

Numeracy Policy

Date: 2018-2019

Review: September 2019



Rationale

The i-College is committed to raising the standards of numeracy for all its students, so that they develop the ability to use numeracy skills effectively in all areas of the curriculum, and the skills necessary to cope confidently with the demands of continued education, employment and adult life.

All teachers have the responsibility for promoting the development of numeracy. Numeracy is a proficiency which is developed mainly in mathematics but also in other subjects. It is more than the ability to do basic arithmetic. It involves developing confidence and competence with numbers and measures. It requires understanding of the number system, a repertoire of mathematical techniques and the motivation and inclination to solve problems in a range of contexts. With an increased emphasis upon numeracy for all young people, teachers will need to consolidate numeracy skills throughout schooling.

Aims

- To develop, maintain and improve standards in numeracy across i-College
- To ensure consistency of practice including methods, vocabulary, notation, etc
- To indicate areas of collaboration between subjects
- To assist the transfer of students' knowledge, skills and understanding between subjects

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- To enable each student to develop within his or her capabilities, the numerical skills and understanding that may be needed for the study of other subjects, for adult life, including both employment and recreation and, where appropriate, for further study and training.

Responsibilities

- AHT (raising standards) will develop marking and assessment policies and other cross-curricular policies
- HOD (Maths). This will involve coordinating the implementation of effective strategies and the sharing of good practice.
- All teachers and TAs across the service will take every opportunity to develop and provide students with the knowledge, skills and understanding of numeracy and to encourage students to develop their mental, written and calculator skills. They should be aware that the students come from a range of backgrounds and use a variety of written methods. No student should be made to change their written method without prior discussion with a maths specialist.

All subjects teachers

Date in different formats

Time in different formats

Telling the time using analogue clock (eg to work out how much time a task is to take)

An appreciation of number weighting and time implication in exams

Number of months and order

Number of weeks in year, days in a month

An understanding of the words average and range as applied to life situations (eg exam passes)

Science

Percentages, using a calculator/checking by mental maths (eg. $10\% = \frac{1}{10}$, is my answer sensible)

Units of measure

Data, gathering, presenting and understanding data

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Graphs, an appreciation of scales, interpreting graphs
Standard Form

Cooking:

Accurate weighing and an appreciation of units of weights (eg how heavy is a pack of butter, how many apples in 500g?)

Applied ratios and proportion (recipes, halving and doubling, finding 150% of a quantity)

Problem solving (eg, you have 500g of meat, you only need 200g and the scales are broken, how could you estimate 200g?)

Time through planning

IT

Excel, formulas, charts, formatting of cells (for numerical values)

A4 / A5 paper sizes

Ascending/descending numbers

Art

Measuring, an appreciation of units of length

Applied ratio and proportion (mixing paint, paper sizes)

PE

Measuring, an appreciation of distance

Prep for Working Life

Basic Arithmetic (budgeting from incomes, deducting expenses)

Percentages, using a calculator/checking by mental arithmetic (eg. 10% = ?, is my answer sensible)

Problem solving, (calculating units of alcohol, calculating income after tax and expenses)

Gathering data (tally scores in quizzes)

Interpreting data, graphs and charts

- Parents / carers should encourage their children to develop their numeracy skills by engaging their children in appropriate conversation when shopping or at home. (Budgeting, sales, an idea of total costs, change expected)

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- Students should take ever-increasing responsibility for recognising their own numeracy needs, by engaging in their lessons and by making improvements.

Responsibilities of the Maths Teachers:

"Our vision:

We offer excellent alternative educational provision in which each of our learners:

- *Achieves their highest possible educational outcomes.*
- *Develops a strong positive attitude.*
- *Makes the best possible positive contributions to the launch pad for their chosen future."*
Taken from the iCollege governors vision statement

Our commitment to working out the vision of the governors (above):

Department Mission Statement:

We aim to empower, inspire and incentivise young people in their

- an interesting and engaging curriculum that teaches and embeds knowledge and skills;
- schemes of work that are developed to promote progression and have assessments that provide the opportunity for students to show what they have learned;
- lessons that are tailored to students' interests, needs and levels of ability; that are creative and innovative; and that challenge in whatever way the student needs;
- functional skills examinations that allow students to practise focusing in exam conditions and which provide achievable success at different stages along the journey;
- professional, friendly and inspiring staff who are excellent at creating warm and welcoming learning environments and building positive relationships with students;

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- celebration of students' work and achievements verbally, in books and on the walls in displays;
- opportunities for student to take ownership of their learning by making choices in lessons, being encouraged to use whatever medium they like and by being flexible in approaches to resources, lesson delivery and recording of work.

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