

Aberdare Community School Ysgol Gymunedol Aberdâr



Numeracy Policy

Date Adopted	27th September 2023
Signature of Headteacher	<i>Carol Morgan</i>
Signature of Chair of Governors	<i>Mama</i>
Date to be reviewed	September 2024

Our Numeracy Mission Statement

Aberdare Community School is committed to raising the standards of numeracy of all of its pupils, so that they develop the ability to use these skills effectively in all areas of the curriculum and to cope confidently with the demands of everyday life and lifelong learning.

Definition of Numeracy

'Numeracy is not the same as mathematics. Numeracy is proficiency with number that is acquired through being taught mathematics well. Although pupils usually learn their numeracy skills during Mathematics lessons, to be fully numerate they must be able to apply these skills in other subject areas and real-life contexts.'

(Estyn Report: Improving Numeracy in KS2 and KS3, April 2010)

Numerate individuals are able to function responsibly in everyday life and contribute effectively to society. Numerate pupils are able to handle numbers fluently in mental, oral and written work, exploit patterns within number when calculating and approximating; measure and calculate accurately and estimate reasonably, using appropriate units of time, length, area, volume, mass, capacity, angle and related compound measures; use calculators accurately and appropriately; use an increasing range of skills to identify, analyse and describe practical problems or tasks involving numerical data; read, extract, interpret and analyse numerical and statistical data from a range of sources and presented in a variety of forms; and select appropriate techniques to represent data.

Curriculum Planning

The Literacy and Numeracy Framework (LNF) is first and foremost a curriculum planning tool that supports all teachers to embed numeracy in their teaching of the curriculum at Key Stage 3. Current curriculum planning and schemes of work, at all Key Stages, have been adapted to include specific aspects of the LNF that aim to introduce, consolidate, apply and make progress in specific numeracy skills. Although the LNF identifies age-appropriate numeracy skills at Key Stage 3, Planning at ACS takes into account the different abilities and needs of pupils across all Key Stages. The development of skills is progressive with each skill, having been taught in Mathematics lessons, then practiced and consolidated elsewhere as required by the skill itself or the individual child.

STEM subjects (Science, Technology, Engineering and Mathematics) naturally include a high level of numeracy and therefore have a large number of numeracy strands that they are responsible for across Key Stage 3. All departments are however required to address numeracy, where numeracy naturally occurs in their subject area. Most departments have assigned numeracy priorities which change in line with the diagnostic data on a yearly basis. Departments embed their priority into schemes of work alongside all other naturally occurring numeracy skills. The priorities are assessed and monitored continually throughout the year.

Sharing Good Practice

All curriculum areas are represented on a whole school Numeracy Professional Learning Community (PLC). This group, which is chaired by the Numeracy Coordinator, meets once per half term and is the school's main method of ensuring that numeracy provision is of a

high standard and progression is a shared priority across the school. All subjects have a representative on the PLC.

Assessment

All teachers will use their numeracy priority assessments to make judgments on pupils' progress in numeracy at Key Stage 3. The assessments are based upon the LNF expectations at Key Stage 3. These assessments are intended to be used formatively by departments and individual teachers to support learner progress and curriculum planning. They will be used to identify learners' current strengths and areas for development, to be shared by teachers.

The LNF and the National Tests

In addition to embedding the LNF effectively across the curriculum and ensuring that all departments are using formative assessments to monitor the progress of the pupils against the strands they are delivering, all pupils also sit the national numeracy tests at KS3. The procedural and reasoning tests will be taken by all pupils unless there are exceptional circumstances. The school will inform the parent / carer and the LEA of any disapplied pupils, giving reasons, and in accordance with Welsh Government guidelines. Similarly, if it is considered appropriate that a child takes the test of an age group below that of his/her peer group, the decision will follow discussion with parents / carers, as a progress score will not then be available for that child. The numeracy tests will provide summative data, which will be collected and analyzed in school, using the diagnostic tools available, and nationally (as part of the national accountability model). This data will give teachers clear indicators of skill development and progress, and will contribute to the judgments teachers make about learners' skill acquisition. The data will also be used to inform school improvement and assign departments numeracy priorities. Assessment against the numeracy tests will give different perspectives on learners' progress, reflecting the fact that they are assessing slightly different aspects of the same skills. For example, the processes test is a snapshot, summative view while the reasoning test will draw on a far broader range of evidence.

The role of the Senior Leadership Team Numeracy Link (KL) is to:

- participate in the planning, implementation and evaluation of the numeracy strategy;
- determine the role of the Numeracy Coordinator (NJ);
- specify expectations to be made of all teachers;
- support the further development and implementation of a whole school numeracy policy;
- provide opportunities for effective communication between the Numeracy Coordinator, the Senior Leadership Team, the Mathematics Department and other departments;
- source and provide finance; and consider and implement a strategy for involving parents in the support of numeracy competency.
- Develop the recording & reporting of the LNF.
- Highlight the need and arrange for any necessary CPD

The Role of the Numeracy Coordinator (NJ) is to:

- Attend training in order to implement the Numeracy Framework (LNF) across the school and keep up to date on any new initiatives
- Work with staff to ensure that all teachers are aware of the content of the LNF and the teaching and learning strategies in numeracy that are appropriate to the curriculum
- Assist classroom teachers in identifying opportunities for the application of numeracy skills from the LNF, within their schemes of work
- Raise awareness of the resources available to support and challenge pupils of all abilities
- Develop the use of rich tasks to embed and assess numeracy skills
- Assign and monitor numeracy priorities taken from NNT diagnostics
- Work with feeder primary schools to develop consistency
- Quality assure the numeracy provision with use of a whole school numeracy calendar, this includes book looks and pupil voice.
- work with the senior leadership team to review, implement and monitor a strategy for numeracy across the curriculum and to ensure the effective development and implementation of a whole school numeracy policy;
- evaluate the effectiveness of the strategy and make modifications where necessary;
- facilitate amendments to the numeracy strategy in the light of evaluation and curriculum changes.
- Analyse the coverage of Numeracy Rich tasks.

Teachers of mathematics should:

- Be aware of the mathematical techniques used in other subjects and feeder primary schools and provide assistance and advice to other departments/schools so that a correct and consistent approach is used to all subjects.
- Provide information to other subject teachers on appropriate expectations of students and difficulties likely to be experienced in various age and ability groups.
- Through liaison with other teachers, attempt to ensure that students have appropriate numeracy skills by the time they are needed for work in other subject areas.
- Seek opportunities to use topics and examination questions from other subjects in mathematics lessons.

Teachers of subjects other than mathematics should:

- Ensure that they are familiar with correct mathematical language, notation, conventions and techniques relating to their own subject and encourage students to use these correctly.
- Be aware of the appropriate expectations of students and difficulties that might be experienced with numeracy skills
- Carry out Rich Numeracy tasks created by LoL. Teachers are then expected to RAG the Numeracy Statements and use SIMS to record the pupil results.

- Provide resources for mathematics teachers to enable them to use examples of applications of numeracy to other subjects in mathematics lessons be positive in their approach to mathematics.
- Consider how their subject can contribute towards the LNF and more widely improving progress in pupils' numeracy skills
- Ensure that Key Stage 3 schemes of work include the relevant skills from the LNF
- Ensure all staff are aware of the numeracy resources available and how they might link to the subject
- Analyse pupil progress in numeracy in line with the school's ARR policy

Involving Governors

- Governors are made aware of the LNF and of any developments within the school in respect of its implementation
- The school has a named Governor for numeracy across the curriculum at all Key Stages
- Governors are given opportunities to observe good practice in the delivery of the LNF across the curriculum

Evaluation

The Numeracy Strategy will be monitored and reviewed through:

- The school and departmental development plans.
- Lesson observations.
- Sampling pupils' work.
- Whole school numeracy audits.
- Discussion with staff, parents and governors.
- Analysing assessment data including bench marking with family schools, the L.A and Wales
- National Numeracy Procedural & Reasoning Results.
- Pupil voice activities.

The Mathematics Link Governor will support the evaluation process.

Information provided from the monitoring and review process will inform decision making about improvements and further developments.

Other related policies

This policy should be used in conjunction with the following policies:

- Assessment, Recording and Reporting Policy
- Policy for children with Additional Learning Needs
- Marking policy

<http://www.nationalnumeracy.org.uk/>