**Numeracy Policy:**

**School Name:** Edmund Rice Secondary School, Carrick-on-Suir.

**School Address:** Mount St. Nicholas, Carrick-on- Suir, Co. Tipperary.

**School Details:** ERSS Carrick-on-Suir is a Voluntary Roman Catholic Secondary School under the trusteeship and the patronage of the Edmund Rice Schools Trust. The School is grant aided by the Department of Education & Skills and is a single sex (boys) school.

**School Management:** The Board of Management of ERSS Carrick-on-Suir is a statutory Board appointed pursuant to the provisions of the Education Act 1998.

**Mission Statement:**

 Inspired by its founder, ERSS Carrick-on-Suir’s mission is to “*To provide a caring Christian community which celebrates effort and talent in an environment of hope and happiness"* , with a vision to *“Learn together, succeed together in a respectful environment.”*

**Ethos**:

As an Edmund Rice School ERSS Carrick-on-Suir seeks to promote the five key elements of an Edmund Rice School as espoused by the ERST Charter:

● Nurturing faith, Christian spirituality and Gospel-based values

● Promoting partnership in the school community

● Excelling in teaching and learning

● Creating a caring school community

● Inspiring transformational leadership

Please Note:

Personal data collected about prospective students/students and their parents/guardians will be retained and used strictly in accordance with the provisions of GDPR legislation as introduced 25th. May 2018. Further details on data protection are set out in the school’s Data Protection Policy.

**Aim**

The aim of the Numeracy Policy is to provide for and support an environment that fosters awareness and appreciation of numeracy and an eagerness to engage with it in both abstract and contextual situations.

**Rationale**

When launching the national literacy and numeracy Strategy, Literacy and Numeracy for Learning and Life 2011-2020, the Minister for Education and Skills stated “Without the skills of literacy and numeracy, a young person or adult is often denied full participation in society.... I am convinced that ensuring all our young people acquire good literacy and numeracy skills is one of the greatest contributions that we can make towards achieving equality and social justice in our country”. At ERSS Carrick-on-Suir we aim to ensure that we maintain a strong focus on literacy and numeracy skills, within a broad and balanced curriculum.

**Definition of Numeracy**

Numeracy is not limited to the ability to use numbers to add, subtract, multiply and divide. Numeracy is the capacity, confidence and disposition to use mathematics to meet the demands of learning, school, home, work, community and civic life. This perspective on numeracy emphasises the key role of applications in the learning of mathematics, and illustrates the way that mathematics contributes to the study of other disciplines.

**Key Players**

In ERSS Carrick-on-Suir five main partners are involved in the enhancement of numeracy within the school:

• Management

• Non-maths teachers

• Maths Teachers

• SEN Support team

• Students and Parents. Their roles and responsibilities are detailed below.

**Role of Management**

Management in ERSS Carrick-on-Suir has ultimate responsibility for the implementation of all school policies. As an integral driver of numeracy in the school, management aims to:

• Facilitate CPD for staff within the limitations of timetabling and budgets. The training of key staff members to deliver internal in-service training to all staff members will be prioritised.

• Set aside financial resources to support numeracy initiatives, e.g. In-service training for staff, funding for Maths Week etc.

• Support Numeracy within timetabling where practicable.

• Reiterate the commitment of the school to numeracy at each available opportunity: Staff Meetings, Parent Council meetings, Parent Information evenings, Open Night and other student meetings. Use the school Newsletter and other media, such as the school website, to support Numeracy initiatives in ERSS Carrick-on-Suir.

• Request that the Board of Management ratifies the Numeracy Policy and subsequent School Self-Evaluation (SSE) Report and Plan, and to keep the Board informed of the progress of numeracy initiatives under the Teaching & Learning item on the agenda.

• Support links with outside agencies which will underpin the numeracy policy, e.g. College and ‘Association’ Quizzes, Engineering Events with STEPS, TYPE (TY Physics Experience), Junior Achievement Awards, STEM etc.

• Support a diverse range of methodologies which promote numeracy at all levels and abilities within the school.

• Support student wellbeing by promoting maths as a means of connecting students to their school, their friends, community and the wider world.

**Role of Non-Maths Teachers**

(Refer to APPENDIX A for further ideas on how to integrate numeracy into a range of subjects.) Non-maths teachers play an important role in integrating numeracy into their lessons, raising awareness of the widespread presence and application of numeric concepts in our everyday lives. The students’ wellbeing is founded on a confidence in their ability to process numerical realities. The responsibilities of non-maths teachers include the following:

• Be familiar with the definition of numeracy and its relevancy in their subject

• Include reference in subject plans regarding commitment to numeracy

• Generate a bank of resources and share them within the department

• Have a print rich environment in their classroom supporting numeracy

• Avail of CPD where possible and disseminate good practice within the department

• Expand the focus of lessons to emphasise the numeric element when appropriate

• Incorporate a numeracy question in tests where appropriate.

• Support students helping to build their resilience.

Table 1 below summarises some suggested approaches. Further suggestions are provided in APPENDIX A.

|  |  |
| --- | --- |
| Subject | Numeracy Strategy |
| Gaeilge & Modern Foreign Languages | Numbers translated, calendar, clock, shopping, money, costing for a trip/holiday/event. Estimating dimensions of landmarks etc |
| English | Calendar, location of quotations with page number and line, timed assignments using online clock, estimating, language of information, searching for evidence, statistics etc. |
| Geography | Maps, grid references, weather data charts, population pyramids, field study data displayed in numbers and chart format, trade games etc. |
| History | Date line, timeline of key events, estimating, evidence, critiquing data, statistical analysis etc. |
| Religion | Date line, timeline of key events, estimating, analysing data and statistical concepts, CSO figures, Calendar of religious festivals/dates |
| Physical Education | Score boards, points for games, diagrams for strategies, bar charts of fitness levels, timing, weights, etc. |
| Art | Painting by numbers, date line for painting periods, estimating, portioning, drawing to scale, segment sketching |
| Science | Periodic table, measurements, estimating, graduating, weighing, calculating, atomic structures etc. |
| Business | Profit and loss accounts, balance sheets, estimating, predictions, projections, surplus etc. |
| Technologies | Measurement, estimating, furnace heat, flame, tension of materials, melting points, joints, drawing to scale etc. |

**Role of Maths teachers**

Maths teachers play a pivotal role in raising awareness of the widespread presence and application of numeric concepts in our everyday lives. It is equally important that the maths teachers assume a guidance role with regard to non-maths teachers. This involves supporting them in integrating numeracy into their subjects. The Mathematics Department recognises its role in promoting and advocating a positive approach to the CBS numeracy policy through its Department Subject Plan.

In addition, the Maths Department further promotes a culture of numeracy by:

(a) Being aware of mathematical techniques/processes/skills which overlap in other subject areas and by supporting non–maths teachers in their objective of promoting numeracy in their specific subject area.

 (b) Availing of and providing opportunities for CPD within the Maths Department and all teaching staff.

(c) Standardising methodologies and assessment where appropriate and using this as a basis upon which student attainment can be analysed and methodologies can be adjusted to reflect agreed necessary changes.

(d) Focusing on the application of mathematical concepts, understanding mathematical terms, application of a variety of methods in problem solving, collecting, handling, interpreting and presenting data and carrying out procedures accurately.

(e) Being aware of the approaches to numeracy being adopted by non–maths teachers and to adopt and implement such approaches into maths classes.

(f) Promoting the value of achievement at both Higher and Ordinary Level in state examinations.

 (g) Promoting numeracy through many co-curricular activities, e.g. Maths Week, Visual Displays, Statistics Noticeboard, National Quizzes, etc.

(h) Informing non-maths teachers of the schedule of topics being taught in first year. (i) Introducing one calculator model school-wide (for all subjects)

(j) Advising non-maths teachers on simple effective strategies to increase the emphasis on numeracy in their lessons.

 (k) Adopting consistency of approach in several key areas (more can be added): factorising, getting %, adding fractions, increasing/decreasing by 20%, slope calculation, simultaneous equations, elements of a graph, greater than/less than………

(l) Running competency test in Aug/Sept of first year. Identify problem areas and strategies for them.

(m)Inculcating a culture of estimation, calculation and checking.

(n) Encouraging mental arithmetic in Calculator-free zone

(o) Using a keyword section of the board for Literacy and Numeracy

(p) Deploying mainstream maths teachers in the SEN Department

(q) Having a print rich environment in classrooms which displays both student and commercial numerical resources

**Role of the SEN team**

 The SENT plays an important role in supporting students who find numerical concepts challenging and demotivating. To overcome these difficulties, the SENT aims to:

• ensure that every student leaving school has an appreciation for, and a working understanding of, numeracy.

• arrange for the administration, correction and analysis of results of standardised testing in Literacy and Numeracy in September in First Year.

• analyse the results of standardised test results/transfer data/psychological reports etc., and to identify students who need support in developing their numeracy skills.

• prioritise students who are performing at or below the 10th percentile on standardised tests in mathematics.

• place significant importance on the development of numeracy skills when drafting these students’ Student Support Plans (SSPs), and will set SMART targets for these students in relation to improving numeracy skills.

• share this information in a collaborative manner with subject teachers so that each teacher will be in an informed position to encourage and help students to develop their numeracy skills across all their subjects.

**Role of Students and Parents**

Children with good numeracy skills are more likely to:

• Stay in education longer

• Be in work as adults

• Earn more throughout their lives.

Even if parents find maths and numeracy difficult, they can support their children using the following guidelines:

• Do not say things like ‘I can’t do maths’ or ‘I hated maths at school’… your son might start to think like that themselves…

• Do talk about the maths in everyday life, and ask your son how they work out problems or questions.

• Do praise your son for effort, rather than talent.

• Do encourage your son to do puzzles and to play logical games.

• Do encourage your son to practice practical maths like shopping, cooking, map reading, communicating and presenting information, looking for and recognising patterns, using estimating and deciding if an estimate is “reasonable”, calculating.....

In turn, each student has a responsibility to enhance his own numeracy and can follow the tips above provided for parents. In addition, it is important that the student partakes fully in classwork, homework, fieldwork and project work. Teamwork is educational and rewarding and it is important that each student partakes to the best of his ability.

There is a far reaching national strategy to support and enhance numeracy levels for Irish students. The student can maximise the positive impact of this strategy by adopting a positive attitude and willingness to learn.

**Approval:**

This policy has been distributed to staff, parents and students for their approval.

Amendments have been made after consultation with these stakeholders.

This policy has been ratified by the Board of Management of ERSS Carrick-on-Suir;

Chairperson: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

This policy will be due for review on:

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Appendix A**

Useful websites

[www.jct.ie](http://www.jct.ie)

[www.curriculumonline.ie](http://www.curriculumonline.ie)

http://pdst.ie/node/632 This is the MAIN source for all things L&N related

http://schoolself-evaluation.ie/post-primary/

www.juniorcycle.ie

<http://nzmaths.co.nz/>

 <http://learning.wales.gov.uk/resources/numeracy-sample-materials/?lang=en>

 http://www.schools.nsw.edu.au/learning/7- 12assessments/naplan/teachstrategies/yr2011/index.php?id=numeracy/nn\_numb/nn\_num b\_s3e\_11

 Fractions http://www.schools.nsw.edu.au/learning/7- 12assessments/naplan/teachstrategies/yr2011/index.php?id=numeracy/nn\_numb/nn\_num b\_s3d\_11

Large numbers http://www.schools.nsw.edu.au/learning/7- 12assessments/naplan/teachstrategies/yr2011/index.php?id=numeracy/nn\_numb/nn\_num b\_s3a\_11

http://nzmaths.co.nz/resource/amazing-mazes?parent\_node=