

Monaghan Collegiate School Numeracy and Literacy Policy

Rationale

In July, 2011, the Minister for Education and Skills, Rúairí Quinn, launched the National Strategy to improve literacy and numeracy among children and young people, *Literacy* and *Numeracy for Learning and Life 2011-2020*.

Monaghan Collegiate School is committed to raising the standards of literacy and numeracy of its students in order that each student will master these crucial skills to the best of her ability. The focus of this policy is to sustain and build on the high levels of teaching and learning outlined in the very positive Whole School Evaluation report, received in February, 2011, by providing a formal framework for the implementation of the measures for the development of literacy and numeracy skills as presented in the Department of Education and Skills' Strategy. Continual and consistent efforts to improve literacy and numeracy standards, which may include providing extra available resources to those pupils with additional needs, will further enhance the opportunity for our students to participate fully in education and in all aspects of society and culture including local, national and global communities with the aim of making a real, measurable and positive difference to their lives and will assist them in achieving their full potential.

Aims

The aims of this policy document are to:

- Support students' learning in all subjects by helping teachers to be clear about the ways in which their work with students contributes to the development of students' communication and numeracy skills;
- develop a shared understanding between all staff of the role of language and mathematics in students' learning and how work in different subjects can contribute to and benefit from the development of students' ability to communicate and complete mathematical tasks effectively;
- be conscious of the fact that good skills in language and numeracy skills are central
- to students' sense of identity, belonging and growth;
- elevate students' own expectations of achievement, thus raising standards;
- improve students' level of confidence and self-expression;
- promote knowledge and understanding of the students' standards of achievement and assessment in speaking and listening, writing and reading and mathematical computation;
- identify areas of strength and weakness and use this information to inform planning.

Learning Support

The role of the learning-support teacher is to provide additional teaching support to students with low achievement in the areas of literacy and numeracy.

- The learning-support teacher prioritises students who are performing at or below the 10th percentile on standardised tests of literacy or mathematics.
- The resource teacher may also provide additional classes in literacy or mathematics to students with special educational needs.
- The learning-support teacher/resource teacher may deliver this additional teaching support in a number of ways, including co-operative teaching with colleagues, small group or one to one support.
- The learning-support teacher may be responsible for the screening of in-take information and transfer data from primary schools (and previous secondary schools, where applicable). The data that will come from the primary school will comprise of results of standardized testing in second, fourth and sixth classes and a copy of the final report card from sixth class.
- The learning-support teacher will 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 in all their subjects to develop their literacy and numeracy skills.

Literacy

In September each year the learning-support teacher administers a Reading Test to all first-year students. This along with the results of the CAT3 (entrance test), transfer data and psychological reports etc. is used to select students for learning-support. The learning-support teacher / resource teacher will target the literacy support, in as far as is possible, to suit the needs of the particular student or group of students. The learning-support teacher will place significant importance on the development of Literacy and Numeracy skills when drafting the students' Individual Educational Plans (IEPs).

Literacy support may include the following:

- Structured reading programmes;
- targeted spelling programmes;
- revision of phonics;
- revision of spelling rules;
- oral language skills;
- comprehension skills;
- punctuation skills;
- reading for meaning;
- prediction skills;
- dictionary skills;
- mind mapping;
- mnemonics;
- skimming, scanning;
- memory games;
- puzzles, word-searches and scrabble.

In addition, the resource teacher oversees a paired reading scheme involving transition year and selected first and second year students. All learning support and resource students are encouraged to select from the large supply of books (including Barrington Stokes novels) available in the resource and learning-support rooms and the school library.

Numeracy

The CAT3 (entrance exam) is used to help select students for additional numeracy support.

As a general rule, additional teaching support in the area of numeracy is provided by the learning- support teacher through co-operative teaching in the classroom. On occasions, small group or individual support may be provided in the area of numeracy by the learning support / resource teacher.

Numeracy support may include the following:

- Revision of fractions and decimals;
- working out percentages;
- revision of tables;
- telling the time;
- using a rough work sheet;
- using the calculator;
- sequencing skills;
- rules for integers;
- algebra basics;
- puzzles and jigsaws.

Refer to:

LITERACY AND NUMERACY FOR LEARNING AND LIFE: The National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020

https://www.education.ie/en/publications/policy-reports/lit_num_strategy_full.pdf

Literacy

Literacy context

In the context of this document literacy is the term used to embrace all forms of language learning. It includes the capacity to read, understand and critically appreciate various forms of communication including spoken language, traditional writing and printed text, broadcast media, and digital media.

The development of literacy skills is vital to support students' learning and raise standards across the curriculum because:

- Students' need vocabulary, expression and organisational control to cope with the cognitive demands of subjects;
- responding to higher order questions encourages the development of thinking skills and enquiry;
- language helps us to reflect, revise and evaluate the things we do, and on the things, others have said, written or done;
- improving literacy and learning can have an impact on pupils' self-esteem, motivation and behaviour;
- high standards of literacy allow pupils to learn independently and the ability to communicate is empowering.

Talking and Listening

Talk is our main means of communication in everyday life and talking and listening are fundamental to the development of understanding. The teacher explains, questions, describes, organises and evaluates in the classroom and this may often be done orally.

The teaching staff of Monaghan Collegiate School aims to foster skills of:

- Listening with understanding and respond sensitively and appropriately;
- using speech appropriately and adjusting ways of speaking clearly and effectively, according to the audience;
- clarifying and expressing their ideas and explaining their thinking, using varied and specialized vocabulary according to context and purpose;
- active listening in order to help improve the students' skills of concentration and sensitivity to the speaker's viewpoint;
- increasing confidence and competence in speaking and listening so that they are able to adapt their speech to a widening range of circumstances including paired and group discussions and speaking to a larger audience and speak for a range of purposes e.g. to narrate, to analyse, to explain, to reflect and evaluate.

These skills may be gained:

- In pairs with a working partner;
- in small groups with opportunities to take on the roles of chair or scribe;
- with the teacher or another adult;
- in whole class discussions;

in presentations to a wider audience.

Reading

The teaching staff in Monaghan Collegiate School aims to foster in its students:

- The ability to make judgments about and respond critically to what is significant in a text;
- an enjoyment of reading and motivation in reluctant readers;
- the motivation to spell correctly;
- increasing confidence and competence in reading so that they are able to read fluently, accurately and with understanding;
- the skills necessary to become independent and critical readers and make informed and appropriate choices.

Writing

Monaghan Collegiate School aims to foster the skills to:

- Write in order to help sustain and order thought and to record;
- write logs and journals in order to clarify thoughts and develop new understanding;
- know when and how to plan, draft, discuss, redraft, reflect and proof-read their writing analyse and explore;
- learn the conventions of different forms of writing in different subject areas, e.g. by scaffolding pupils' writing and providing models of good writing;
- by providing frameworks for writing consisting of starters, connectives and sentence modifiers and provide clear models for communication;
- write coherently about a wide range of topics, issues, ideas and incidents, organising text in ways which help the reader;
- craft their writing, showing an improved control of grammatical structure and of a differentiated vocabulary;
- write at appropriate length, sometimes briefly;
- write collaboratively with other students;
- develop ideas and communicate meaning to a reader using wide-ranging and technical vocabulary and an effective style, organising and structuring sentences grammatically and whole texts coherently;
- have a high standard of presentation for their finished work clearly using accurate punctuation, correct spelling and legible handwriting;
- appreciate the differences between standard English and non-standard forms of the language;
- recognize appropriate form for their written responses so that they know when to respond in note form and when more formal constructions are required;
- apply word processing conventions and understand the principles of authoring multi-media text;
- understand the criteria for marking writing;
- present some writing for display or publication, showing varying degrees of ability.
- write in a widening variety of forms for different purposes e.g. to interpret, evaluate, explain,

Numeracy

Numeracy context

Numeracy is a proficiency which involves confidence and competence with numbers and measures. It is more than an ability to do basic arithmetic. Numeracy encompasses the ability to recognise situations where mathematical reasoning and skills can be applied to solve problems and meet the demands of day-to-day living in complex social settings.

Students shall:

- Have a sense of the size of a number and where it fits into the number system;
- recall mathematical facts confidently;
- calculate accurately and efficiently, both mentally and with pencil and paper, drawing on a range of calculation strategies;
- use proportional reasoning to simplify and solve problems;
- use calculators and other ICT resources appropriately and effectively to solve mathematical problems, and select from the display the number of figures appropriate to the context of a calculation;
- use simple formulae and substitute numbers in them;
- measure and estimate measurements, choosing suitable units, and reading numbers correctly from a range of meters, dials and scales;
- calculate simple perimeters, areas and volumes, recognising the degree of accuracy that can be achieved;
- understand and use measures of time and speed, and rates such as € per hour or kilometres per litre;
- draw plane figures to given specifications and appreciate the concept of scale in geometrical drawings and maps;
- understand the difference between the mean, median and mode and the purpose for which each is used;
- collect data, discrete and continuous, and draw, interpret and predict from graphs, diagrams, charts and tables;
- have some understanding of the measurement of probability and risk;
- explain methods and justify reasoning and conclusions, using correct mathematical terms;
- judge the reasonableness of solutions and check them when necessary;
- give results to a degree of accuracy appropriate to the context;
- be aware of materials, shape and space;
- be aware of pattern and difference, classifying, matching, comparing and ordering;
- recognise that she can effectively describe and explain her work through a balance of prose, diagrams, tables, graphs, charts, symbols and formulae;
- be able to make the transition from concrete, tactile, kinaesthetic abilities to auditory and analytical skills.

The Maths teacher may:

- Include explicit literacy and numeracy strategies in the Maths Department Plan;
- incorporate a strong emphasis of literacy and numeracy skills into maths lessons;
- be aware of the mathematical techniques / process skills which overlap from other subject areas and provide assistance and advice to other departments, so that a correct and consistent approach is used in all subjects;
- help students to develop a deeper conceptual understanding in mathematics and the ability to apply mathematical concepts in a range of real-life every-day scenarios;
- assist students in understanding and communicating information presented in mathematical terms;
- help students develop their ability to explore, hypothesise and reason logically and to use a variety of methods to solve problems;
- ensure the development of young people's skills in carrying out procedures flexibly and accurately;
- provide opportunities for students to handle data in a range of contexts and to make and monitor decisions about the collection and representation of data;
- infuse language, thought and meaning into mathematics teaching;
- use open-ended challenging tasks that motivate young people to engage with problem-solving in a meaningful way;
- provide information to other subject teachers on appropriate expectations of students and difficulties likely to be experienced in various age and ability groups;
- liaise with other teachers, attempt to ensure that students have appropriate numeracy skills by the time they are needed for work in other subject areas;
- seek opportunities to use topics from other subjects in mathematics lessons;
- be familiar with the various strategies, approaches, methodologies and interventions that can be used to teach numeracy as a discrete area and across the curriculum;
- continue to implement Project Maths;
- provide opportunities for students to acquire confidence and fluency in using mathematical language when deciding the mathematics and equipment to use, planning and organising work, conjecturing or hypothesising, generalising, explaining methods and
- provide opportunities for students to apply mathematical processes at a level commensurate with the mathematical content covered;

justifying their use and presenting results and conclusions with reasons;

- provide opportunities for students to work collaboratively so that through discussion they can develop their mathematical language and organise their thinking for selecting mathematics and resources to judge their suitability for a range of applications, recording their work, discussing and evaluating their choices;
- plan regular opportunities to use mental computation to improve estimation skills, consolidate quick recall of table facts and prolong the students' memory of computational skills and firm up their understanding in using these;
- provide access to a broad and balanced curriculum for pupils with special educational needs, ensuring that students experience work in all attainment targets.

Teachers of subjects other than mathematics may:

- Identify what successful numeracy strategies are already embedded in current classroom practice, document what works well and plan incremental reconstruction of other strategies;
- incorporate a strong emphasis on literacy and numeracy in lesson plans and the inclusion of explicit literacy and numeracy strategies into subject department plan;
- ensure that they are familiar with correct mathematical language, notation, conventions and techniques, relating to their own subject, and encourage students to use these correctly;
- identify and plan for the numeracy demands/opportunities within the subject (by topic/by chapter) and identify the connections with numeracy that are essential and meaningful;
- identify the numerical knowledge and skills required and be aware of appropriate expectations of students and difficulties that might be experienced with numeracy skills;
- provide information for mathematics teachers on the stage at which specific numeracy skills will be required for particular groups;
- provide resources for mathematics teachers to enable them to use examples of applications of numeracy relating to other subjects in mathematics lessons;
- become familiar with the various strategies, approaches, methodologies and interventions that can be used to teach numeracy across the curriculum;
- encourage a balanced practice between mental computation and the use of calculators;

Management of Numeracy and Literacy

The role of the Senior Management Team may involve:

- engaging the whole staff in conducting a review of the literacy and numeracy provision currently available in the school and the range of interventions already being employed for the improvement of literacy and numeracy standards in the school with the aim to establishing a comprehensive and coordinated literacy programme (e.g. school policies on retention, attendance, spelling, homework, presentation of work);
- identifying improvement in literacy and numeracy standards as a priority for the school and establish and maintain a policy on improving literacy and numeracy standards;
- setting up and support the appropriate structures such as a literacy committee, possibly comprising of a Literacy Co-ordinator, two English teachers, two mathematics teachers, Management Representative, Learning Support/Resource teacher and others, responsible for developing and implementing a plan for a whole school approach to literacy development;
- evaluating current teaching practices with regard to literacy and numeracy and identify areas for improvement;
- putting in place structures to review, monitor and evaluate the literacy and numeracy development plan on an annual basis;

- evaluating the efficacy of assessment and evaluation measures in the school and make adjustments as necessary;
- assessing the performance of students at the end of second year (beginning 2016) and use data from these assessments to establish the existing levels of achievement;
- using assessment data to inform national educational policy for literacy and
 numeracy;
- using assessment information as a source of evidence for the school community to monitor progress and interpretattainment levels with a view to informing planning and adjusting actions as necessary;
- setting challenging but realistic goals for improvement in literacy and numeracy targets, focussed on the progress of every student;
- participating in the planning, implementation and evaluation of the whole school literacy and numeracy strategy;
- determining the role of the Numeracy Co-ordinator;
- specifying expectation of the active role to be played by all teachers in the consolidating the critical core skills of literacy and numeracy;
- ensuring the provision of co-ordinated support for literacy and numeracy across the curriculum;
- regularly reviewing the literacy and numeracy policy and support and maintain the implementation of strategies and provision of resources to improve the standards in literacy and numeracy;
- supporting newly qualified teachers in addressing literacy and numeracy;
- creating a culture of continuous improvement and shared goals;
- supporting the development, implementation and integration across the curriculum of a whole school literacy and numeracy policy;
- providing resources for English and mathematics teachers and other teachers in the school;
- providing finance for material resources and ensure efficient use of available resources;
- providing opportunities for effective communication between the Literacy and Numeracy Co- ordinator, the Senior Management Team, the English, Mathematics and ICT Departments and other departments so that numeracy, literacy, special educational needs and ICT provision is integrated;
- identifying and make provision for the training needs of staff in the form of relevant and focussed continuing professional development, encouraging principals, deputy principals and teaching staff to continually reflect, improve and upskill throughout their professional careers;
- supporting and encouraging staff involved in the project to maintain sustained effort and focus;
- monitoring the effect of the implementation of Project Maths on mathematics standards using a range of indicators;
- providing parents with copies of the NCCA explanatory leaflets when issuing written reports to parents about standardised score tests;
- continuing with attendance monitoring and tracking and informing parents of absences, ensuring that the EWB (Education Welfare Board) is informed of absences as necessary and acknowledging and rewarding excellent attendance.

Evaluation

When responding to students' work the staff may:

- make comments which are positive and supportive
- target specific areas for improvement (a selective and focused identification of errors);
- provide guidance on how to achieve the short-term targets set. For example, whilst "improve your spelling" is unhelpful and vague, the identification of a particular spelling error, e.g. doubling of letters before adding –ing is specific and presents the student with a target which can be addressed;
- create opportunities for students to reflect on the quality of their own work and for peer assessment.

The Strategy will be monitored and reviewed through:

- the school and departmental development plans;
- lesson observation;
- sampling pupils' work;
- discussion with staff, parents and governors;
- reviewing planning;
- analysing assessment data;
- discussion of students

Information provided from the monitoring and review process will inform decision making about improvements and further developments.