

# Pobalscoil Iosolde's Numeracy

## Policy 2023 - 2024

### Numeracy Mission Statement

Pobalscoil Iosolde is committed to raising the standards of Numeracy for all its students, ensuring the development of the ability to use numeracy skills across the curriculum and the skills necessary to confidently cope with the demands of further education, employment, and adult life.

### Rationale

It is important that all pupils develop the ability to apply numerical understanding and skills confidently to solve problems in various curriculum contexts and to handle practical mathematical demands in everyday life. The focus on numeracy skills is not solely the responsibility of the Mathematics department. All subjects expecting pupils to apply numerical skills should take positive steps to develop pupils' numeracy skills, provide opportunities for them to acquire mathematical language crucial for understanding mathematical knowledge, and enhance overall mathematical attainment, promoting high standards in other subjects.

People with poor numeracy skills face a disadvantage when entering full-time employment, often struggling to secure and maintain employment long-term.

### Definitions

**Numeracy is:** The ability to confidently cope with the mathematical demands of further education, employment, and adult life, including efficiently and accurately carrying out basic calculations, applying knowledge of numbers to different circumstances, understanding and using units of measurement, and interpreting information presented in mathematical forms.

### Numerate students:

- Have a sense of the size of a number and its place in the number system.
- Read numbers correctly from various meters, dials, and scales.
- Know basic number facts and recall them quickly.

- Use calculators and other resources appropriately.
- Make sense of number problems, recognize necessary operations, and work confidently with numbers.
- Understand and use correct mathematical notation and terminology.
- Measure accurately using a range of instruments.
- Understand and use compound measures and rates.
- Interpret and predict from graphs, diagrams, charts, and tables.
- Understand probability and risk.

### **Raising Standards of Numeracy**

A whole school strategy for raising standards of numeracy involves:

- Increasing awareness of teaching strategies used in primary schools and mathematical skills acquired by pupils.
- Identifying numeracy needs in different subjects.
- Providing information on expectations for particular groups.
- Developing a consistent approach to learning and numeracy skills in all subjects.
- Encouraging teachers to work more effectively.

The responsibility of the Mathematics Department is to teach basic skills, but by collaborating more effectively with other teachers, standards should be raised for all students. This should mean:

- Reduced need for teachers in subjects other than Mathematics to teach basic numeracy skills.
- Improved achievement in curriculum aspects involving basic numeracy skills.
- Enhanced ability of all students to work confidently with mathematics in various contexts.
- Better preparation of students for further education, employment, and dealing confidently with the mathematical demands of adult life.

### **Monitoring and Evaluation**

This policy and the school's efforts to improve standards of numeracy will be monitored and evaluated by:

- A Numeracy coordinator collaborating with other teaching and learning coordinators and subject coordinators.

- Representatives reporting progress to their learning/subject areas.
- The Numeracy coordinator reporting progress to the mathematics department and providing cross-curricular material for Maths lessons.
- Numeracy being included on the agenda at subject meetings.

### **Dyslexia Statement:**

Inclusion is the ultimate aim of the school. To this end, differentiation and multi-sensory strategies are deployed to support students with dyslexia. Differentiation, both by activity and outcome, is used to maintain high expectations for all students.

### **Strategies in Place:**

#### **1: Maths Week:**

Maths week takes place every year in October. Many activities are planned to highlight numbers in everyday life. Competitions are run for junior students including poster competitions and maths hat and daily maths puzzles given during tutor time.

#### **2: Lunchtime Numeracy Initiative**

First years who scored low on the maths competency test are selected for this initiative, taking place twice a week for 6 weeks approximately during the last term. Areas targeted are ones highlighted from the competency test. Smart targets employed to measure success.

#### **3: Numeracy Ninjas**

**Numeracy Ninjas** is a numeracy programme for schools which supports learners in developing high levels of fluency with important numeracy skills that are prerequisites for success in the study of 11 – 16 mathematics. Numeracy ninjas will run for first years between mid-term and Easter.

#### **4: Whole school emphasis on Graphing:**

X and y axes placed perpendicularly on the corner of every board in every room with a labelled co-ordinate. The aim is to promote graphing and mitigate students' misconceptions identified through survey, on a whole school basis across all subjects and abilities.

## **5: Paired Maths**

An intervention for 1<sup>st</sup> year students in term 2 designed to improve confidence in maths. Selected transition-year students will attend one first year maths class a week and help students with classwork and build their confidence in maths.

## **6: Peer Maths**

From September to December, TY HL maths designed and cultivated game-based lessons from the 1<sup>st</sup> year maths curriculum. The students, in groups, taught different elements of the class to one first year group at a time, visiting each 1<sup>st</sup> year group once. For this term, the students will be targeting another learning intention and hope to visit all first years before Easter.

### **Review and Evaluation:**

Each initiative is usually evaluated after its completion. In some cases, evaluations may take place later in the year, using qualitative and quantitative approaches, including questionnaires. Results are used to plan numeracy strategies for the next academic year.

### **Action Plan:**

- To run Lunchtime Numeracy Club for targeted first year students. Emphasis on pre and post testing to measure success.
- Run Paired maths in 1 Higgins for 6 weeks and evaluate.
- Continue with a common approach to graphing in all subject areas.
- Run numeracy ninjas after February Mid-term in first year maths classes.
- Peer maths to run after Easter with TYs and 1<sup>st</sup> years.