

# Ratoath College Numeracy Improvement Plan 2021-2024

## A. Introduction - School Ethos

Ratoath College is a co-educational, multi-denominational centre of learning. We are committed to promoting an inclusive atmosphere of learning while providing a balanced and well-rounded education for all our students to achieve their personal best.

Numeracy is part of the School Improvement Plan. The Numeracy policy will play a role in providing an effective education to our students. STEM careers are rapidly becoming a popular path due to an everadvancing technological world. It is vastly important that we uphold the Numeracy policy as it prepares our students for the jobs of tomorrow.

This policy is evaluated and updated annually and runs in a three-year cycle.

## **B.** Legislation

Under government guidelines, in 2011 The National Literacy and Numeracy Strategy was introduced. This document outlined targets for all schools to achieve by 2020. Among these were to raise the proportion of students taking Higher Level in Junior Cycle and Leaving Certificate to 60% and 30% respectively. The Digital Strategy for Schools 2015-2020 sets out the plan to embed ICT into teaching, learning and assessment methodologies, highlighting the importance of a preparing students for a technological and numerate future. The aims of this strategy for Numeracy are for students to be able to:

- a. Gather, interpret and represent data
- b. Estimate, predict and calculate based on data
- c. Identify mathematical patterns and trends
- d. Express ideas mathematically
- e. Use mathematical understanding and skills to solve problems.
- f. Use technology to develop numeracy skills and digital media literacy

## C. Aims and Objectives of Numeracy Policy

Being numerate is one of the key skills of the Junior Cycle. Numeracy has practical applications in everyday life. All students are required to study mathematics in senior and in junior cycle. Additionally, students may take other subjects in which numeracy is applicable such as STEM subjects.

The aims of this policy are to:

- Create a numeracy rich environment.
- Improve students' attitude towards STEM subjects.
- Promote problem solving as a cross curricular skill.

## D. Roles and Responsibilities

## **Board of Management:**

The board of management is responsible for:

- ensuring the numeracy policy is developed and reviewed as appropriate
- considering reports from the principal on the implementation of the policy

## **Senior Management**



The senior management team led by the principal is responsible for:

- engaging the whole staff in developing strategies for the improvement of numeracy in the school with the aim of establishing a comprehensive and co-ordinated numeracy programme
- participating in the planning, implementation and evaluation of the whole school numeracy strategy
- putting in place structures to review, monitor and evaluate the numeracy development plan on an annual basis
- assessing the performance of students and using data from these assessments to establish the existing levels of achievement
- creating a culture of continuous improvement and shared goals
- evaluating teaching practices with regard to numeracy and identifying areas for improvement
- evaluating the efficacy of assessment and evaluation measures in the school and making adjustments as necessary
- determining the role of the numeracy co-ordinator
- providing finance for material resources and ensuring efficient use of available resources
- providing opportunities for effective communication between the Literacy and Numeracy Coordinator, SEN co-ordinator, the Senior Management Team and subject departments so that literacy, numeracy and special educational needs is integrated
- identifying and making provision for the training needs of staff in the form of relevant and focussed continuing professional development
- liaising with parents and external agencies in the provision of numeracy supports for students

## **Numeracy Coordinator**

The numeracy co-ordinator is responsible for:

- leading the planning, implementation and evaluation of the whole school numeracy strategy
- chairing regular meetings of the numeracy committee
- assessing the performance of students and using data from these assessments to establish the existing levels of achievement and set targets
- setting challenging but realistic goals for improvement in numeracy targets focussed on the progress of every student
- supporting and maintaining the implementation of strategies through subject departments
- planning, running and reviewing whole school numeracy interventions such as word millionaire and paired reading
- liaising with senior management, numeracy co-ordinator, SEN coordinator and subject departments
- identifying, sourcing and alerting staff of appropriate resources
- identifying CPD needs and alerting staff to CPD opportunities SEN Co-ordinator

#### **SEN Coordinator**

The SEN Co-ordinator is responsible for:

- organising the additional teaching supports to students with low achievement in the area of numeracy
- gathering data relevant to numeracy NGRT, CAT5, education passport, psychological reports, teacher observation and identifying students in need of high levels of literacy support
- liaising with the numeracy co-ordinator with regard to the individual needs of SEN students on an ongoing basis
- creating, monitoring and reviewing IEP's which include clear numeracy targets in consultation with relevant stakeholders
- monitoring and reviewing numeracy supports for SEN students

## **Subject Teachers**

All subject teachers are responsible for:

- using agreed common approach and strategies in identified areas for numeracy development (see Appendix 1)
- contributing to the development and implementation of a whole school numeracy programme (see Appendix 2)
- contributing to the monitoring and evaluation of numeracy policy throughout the school



• participating in whole school numeracy initiatives

## **Students**

Students are asked to:

- participate fully and to the best of their ability in whole school numeracy initiatives
- follow the school's policy with regard to homework (see Appendix 2)
- make every reasonable effort to improve their numeracy levels by using the problem solving strategy (see Appendix 4)

#### **Parents**

Parents are asked to:

- promote numeracy at home and to be seen as problem solvers
- encourage child to take an interest in numeracy based activities
- engage in discussion with their child on homework and school affairs
- encourage child to take time with numerical homework, in particular trying and retrying problems
- participate in school activities to promote numeracy when invited to do so
- contact the school if they have any concerns about their child's numeracy levels

This policy was compiled in October 2021 and will be reviewed again in 2024.

This policy was adopted by the Board of Management on the 23rd October 2023.

Date of next review: May 2024



## **Appendix 1: List of Whole School Numeracy Interventions**

### **Print Rich Classrooms**

Create a print rich classroom by:

- having lots of visual cues/reminders on display
- having posters/definitions/keywords on display
- referring regularly to the visuals on display
- displaying student work inside and outside your classroom
- share the date, learning intentions, homework and keywords on the board when appropriate

## **Key words**

Acknowledge the importance of keywords by:

- pre teaching key words for each topic
- displaying keywords on wall and referring to them regularly
- ensuring a copy of the key words for all relevant topics is in subject department folder
- teaching students to recognise and wherever possible, to spell key words correctly

## **Hardcopies of Notes/Handouts**

- Ensure that all students can utilise classroom notes and handouts by:
- using typed notes (Recommended Font: Arial. Recommended Font Size: 14)
- using one 1½ line spacing
- using bullet points / headings
- keeping the amount of text used as short as possible
- making notes available electronically to students through their Microsoft Teams accounts

#### **Whiteboard Decals**

This year 23/24, all teachers were provided with signs for their board: Date, Keywords, Homework and Learning Intentions. The intention is that literacy, numeracy and differentiation strategies will be promoted in the classroom for the benefit and clarity of all students and lessons.

#### **Results Tracking**

Teachers are to encourage students to use the section of their dialann containing the Ratoath College Trend Graphs. These graphs allow students to take control of their learning and work to achieve their potential.



## **Appendix 2: Checklist on Standard of Homework**

All students must have a pencil, red biro, ruler, calculator, blue or black pen, colouring pencils, drawing equipment, mathematical set, eraser, topper and pencil case.

- Homework must be completed in the correct homework copy for the subject.
- Date the top of page for homework.
- Page number in book/Year of exam paper at the top of the homework.
- Use only blue or black pens for the main text.
- All questions are numbered.
- All questions should be answered in full sentences where required.
- Every sentence begins with a capital letter and ends with a full stop or question mark.
- Handwriting is clear and easy to understand.
- The meaning of each sentence is clear.
- Diagrams where required are drawn in pencil, presented neatly and properly labelled.
- The use of rulers, coloured biros and other requirements set down by the teacher are followed.



# Appendix 3: RC Trend Graph

	My Semester 1Result				% My Semester 3 Target					<b>%</b>	
Test results (%)	100 90 80 70 60 50 40 30										
	Semester 1 Result										



# **Appendix 4: Problem Solving Checklist**

# Problem Solving STEPS

