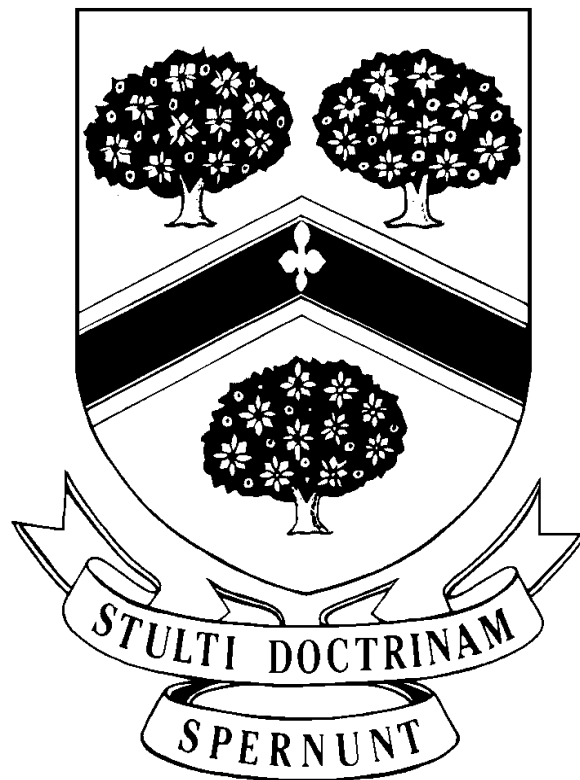


# **THORNTON GRAMMAR SCHOOL**

**A SPECIALIST SPORTS, SCIENCE & APPLIED LEARNING  
TRUST SCHOOL**



FOUNDED 1673

## **POLICY FOR NUMERACY ACROSS THE CURRICULUM**

REVIEWED: FEBRUARY 2003

# **POLICY FOR NUMERACY ACROSS THE CURRICULUM**

## **DEFINITION**

At Thornton Grammar School we see numeracy as focusing on:

- **Knowledge** of numbers and number properties
- **Familiarity** with standard procedures in the presentation and communication of verbal, numerical, symbolic and graphical information
- **Confidence** in using, discussing and manipulating numbers and in solving problems in many contexts.

## **RATIONALE**

Numeracy skills facilitate access, understanding and communication and are a key to educational achievement. It is essential that students acquire these skills if they are to have full access to educational opportunities both within and outside the school, and be able to fulfil their potential.

## **AIMS:**

- That every pupil has the skills and an inclination to solve numerical problems, including those involving real life applications and cross-curricular activities, using written and mental techniques
- That every pupil should be confident in the art of communicating and interpreting information presented in words, symbols, graphs, tables or diagrams
- That every teacher should contribute to the development and extension of numeracy skills.

## **OBJECTIVES:**

- To promote an understanding of the relevance of numeracy in the world today
- To promote a cross curricular approach to numeracy
- To promote consistency across the curriculum in the delivery of all aspects of numeracy
- To ensure staff are confident in delivering areas of numeracy where this is relevant to their subject
- To ensure parents are aware of how and when to support their children in the development of their numeracy skills and have the confidence and resources to facilitate this
- To enable teachers of all subjects to draw upon one another's expertise
- To raise pupil's achievements through improved numeracy skills.

## **NUMERACY PRACTICES**

At Thornton Grammar School, we endeavour to ensure that pupils are constantly aware of numeracy issues. This is achieved in lessons and via assemblies, competitions, tutorial sessions, challenges and advertisements about the place of numeracy in the world of work. We celebrate the achievements of pupil's skills through display work, which also serves as a tool for educating.

### **Responsibility:**

The Numeracy Co-ordinator and the Head of the Mathematics Department have responsibility for working towards an agreed action plan, which focuses on monitoring:

- The Numeracy Policy
- Delivery of numeracy through Mathematics (including homework)
- Delivery of numeracy across the curriculum
- Raising awareness of numeracy issues
- consistency of approach where this is required
- Parental involvement
- Primary school liaison
- Post 16 numeracy and preparation for the world of work

### **Delivery through Mathematics**

Pupils will receive numeracy as part of their programmes of study at KS3 and KS4 with more emphasis of numeracy in Years 7, 8 and 9. Numeracy planning for the long, medium and short terms will be incorporated in to the department schemes of work. Some examples of lessons plans will be included showing a series of activities designed to stimulate mental, written and thinking skills. These activities may be extended in maths homework time but will not necessarily be linked to the area of the maths curriculum taught at that time. Some lesson plans will also illustrate how to make use of the three main phases i.e. mental and oral starter, main activity and plenary.

In Years 10 and 11 pupils will continue to develop their numeracy skills whilst following the Mathematics curriculum and working towards their GCSE examinations. They will be encouraged to share their techniques for mental calculations and non-calculator techniques.

The department takes on board national numeracy project recommendations to use whole class teaching and group work strategies for effective differentiation and to improve communication. Both DfES and QCA recommendations are borne in mind and will be acted upon.

The Mathematics Department thus endeavours to:

- Provide opportunities for pupils to explain their mental processes and talk through both correct and incorrect answers
- Find ways of helping pupils to make connections between conceptual and calculation aspects of Mathematics
- Treat calculations as problems, which require interpretation in a meaningful way rather than encouraging pupils simply to spot the appropriate method to use
- Use realistic contexts in which to apply problems
- Challenge pupils to think and reason, and explain the method leading to their solutions

### **Delivery of skills across the curriculum**

A teachers' handbook will be available to all staff detailing areas where a common approach to numeracy is required.

The Numeracy Co-ordinator will offer a numeracy working party where strategies and concerns can be discussed and addressed.

The Numeracy Co-ordinator and members of the Mathematics Department will offer to work with other Departments when introducing a topic of significant numerical content.

### **Consistency**

We recognise that there are strong links between numeracy and most subjects of the curriculum. To enable the Mathematics Department to draw upon cross-curricular numeracy links as often as possible, a curriculum map, which highlights common areas of numeracy covered in other subjects, will be drawn.

The success of these links and ideas for developing them will be highlighted and pursued via the numeracy Working Party.

### **Parental Involvement**

New pupils and parents to the school will be made aware of the numeracy strategies at an early stage of the school new year. It is hoped that such contacts will develop the confidence of parents in their own skills and enable them to work with their own children at home. They will also build bridges between primary and secondary school numeracy with the aim of informing staff of areas of pupil's strengths and weaknesses. Enhancement materials will be provided for pupils and parents to use at home.

Feeder school visits by Mathematics staff and the Numeracy Co-ordinator will contribute to building a clearer profile of the expected levels of numeracy in Year 7.

### **Post 16 Numeracy / World of Work**

We aim to make pupils aware of the relevance of good numeracy skills and their place in the world of work.

We aim to achieve this by:

- Inviting visitors and guest speakers to the school
- Set up a numeracy library in the Mathematics department
- Display numeracy at work posters
- Encourage pupils to apply their numeracy skills during their work experience

Compiled by Mr S A Touil (Numeracy Co-ordinator)