Rooks Heath College

Numeracy Policy

Introduction

This policy replaces any previous policy and follows DfE regulations and guidance. All members of staff are affected by and expected to adhere to this policy.

In line with the College's Equal Opportunities and Special Educational Needs policies, we aim to give all students equal opportunities to take part in all aspects of the college life, as far as is appropriate, practicable and compatible with giving regard to health and safety and the efficient education of other students.

This policy takes account of our aim for children to have the support they need:

- to be healthy
- to stay safe
- to enjoy and achieve
- to make a positive contribution
- to achieve economic well-being

The policy will follow the five principles of the Children's Plan:

- to support parents and families;
- to allow children to reach their full potential
- to enable children to enjoy their childhood whilst preparing for adult life
- to provide services in response to children and family needs
- to use preventative measures to help students to avoid the possibility of failure

This policy is founded in the College's commitment to the development and maintenance of good behaviour and a positive and inclusive ethos for all members of the College community. It reflects the College's commitment to safeguard children, as well to encourage diversity in all aspects of College life.

Ratified by Governors: 4th February 2019
Ratified by Board of Trustees: 4th February 2019
To be reviewed every 3 years by the Numeracy Coordinator

Foreword

Rooks Heath College is a mixed 11 to 18 multicultural comprehensive academy in the London Borough of Harrow and is part of the Tithe Multi Academy Trust. This policy is formulated by the Numeracy Coordinator, in consultation with other staff, and is monitored by other members of the College 's Leadership and Management Group. The policy is subject to tri-annual review by the College 's Leadership and Management Group and is subject to approval by the Governors of the College.

Rooks Heath College believes it is the responsibility of ALL staff within the College to maximise opportunities for students to develop and improve their Numeracy and to help them to develop a positive attitude towards mathematics, in order to maintain improvement in the quality of education provided.

This Numeracy Policy has been formulated to sit within the College Development Plan and reflects the Government's recommended policy. The College also has a separate Numeracy Information Handbook.

Principles

1. It is the responsibility of ALL staff within the College to maximise opportunities for students to develop and improve their Numeracy and to help them to develop a positive attitude towards mathematics.
2. The Mathematics department aims to recognise the explicit links between subjects, by using examples from other subject areas to highlight their expectations and unique demands.
3. The Mathematics department aims to provide support for ALL departments within the College to develop Numeracy across the curriculum, and to maximise opportunities for collaboration between departments on issues relating to Numeracy.
4. All departments within the College aim to encourage the selective use of the calculator and to promote non-calculator methods when appropriate.
5. This policy and Appendix 2 'A consensus of the use of Mathematics across the curriculum' should be part of the schemes of work for all departments.

Being Numerate implies:

1. An 'at-homeness' with numbers.
2. An ability to make use of Mathematics skills which enables an individual to cope with the Mathematical demands of everyday life.
3. To have an appreciation and understanding of information, which is presented in Mathematical terms, for instance in graphs, charts or tables, or by reference to percentage increase or decrease.
4. To appreciate and understand some of the ways in which Mathematics can be used as a means of communication.
5. The use of methods of calculation, which are both efficient and effective.

6. Confidence and ability in mental methods.
7. Selecting the most appropriate method of calculation for a given purpose.
8. An awareness of the links between different aspects of the Mathematics curriculum.
9. Reasoning, justifying and proving results about number.
10. Using number to represent Mathematical models of real-life situations.
11. To understand and be able to use the language of Mathematics, and talk confidently about Mathematical ideas.

How do students learn to become numerate?

1. Through purposeful interpersonal activity based on interaction with others.
2. Through being challenged and struggling to overcome and solve problems.
3. Most students are able to become numerate, but vary in their ability and the rate at which they develop their Numeracy.
4. Students can develop their own strategies for calculating and solving problems, but it is their teacher's responsibility to help them to refine their methods.
5. Students misunderstandings need to be recognised, made explicit and worked on.

How is it best to teach students to become numerate?

1. Teaching and learning are complimentary.
2. Learning is based on dialogue between teacher and student, but also between student and student.
3. Learning about Mathematical concepts and how to apply them should develop together, alongside each other.
4. The connections between different Mathematical ideas need to be acknowledged in teaching. (Connectionist theory)

Promoting Numeracy throughout the school

1. **Tutor Time Activities**

   Activities for use in tutor time have been provided in the staff shared area. Years 7-9 have activities which are aimed at improving Numeracy skills and years 10 and 11 have activities which are aimed at revising topics for their forthcoming GCSE exams. Numeracy Activities take place on a designated day every fortnight interchanging with Literacy activities.

2. Link books include Numeracy Mats (containing mathematical methods and formula) that can be referred to in school and at home by pupils and at school by teachers of all subjects (see appendix 1)

3. Numeracy activities such as card matching activities and questions have been provided to the weekly KS3 Maths club after school.

4. **Numeracy Intervention for Year 7**

   Students are selected for small group numeracy intervention and are removed from their usual lessons twice a week to attend. They are identified from their KS2 SATs test taken in year 6 as well as their performance in the baseline maths test that they took on entry to year 7 and their CAT score. They follow a KS2 Scheme of Work as they did not achieve the expected KS2 SATs level in Mathematics on entry to year 7.

5. **Numeracy Intervention for Year 8**

   Students who are weak and under performing at the end of year 7 are selected for Numeracy Intervention. During their maths lessons they follow a Scheme of Work based on topics to help improve their Numeracy Skills.

Plans for the future

1. Numeracy activities to be provided to the English Induction classes.
2. Teachers will have access to an A3 copy of the Numeracy Mats., so that they can refer to them in students' link books. This will encourage consistency in the cross curricular use of numeracy.
3. Areas covering Numeracy topics will be highlighted in schemes of work for other departments and the maths scheme of work will also be adjusted to allow for teaching topics in an order that supports other subjects.
4. Numeracy resources such as cubes for counting, 3-d shapes, coins and clocks to be kept centrally and made available to all departments to borrow if required while teaching a topic involving numeracy.