

# LLISWERRY HIGH SCHOOL



## NUMERACY POLICY

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# LLISWERRY HIGH SCHOOL

## NUMERACY POLICY

### Rationale

At Lliswerry High School, we accept that being numerate is essential for pupils to prepare them for adult life. We realise that numeracy is a proficiency that is developed mainly in mathematics but also in other subject areas. Numeracy is more than an ability to do basic arithmetic. The school recognises that poor numeracy skills hold back pupils' progress and can lower their self-esteem. Numeracy skills can be consolidated and enhanced when pupils have opportunities to apply them across the curriculum. Thus, improving these skills is a whole school matter.

At Lliswerry High School we recognise that certain subjects, such as Science, use numeracy on a more regular basis than subjects such as English. The subjects with a high demand of numeracy are known as 'numerate heavy' subjects whereas those with less numeracy are known as 'numerate light' subjects. However, the school recognises that all teachers have a responsibility to teach numeracy when it arises naturally within the subject. Therefore, as such, **all teachers are teachers of numeracy**. Therefore the staff of Lliswerry share responsibility for the teaching of numeracy **throughout** the curriculum and recognise their statutory responsibilities, as outlined in National Literacy and Numeracy Framework.

### Policy Aims

- to adopt a whole-school approach to numeracy throughout the curriculum in keeping with the principles and practices established in the National Literacy and Numeracy Framework.
- to enable all pupils to reach their potential in the key numeracy skills of numeracy
- to support the development of numeracy skills throughout the curriculum and those who are under performing
- to raise staff awareness of key numeracy strategies through working party discussions, INSET and the dissemination of good classroom practice
- to encourage staff to take responsibility for the development of numeracy in their subject areas through the inclusion of appropriate lesson planning
- to identify specific roles and responsibilities within the school with regard to the development of numeracy work
- to establish procedures for monitoring numeracy across the curriculum

### Leadership of the Policy

Numeracy is a key drive of School Improvement and hence the 2<sup>nd</sup> in the Mathematics Department has the responsibility of Numeracy throughout the curriculum co-ordinator. The roles and responsibilities of co-ordinator are:

- identifying, through research/observations in the school, locally and nationally, current thinking, development and good practice, (to include Estyn guidance) and communicating these to all relevant parties.
- liaising with partner primary schools regarding teaching/learning strategies, assessment processes and the standards achieved by pupils in order to ensure a smooth transition and continuity and progression between Key Stages 2 and 3.
- coordinating, monitoring and evaluating specific projects and programmes aimed at developing pupils' numeracy skills including the Numeracy Acceleration Programme.
- reviewing, developing and updating, on an annual basis, the school's 'Numeracy Policy and Guidelines' and advising/supporting colleagues accordingly.
- providing training/support for colleagues on an individual, departmental and whole school basis.

- contributing, particularly in the context of 14 to 19 requirements, to the planning, development, delivery, monitoring and evaluation of the school's provision in respect of the numeracy and application of number aspects of Key Skills.
- auditing and evaluating the cross-curricular status of numeracy in the school in terms of pupils' standards of achievement, teaching and learning strategies and assessment processes and communicating the outcomes of this to all relevant parties.
- advising on the priorities/targets relating to cross-curricular numeracy to be included in the school's annual development plan and coordinating/managing their implementation.

## **Implementation**

The implementation of the Numeracy Policy is based around 3 main areas:

### 1. Numeracy within the Mathematics curriculum

The school is aware of the importance of the mathematics in taking the lead in providing a solid foundation for pupil's numeracy skills. Hence the department employs a number of different strategies in raising the numeracy skill levels of pupils. The department recognises the importance that pupils realise that skills developed in the mathematics classroom are transferable to other subject areas and to the real-world.

### 2. Numeracy Acceleration Programmes

The school uses data received from the partner primary schools to identify a number of year 7 pupils who require additional support to improve their Numeracy. These pupils are withdrawn from the mainstream lessons once a week and work in small groups with a Numeracy teacher in the Numeracy Development Room. The pupils are tested at regular intervals throughout the year and once it is determined they have reached a level where support is no longer needed then they are removed from the programme. This programme continues throughout KS3 for those pupils who require it. The number of pupils on the programme decreases as in year 8 and further decreases in year 9. This programme is taught by staff that have been timetabled to undertake the lessons but is evaluated and reviewed by the co-ordinator.

The co-ordinator identifies and provides any staff training requirements for the acceleration programmes.

### 3. Numeracy throughout the curriculum

At present, Numeracy throughout the curriculum is underdeveloped within Wales. Thus the co-ordinator has a vital role in leading the school in implementing a policy that secures good provision that leads to good outcomes. In order to ensure this, the co-ordinator will need to take on the following tasks on a regular basis:

- meet with representatives of departments to discuss Numeracy within that subject area in order to provide support and guidance as appropriate
- identify good practice and shares with colleagues
- develop resources that support Numeracy within the classroom

In order to develop Numeracy throughout the curriculum, it has been agreed to pilot an initial project during the Summer Term 2013. This will involve the mathematics department and three 'numerate heavy' subjects. The project is outlined with an action plan (appendix 1). The plan is designed to provide the way forward for the school to ensure Numeracy is utilised fully across the curriculum.

Hence by the end of the academic year 2012-13 the actions in the plan will have been undertaken. At this point a review of progress can be made and decisions on the next stages of development can be decided upon and written into the School Improvement Plan.

It is currently anticipated that further departments will be invited into the project and hence numeracy will become more throughout the curriculum.

However, subjects that are not involved with the initial project are encouraged to make contact with the mathematics department and discuss any issues relating to numeracy within their subject.

### **Supporting Staff Development in Numeracy**

In order to develop consistency in use of the Numeracy policy it is essential that staff are provided with a variety of support and training opportunities. The opportunities that are in use within the school are:

- staff INSET days – numeracy will be included when it is deemed appropriate
- support for departments by the mathematics department
- identification of good practice in Numeracy from lesson observations which can then be shared with colleagues
- encourage models of good practice e.g. modelling and close collaboration between colleagues in order to promote numeracy developments
- staff are provided with a reference book which details good practice and ideas that reinforce the delivery of Numeracy

### **Roles and Responsibilities**

In addition to the roles and responsibilities of the Numeracy co-ordinator the following also applies:

#### SLT

- accept overall responsibility for the delivery of the school's Numeracy Policy
- provide opportunities for staff training in Numeracy during INSET days
- monitor departments' implementation of the Numeracy Policy

#### Head of Department or nominated Departmental Numeracy representative

- ensure that 'subject specific numeracy' is clearly identified in schemes of work, and that there is obvious progression through the key stages
- seek to find opportunities to liaise with the Numeracy Co-ordinator and the Mathematics Department to provide continuity
- monitor the work of the department with regard to the inclusion of specific numeracy strategies in lesson planning
- use available assessment data to identify pupils that need support.

#### Teachers across the curriculum

- contribute to pupils' development of numeracy, since being numerate, is an essential skill for life in school and in the real-world
- should ensure that they are familiar with the specific numeracy demands of their subject and ensure sufficient coverage of these skills in their lesson planning

#### ALNCO

- the ALNCO should continually liaise with the numeracy Co-ordinator about ALN pupils and about the Numeracy levels

#### Parents

- encourage their children to use the range of strategies they have learnt to improve their numeracy skills

## Pupils

- take increasing responsibility for recognising their own numeracy needs and making improvements

## **Literacy and Numeracy Framework**

From January 2013 the Welsh Government has introduced a new Literacy and Numeracy Framework which becomes statutory from September 2013. The school has written and implemented an action plan to ensure the elements of the framework are in place for September 2013.

## **Monitoring and Evaluation**

The monitoring and evaluation processes are under development. We will look to make use of available data to assess the standards of pupils' numeracy. Senior Leaders and the Numeracy Co-ordinator will decide how to monitor progress in the school.

Possible approaches are:

- sampling work pupils work to determine standards and use Marking and Feedback policy
- lesson observations
- line manager meetings
- pupil interviews
- encouraging departments to share good practice by exhibiting or exemplifying pupils' work
- talking to pupils about teaching techniques which help them with their reading and writing skills, and reporting their comments to staff;
- reporting on numeracy features noted in SLT lesson reviews.

## **Review and Evaluation**

Responsibility for the planning, delivery and review of the Numeracy Policy initially rests with the Numeracy co-ordinator in conjunction with the Deputy Headteacher.

This policy will be reviewed

- as part of the school's self-evaluation cycle in the summer term of each academic year
- prior to this date should there be any changes to statutory requirements

## Appendix 1 – Numeracy throughout the curriculum Action Plan

<b>Targets</b>	<b>Co-ord.</b>	<b>Timescale</b>	<b>Resources</b>	<b>Monitoring Procedures</b>	<b>Evaluation / Success Criteria</b>
Identification and invitation of 3 'Heavy numerate' subjects to take part in the project	Deputy Headteacher (DH) and Numeracy co-ordinator (NC)	April 2013	Time to discuss with HoDs	Minutes of meetings	Departments identified
Introduction day of the project	DH, NC and departmental reps	May 2013	Cover	Identified focus from the day	All departments agree individual focus for the project
Implementation of agreed focus of the project	NC and departmental reps	June 2013	Cover, numeracy resources	Lesson observations, meetings between maths department and other departments and reports to DH	Improved numeracy outcomes within lessons
Presentation of outcomes of project	DH, NC and departmental reps	July 2013	Cover	Report of findings from project	Consistency in use of numeracy across each department
Evaluation of project and planning for next steps of project	DH and NC	July 2013	Cover	Minutes of meeting	Further plans added to SIP 2013-14