Reception, Baseline assessments provide us with a profile of the child’s development at that stage in MD, using Incerts.

In Year 2 the child is formally assessed again through teacher assessments to provide statutory levels.

All pupils in Years 2 – 6 are assessed annually using the National Numeracy Test test and these results are recorded and tracked by class teachers and senior staff in the school.

A piece of problem solving work is completed every term for purposes of assessment and used in conjunction with level descriptors at the front of every book in Years 2 – 6. At the end of a unit of work, teachers will make an assessment of the level achieved.

At the end of Foundation Phase and Key Stage 2, teachers keep learning profiles in Numeracy which are moderated against cluster agreed portfolios.

Teachers will maintain records of how each pupil is developing in numeracy. This will be in line with the Programme of Study. In time this will be added to the Incerts assessment profile held for each pupil.

Weekly assessments in Big Maths are held centrally on the main server.

Scores are shared with parents each year and parents will receive an annual report on their child's numeracy skills and abilities.

Pupils who require further support in Numeracy are assessed by support assistants using MALT tests and information is discussed with the class teacher and support planned appropriately.

Leadership and Monitoring

- The Literacy, Numeracy and Digital Competency Skills Leader is the school's Lead Professional responsible for mathematical development and mathematics and reports to the Head Teacher. They are responsible for overseeing the work of the Numeracy Leader
- The Numeracy Leader (Mrs. Sarah Burton-Little) has the responsibility to take a lead in developing Mathematics and the teaching of numeracy across the school within the School's Improvement Plan. They take a lead in the STEM faculty and in achieving the aims agreed by this group.
- The Numeracy Leader and the Skills Leader have the responsibility to monitor the effectiveness of teaching and learning and the use of resources.
- Teachers and educational support staff can expect informal support from the Numeracy Leader, support arising from the School Improvement Plan and that which is identified through performance management and other programmes.

How the subject is monitored and evaluated

Monitoring takes place so that the school's progress towards its targets for improvement can be evaluated. All teachers take part in this but the Numeracy Leader, in partnership with the Head Teacher, takes a lead.

Teachers' planning is evaluated and areas of strength are identified as well as areas for further development. This information is then fed back into the scheme of work. We value the fluid and evolving nature of teaching Numeracy. The contribution made by all members of staff ensures that we keep the raising of standards within this subject as the purpose of our evaluations. Book Audits, Learning Walks and Lesson Observations provide additional opportunities for direct monitoring and talking to pupils also provides invaluable information.

A School Portfolio for Numeracy contains work from across all strands of the subject. This contains evidence of work levelled as O4,5 and 6 along with work levelled as L3, 4 and 5. This is all moderated with the cluster as a whole. Teachers have agreed that this document provides a snapshot of standards achieved by our pupils.

Monitoring and evaluation of Number

Number skills are at the foundation of a child's experiences in school. We want our children to be able to use number confidently.

The Head Teacher, Numeracy Leader, ALN Co-ordinator and teachers are responsible for monitoring pupils' progress. This is undertaken by:

- Monitoring long, medium and short-term planning to ensure that proper provision for number is made.
- Analysing outcomes from records of teachers' observations of number.
- Undertaking lesson observations where the provision for number is a particular focus.
- Formal assessment at the end of Y2 and Y6.
- Weekly assessment of numeracy within the context of "Big Maths".

Monitoring and evaluation of Measure, Data Handling, shape and Space

Through a variety of approaches, all children will be given the opportunities to learn how to use each of these skills with confidence and understanding. They will experience varied activities and learn to use number skills to aid their learning of these areas. By the end of Year 6, it is hoped that most children will be able to measure effectively and use a range of data sources to gain information.

The Head Teacher, Numeracy Leader, ALN Co-ordinator and teachers are responsible for monitoring pupils' progress. This is undertaken by:

- Sampling teachers' records;
- Undertaking discussions with sample groups of pupils;
- Examining closely the progress made by pupils with IEPs;
- Analysing mathematics records to ensure that pupils experience a suitable range of skills and activities over time;
- Using statutory assessment tests and the end of each Key Stage to monitor pupils' progress and evaluate effectiveness.

Monitoring and evaluation of Problem Solving

We believe that children must be taught investigative skills, so that they can apply their knowledge in a coherent and logical way. This will serve to increase their confidence as independent mathematicians.

The Head teacher, Numeracy Leader, ALN Co-ordinator and teachers are responsible for monitoring pupils' progress. To achieve this:

- Problem solving is monitored by tracking pupils' progress through their books. Different topics are focused upon so that over time a sufficiently broad range is covered. This gives an opportunity to gauge whether key learning objectives have been met. Formal pieces are assessed each term.
- The ALN Co-ordinator will monitor the progress of pupils with IEPs in relation to the impact of provision.
- The Head Teacher and Literacy Leader monitor attainment and progress. In addition, the teachers' planning will be examined to evaluate its impact on progress.
- Across the school year, lesson observations will focus on the teaching of problem solving and the standards achieved by pupils.
- Teacher assessment tests are used at the end of Foundation Phase and at the end of Key Stage Two to monitor pupils' progress and evaluate effectiveness.
- Pupils from Years Two to Six are tested annually through the National Tests in Reasoning.

Policy review

This policy will be reviewed in line with the school's policy review programme. The Skills Leader is responsible for reporting to the Governors' Curriculum Committee about the quality of its implementation and its impact on standards. In the light of this, policy amendments will be made. This policy document reflects the School as a whole. Contributions and amendments are welcomed from all teachers and teaching assistants who may use it.

S. Roberts – Headeacher.
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