

Numeracy Plan 2013- 2015

St. Michael's College

Mission Statement

We in St Michael's College acknowledge that it is through our relationships with others that we grow to our full potential. Therefore, we aspire to create an educational environment where pupils come to learn and to understand for themselves. In this environment our students will learn to take responsibility for themselves and others, and so can become independent adults.

The board of management (BOM), the management of the school (Principal and Deputy Principal), teachers and all other staff acknowledge that we have a responsibility to promote and raise numeracy levels in our students. This is explicit in national policy re: National Strategy to improve *Literacy and Numeracy among Children and Young People* (LNLL 2011), 2011-2020, and *Circular 0025/2012* (DES 2012) by the DES.

All staff recognise and accept that they are numeracy teachers and are fully committed to raising numeracy standards within their own subject areas or when an opportunity arises. All students of St. Michael's College are encouraged to actively engage in improving their own numeracy.

Rationale

Numeracy “encompasses the ability to use mathematical understanding and skills to solve problems and meet the demands of day-to-day living in complex social settings” (*Literacy and Numeracy Learning for Life*, DES p. 8). Improving numeracy and learning can have an impact on students' self-esteem, on motivation and behaviour leading to a more clear appreciation and value for spatial awareness and understanding to problem solving. In fact the eight principles for the *Towards a Framework New Junior Certificate* are all encompassing of Numeracy – quality; wellbeing; creativity & innovation; choice & flexibility; engagement, relevance & enjoyment; inclusive education; continuity and lifelong learning. Furthermore, eight of the twenty-four Statements of Learning in the *Towards a Framework for Junior Cycle* (DES 2012 p. 15) specifically highlight key numeracy skills. With this, there is a clear understanding by students that numeracy is more than just Maths. It

encompasses elements of every school subject and extra-curricular activities and is a key 'life skill' (National Induction Programme for Teachers 2013).

Aims: 2013-2015

Initiatives

- Build up the library as a resource and encourage students and teachers to use the library regularly (This is also a key basis of St. Michael's College's Literacy policy).
- Focus on students who are displaying numeracy difficulties. This focus will not negate the school's responsibility to ensure all students attain the highest levels of numeracy. This is a key objective with the delivery of the New Project Maths national curriculum for Junior and Leaving Certificate students.
- Introduce specific learning methodologies focusing on specific skills that highlight the relevance of numeracy to each subject. All subject departments will produce a Numeracy plan within their subject plan. (**See Appendix A & B**).
- Alterations of class white boards to facilitate a greater focus on numeracy in all classes. (Partitioning of white boards with left hand column for one-quarter of board used for this purpose). This best practice has been in place in the school since August 2013 as part of the literacy strategy.
- Integrate Numeracy initiatives into new curricula such as course work and short courses as proposed in the New Junior Certificate.
- Introduce standardised testing as envisaged in the new Junior Cycle programme from 2014 onwards.
- Provision for staff CPD as offered by Educational Centres and PDST

Special Educational Needs:

St. Michael's College has a team of ten teachers working within this area who strive to deliver the national curriculum and ensure inclusivity for all students. The Board commits to the enhancement of the present structures and fully complies with the legislative requirements as enshrined by EPSEN Act (2004).

Staff Liaise with the Special Needs Coordinator and the Learning Support Teachers and also access on line resources from the SESS (Special Education Supports Service) website. The College's library is also used as a resource to meet the needs of students having learning difficulties.

School Self Evaluation:

Six Staff committees are in place, since December 2013 looking at all areas of school policy – New Junior Certificate Framework, Ethos, Communications, ICT, Discipline/Behaviour, Literacy and Numeracy. These meetings are chaired by WSPD coordinator.

Focus/Target group:

The Numeracy Committee is working under the following assumption and context:

It was felt by the Committee members that students and society at large, often have a misunderstanding of what Numeracy is. This Committee welcomes the Department of Education and Skills initiative as it highlights the relevance that 'numbers' have for everybody thus the need to visualise this relevancy more within the school.

The Committee recognised that a some students within the school require greater attention and assistance and this is where priority of the school's first Numeracy policy, 2013 – 2015 will be focused.

Short-term plan (2013-2014)

- Encourage all subject departments and teachers to devise a Numeracy policy cognisant of their own subject requirements and specifications.
- Subject Departments to allocate budgets for the purchasing of posters and other necessary resources specific to their subjects promoting Numeracy.
- Committee to liaise with Maths Department or individual Maths teachers, if possible, for professional assistance.
- Subject departments to look at their streaming and differentiation policies to ensure that weaker and stronger students are fully included within numeracy strategy.
- Included in all subject planning there will be numeracy objectives and assessments therein.

Long term plan (2013 - 2015)

- Library visits to be regular and promoted across all subjects.
- Greater focus on pair and groups work.
- Numeracy to be visually within a designated areas of the school. (**See Appendix B**). The Chaplaincy notice board is a resource where the relevance of 'numbers' could be prominently promoted e.g. each day have the birthday of somebody famous. This visually enriches the numeracy impact for students and ensures relevancy on a day-to-day basis for all students.
- Designated area of the school should be established where students can display interesting and relevant articles which have a numeracy component. E.g headlines of newspapers displaying surveys and statistics instilling the importance that 'numbers' have in our lives. Maths Week – ensuring numeracy as a subject becomes relevant to students and thus the need to engage with subject.
- BT Young Scientist Competition – importance of data collection and analysis as drivers for evidence based practice.
- Cross-curricular approach to numeracy creating a unified and whole school perspective.

Appendix A **Numeracy subject specific**

- Accounting: Calculations & interpretation of data
- Art: Proportion, Perspective & Measurement
- Business: Accounts, Budgets & Documents
- Classics & History: Time Lines
- Construction: Measurement, Counting, Trigonometre & Calculation
- Geography: Scale, Statistics, Measurement, Graph interpretation & Population
- Languages: Numbers and Language inter-connected, Counting
- P.E: Counting, Estimation, Time
- Science & Physics: Differentiation

Appendix B **Teaching a Numerical Concept**

- Teaching language of numeracy e.g. key words, concepts and symbols associated with numeracy such %
- Re-inforce students' knowledge and experience of numeracy within own subject e.g. context very important.
- Use of visuals and charts within class room walls to stimulate debate, discussion and relevance for students.
- Peer tutoring, group work, project work within class room dynamic.