

Numeracy Policy

Summary

Woodham Academy is committed to ensuring that all students are able to achieve their potential and beyond, within an ethos of unconditional mutual respect as reflected in our school mission “Achievement for All”.

We know that high quality learning experiences for students are our core business. We recognise that good teaching which stimulates interest and engages students, allows all students to make good progress, and which leads to ultimately to successful outcomes is the foundation of these high quality learning experiences. Learning is the most important part of any lesson. Teaching must facilitate this learning through a variety of means.

This Numeracy Policy is an addition to the Teaching and Learning Policy that operates across Woodham Academy.

Date adopted: March 2014

Review date: Annually

Last Reviewed: September 2020

1. Rationale

Woodham Academy is committed to raising the standards of numeracy of all of its students. We will enable them to develop the ability to use numeracy skills effectively in all areas of the curriculum, ensuring all students are able to transfer these skills to cope confidently with the demands of further education, employment and adult life.

2. Aims

- To develop, maintain and improve standards in numeracy across the school;
- To ensure consistency of practice including methods, vocabulary, notation, etc.;
- To indicate areas for collaboration between subjects;
- To assist the transfer of students’ knowledge, skills and understanding between subjects.

3. Definition

- Numeracy is a proficiency that is developed mainly in mathematics but also in other subjects. It is more than an ability to do basic arithmetic.
- Numeracy involves developing confidence and competence with numbers and measures. It requires an understanding of the number system, a repertoire of computational skills and the inclination and ability to solve problems in a wide range of contexts.
- Numeracy also demands an understanding of the ways in which information is gathered by counting and measuring and presented in graphs, diagrams, charts and tables.

4. Consistency of Practice

Teachers of Mathematics and teachers of other subjects should co-operate on agreed strategies.

4.1 Teachers of mathematics should:

- Be aware of the mathematical techniques used in other subjects and provide assistance and advice to other departments, so that a correct and consistent approach is used in all subjects.
- 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.
- Provide information to other subject teachers on appropriate expectations of students and difficulties likely to be experienced in various age and ability groups.
- Seek opportunities to use topics and examination questions from other subjects in mathematics lessons.

4.2 Teachers of subjects other than mathematics should:

- Display a positive attitude towards numeracy.
- 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.
- Provide information for mathematics teachers on the stage at which specific numeracy skills will be required for particular groups.
- Be aware of appropriate expectations of students and difficulties that might be experienced with numeracy skills.
- Provide resources for mathematics teachers to enable them to use examples of applications of numeracy relating to other subjects in mathematics lessons.

5. Guidance:

This section provides guidelines to help produce consistency across the curriculum - it is not intended to be a prescription for teaching although some advice is given.

All teachers should consider students' ability to cope with the numerical demands of everyday life and provide opportunities for students to:

- Handle number and measurement competently, mentally, orally and in writing;
- Use calculators accurately and appropriately;
- Interpret and use numerical and statistical data represented in a variety of forms.

Approaches:

- It is recognised that not all students in a teaching group will have the same numerical skills. Where teachers are unsure of an appropriate 'numerical level' teachers they consult with the Numeracy Co-ordinator.
- All teachers will discourage students from writing down answers only and encourage students to show their numerical working out within the main body of their work.
- All teachers will encourage students to use estimation skills and check their work makes sense.
- All teachers will encourage students to write mathematically correct statements.
- It is recognised that there is never only one correct method and students will be encouraged to develop their own correct methods where appropriate rather than be taught 'set' ways.
- Wherever possible students will be allowed and encouraged to 'vocalise' their maths - a necessary step towards full understanding for many students.

- All students should be helped to understand the methods they are using or being taught – students gain more and are likely to remember much more easily if they understand rather than are merely repeating by rote.
- All teachers will encourage students to learn multiplication tables and other number facts.

Calculators:

In order to improve numeracy skills, it is essential that students should be encouraged to use non-calculator methods whenever possible. However, departments should ensure students have access to calculators when they are necessary. Students should be encouraged to bring their own calculator and get to know it.

Methods and Presentation:

Where a student is gaining success with a particular method it is important that s/he is not confused by being given another method. This does not disallow the possibility of introducing alternatives in order to improve understanding or as part of a lesson deliberately designed to investigate alternative methods, provided students can manage this without confusion.

Language:

When referring to decimals say "three point one four" rather than "three point fourteen".

Read numbers out in full, so say three thousand four hundred rather than three, four, zero, zero.

Except for very long numbers.

Time: Students should never record 3hrs and 30 minutes as 3.30hrs but as 3.5 hrs.

6. Implementation:

The Numeracy Co-ordinator will:

- Be responsible for the development of numeracy across the curriculum.
- Play a leading role in the design and production of a whole school policy for numeracy.
- Help identify training needs of staff in relation to numeracy and ensure that these training needs are met.
- Collect relevant information and resources and communicate these to the teaching staff as a whole.
- Establish procedures to monitor and evaluate the provision of numeracy for all pupils in all curriculum areas.
- Set priorities and targets to be achieved through the school development plan.

The Leadership Group will:

- Recognise and support the work on developing numeracy across the curriculum
- Provide time for meetings and resources for staff training as appropriate