



“Opening doors to the future”

CYNGOR BWRDEISTREF SIROL MERTHYR TYDFIL

MERTHYR TYDFIL COUNTY BOROUGH COUNCIL

GREENFIELD SCHOOL

NUMERACY POLICY

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‘ Opening Doors To The Future ’
‘ Agor drysau i’r dyfodol’

Original Completion Date

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MONITORING THE POLICY

This policy will be reviewed bi-annually unless change of circumstances or legislation requires it to be amended earlier.

Signed: Date:

Head teacher

Signed: Date:

Chair of Governors

Review Date

Author

Our Vision

'To open doors to the future'

Our Mission Statement

That children, staff, parents, carers and all stakeholders work actively in partnership to enable all pupils to realise and reach their full potential.

Aims

- For pupils to operate as independent learners and thinkers
- To inspire a love for learning
- To provide a relevant curriculum for all
- For pupils to value themselves
- To foster a sense of belonging to a community

Our Values

- We create
- We respect each other
- We try our best
- We are a team
- We learn from mistakes
- We celebrate each other's success
- We are polite and considerate
- We produce magic moments

We want every child to be safe and happy in our school. We believe that the key to this is for us all to have self-respect, respect for others and respect for property.

Everyone has the right to:

- Feel safe, cared for and respected.
- Be able to learn to the best of his/her ability and to develop whatever skills he/she possesses.
- Be treated equally irrespective of gender, race, physical characteristics or any other factors.
- Learn and play without disruption.

Everyone is expected to:

- Be responsible for their own behaviour
- Respect the rights of others
- Share our values

Aim of the curriculum

- To ensure teaching and learning is fun and interactive.
- Use the LNF to develop numerical skills of each learner during their time at Greenfield.
- To make links and use guidance from the Literacy and Numeracy Framework (LNF) to relate numeracy to real life situations making learning more meaningful for the pupils.
- Develop skills, knowledge and understanding of numeracy through oral, practical and play activities.
- Use numerical skills in practical tasks, real life problems and within numeracy sessions.
- Use ICT resources as tools for exploring number, obtaining real life data and presenting findings.
- Develop and maintain a positive attitude towards numeracy.
- Develop independent living skills.
- Effectively track learners' progress in numeracy skills.

Definition of Numeracy

Numeracy is an essential life skill and learners need to be able to apply this skill across the curriculum in different subject areas, and in real life contexts.

Mathematics is a part of numeracy, but to be numerate means you are able to apply some of these mathematical skills in many more contexts than in mathematics lessons and across several subject areas. It is therefore our expectation that all teachers will be teachers of numeracy.

To help distinguish between numeracy and mathematics, we have defined numeracy in the following way for the purposes of this programme:

'Identifying and applying numerical reasoning skills in order to solve a problem, and carrying out the numerical procedures which enable people to work out and show their solutions.'
(National Numeracy Programme, September 2012)

Teaching and Learning strategies and planning

The class teacher will identify the most appropriate teaching strategy to suit the particular learning needs of the pupil.

Teachers will teach from the Mathematics National Curriculum guidance and use The Literacy and Numeracy Framework as a tool for curriculum planning in order to ensure pupils' numeracy skills progress across the curriculum as well as identifying targets for each pupil.

Numeracy skills will be taught discretely throughout the curriculum.

Skills that are highlighted for students for their I.E.P targets will be focused on during thematic work. This approach will enable children to transfer skills more readily throughout a range of tasks.

The main schemes of work followed throughout the school are Little Big Maths for pupils working below level 1 and Big Maths Little Maths for pupils working at level 1 and above.

Throughout the school staff have access to Abacus, Heinemann, Numicon and the EQUALS curriculum to supplement the delivery of the curriculum if they feel they are suitable for meeting the needs of the pupils.

Mathematical skills and experiences should be developed through cross-curricular work and planning which will coincide with the IPC curriculum topic for each term.

Differentiation

All pupils will have access to a broad, balanced curriculum that is relevant to their personal needs. All ranges of ability will be taken into consideration when planning lessons, activities and access to the Numeracy Curriculum. Provision should be made to enable the use of switches, IT, Communication Aids and the deployment and support given by staff. Resources should be made readily available and adapted to support all learners with consideration given to ASD pupils and pupils with Visual Impairment.

Skills across the curriculum

The National Literacy and Numeracy Framework will provide guidance on the continuity and progression for Numeracy and Literacy across the curriculum.

The Skills framework for 3 to 19-year-olds in Wales provides guidance about continuity and progression in developing thinking and ICT for learners from 3–19.

Cwricwlwm Cymreig

Numeracy contributes to the Cwricwlwm Cymreig by offering learners the opportunity to learn and apply mathematics in the context of data from their own local community, from the local and national environment, and from current issues related to Wales. The traditional Welsh vocabulary for some numbers as well as Welsh quilt and Celtic patterns provide investigative opportunities to contribute to learners' development of a sense of Welsh identity.

PSE

Numeracy development will contribute to learners' personal and social education by providing opportunities to apply mathematics to real-life problems. It helps them to analyse and interpret information presented to them on environmental and other twenty-first century issues, and to develop an informed and challenging attitude to real-life information, questioning its validity and recognising its implications for their world.

ICT

In numeracy learner will have the opportunity to use a wide range of ICT resources to find, select, organise and interpret information, including real-life data, to explore relationships and patterns.

To enhance the pupils learning the curriculum all pupils who are able to access the programme have the opportunity to obtain a log on for www.ixlmaths.com. This can be used both in and out of school to enhance learning and support as a revision tool. Pupils unable to access ixl maths have the opportunity to access a wide range of appropriate numeracy applications on the iPads.

Applications such as Grid Player are used as a communication tool to support pupils during numeracy sessions.

Careers and the world of work

Numeracy contributes to learners' awareness of careers and the world of work by providing opportunities to apply mathematics in the context of financial awareness of employment, budgeting, saving and spending.

Progression in Numeracy

Skills development, as described by the LNF, should be viewed as a continuum and not as a series of discreet skills to be learned. Progression is cumulative and each element/aspect assumes that the element/aspect in previous years expectations have been achieved and consolidated.

Staff will need to ensure that each learner's progression through the stages of the framework is demonstrated by an ability to develop and demonstrate increasing competence in numeracy skills. Pupils will be assessed on their ability to select and apply numeracy skills in ways that are appropriate to each context. Progression will be assessed in terms of both underpinning techniques and of the skills of application. Each expectation will build on the previous achievement to ensure progression for each element.

As many of our learners are working below age-related expectations careful planning and appropriate support will need to be implemented to support, stretch and challenge learners to ensure progression is maintained. This can be done through progressive task development matched to learners needs.

- Foundation phase

Staff will deliver the National Curriculum based on the Framework for Children's Learning for 3-7 year olds in Wales. Staff will deliver Little Big Maths which is linked to The National Literacy and Numeracy Framework to develop core numeracy.

During the Foundation Phase, children will be given opportunities to develop their skills, knowledge and understanding numeracy through oral, practical and play activities. Learners will be given opportunities to use and apply numeracy in practical tasks, real-life problems, and within numeracy itself. Learners will have the opportunity to use a variety of ICT resources as tools for exploring numeracy and for obtaining real-life data and for presenting their findings.

- Key stage 2

Staff will deliver the National Curriculum Framework for Key Stage two and pupils will build upon the skills they have started to acquire and develop in the Foundation Phase. Pupils working below level 1 will continue to access the Little Big Maths scheme of work. Pupils working at Level 1 and above will progress to access Big Maths.

At Key Stage 2, learners build on the skills, knowledge and understanding they have already acquired during the Foundation Phase. They continue to develop positive attitudes in numeracy and extend their numerical thinking by solving mathematical problems, communicating and reasoning using contexts from across the whole range of numeracy, across the curriculum and as applied to real-life problems.

- Key stage 3

Learners will be given opportunities to build on skills they have started to acquire and develop during the Foundation Phase and Key Stage 2. Learners will continue to acquire, develop, practise, apply and refine these skills through group and individual tasks in a variety of contexts across the curriculum. Progress can be seen in terms of the refinement of these skills and by their application to tasks that move from: concrete to abstract; simple to complex; personal to the 'big picture'; familiar to unfamiliar; and supported to independent and interdependent.

Pupils working at Level 1 and above will access Big Maths where skills are linked to relevant levels of The Literacy and Numeracy Framework.

- 14-16

In Key Stage 4 learners will continue to access Numeracy through the National Curriculum and learners will also be working on Edexcel Personal Progress Accreditation at Entry Level 1.

Key Skills are threaded throughout the qualification and learners are given the opportunity to develop the following skills;

- Number
- Measuring
- Position
- Shape
- Sequencing and Sorting.

- Post 16

In the Post 16 department pupils will have the opportunity to gain a qualification through the Essential Skills Wales; Application of Number at Entry Level 2, Entry Level 3 and Level 1.

Pupils working at Entry Level 1 and below will continue to access the numeracy unit associated with Edexcel Personal Progress.

Literacy and Numeracy Framework (LNF)

The LNF is designed to be inclusive of all learners, including those with Additional Learning Needs (ALN).

The two components of the LNF, Literacy and Numeracy, are divided as follows;

The strands within Literacy are;

- Oracy across the curriculum.
- Reading across the curriculum.
- Writing across the curriculum.

The strands within Numeracy are;

- Developing numerical reasoning.
- Using number skills
- Using measuring skills
- Using data skills.

Each strand is further divided into elements (numeracy) and aspects (literacy).

As many of our learners are working below age related expectations we will be working through the continuum according to ability rather than age.

The LNF is statutory for all learners aged 5-14 years and as many of our learners at Greenfield are not working at the expected age related level the framework will be used for all learners aged 3-19 within the school.

The role of the Numeracy co-ordinator

- Ensure that current LNF Guidance is being followed and that activities are progressive building on learners' prior knowledge.
- Ensure that a range of Numeracy skills are offered across all curriculum areas.
- Keep up to date with current thinking and curriculum development.
- Provide support and advice to staff.
- Order resources & budget as appropriate & co-ordinate their use.
- Provide a sound body of knowledge.
- Attend INSET and deliver relevant in-service training.
- Monitor the teaching and learning throughout the school.
- Ensure continuity and progression for every learner.
- Ensure the curriculum is being delivered at a level suitable for each learners needs.
- Work to the guidelines as laid down in the job description for subject co-ordinators.

Governors

Governor's responsibility;

- To be fully aware of the Numeracy Framework.
- Appoint a governor to have specific responsibility for numeracy.
- Be clear of the differences between numeracy and mathematics.
- Be aware of the need to improve learner's numeracy levels and the benefits of doing so.
- Be familiar with the strategies and resources used to promote effective implementation of the Numeracy Framework.
- Attend some whole school training days devoted to Numeracy.
- Governors will be provided opportunities to observe good practice in the delivery of numeracy across the curriculum.
- Contribute to the schools efforts to inform parents/carers and involve them in their children's learning of numeracy.

Parents/Carers

It is the responsibility of parents/carers to;

1. Be aware of the importance of improving their children's numeracy skills and the benefits of doing so.
2. Be clear of the differences between numeracy and mathematics and help to try and change the negative thoughts and feelings that some may have towards numeracy.
3. Be aware of strategies and resources used to promote better understanding of numeracy.
4. Be aware of the school point of contact for numeracy.
5. Be encouraged to attend sessions to receive guidance for home delivery of numeracy.