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**Numeracy Policy**

**and Action Plan**

**2015-16**

Numeracy is a proficiency, which involves confidence and competence with numbers and measures. It requires an understanding of the number system, a repertoire of computational skills and an inclination and ability to solve number problems in a variety of contexts. Numeracy also demands practical understanding of the ways in which information is gathered by counting and measuring, and is presented in graphs, diagrams, charts and tables.

*(National Framework for teaching Mathematics, 1999).*

**Broad definition of Numeracy**

There are many definitions of numeracy and mathematics both in respect of their sameness and their differences. All teachers should share responsibility for their pupils' development of numeracy. All, including mathematics teachers, must be aware of the demands their learning area makes on their pupils' numeracy. Those involved in teaching mathematics lay the groundwork, and other learning areas provide opportunities every day for pupils to build upon.

**Aims and Objectives**

Numeracy should be promoted throughout all areas of the curriculum in a consistent and efficient manner. Also it should be noted that learning, teaching and assessment of numeracy should be appropriate to pupils’ needs.

Numeracy includes:

* the ability to make sense of more than just number;
* developing mental strategies, as well as pencil and paper methods;
* a confidence and competence in using and applying mathematics, recognising that skills are transferable across different subject areas and in a variety of contexts;
* the ability to use the correct mathematical language.

**The Role of the Numeracy Co-ordinator**

The role of the co-ordinator is:

* Development of numeracy throughout the school;
* To play a leading role in the design and production of a whole school policy for numeracy;
* To carry out an audit of the numeracy requirements/provision in all areas of study;
* To help identify training needs of staff in relation to numeracy and ensure that these training needs are met;
* To liaise with all subject departments to ensure that numeracy is developed in a coherent and consistent manner throughout the school;
* To establish procedures to monitor and evaluate the numeracy provision for all pupils in the school;
* To establish procedures to monitor and review the implementation of the school’s numeracy policy;
* To ensure all staff are aware of their responsibility that the acquisition of basic skills is a whole school issue, and not subject based.

**Cross-Curricular Numeracy Links**

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| **In…** | **Learners will…** |
| **Art and design** | Apply number skills such as measurement, estimates, scale, proportion, pattern and shapes to develop, inform and resource their creative activities. |
| **Design and technology** | Use mathematical information and data, presented numerically and graphically, to research and develop their ideas. They use number to measure and calculate sizes, fits and materials. |
| **English** | Develop skills in the application of number through activities which include number rhymes, ordering events in time, gathering information in a variety of ways, including questionnaires; accessing, selecting, recording and presenting data in a variety of formats. |
| **Geography** | Apply number skills in the classroom and in fieldwork to measure, gather and analyse data. They use mathematical information to understand direction, distances and scale and to determine locations when using plans, maps and globes. |
| **History** | Develop their number skills through developing chronological awareness, using conventions relating to time, and making use of data, *e.g. census returns and statistics*. |
| **Information and communication technology** | Use mathematical information and data presented numerically and graphically in data-handling software. They use number to collect and enter data for interpretation in spreadsheets and simulations and present their findings as graphs and charts, checking accuracy before processing. |
| **Modern foreign languages** | Develop number skills through a range of activities in the target language. These can include number rhymes; ordering numbers; ordering events in time; using number in relevant contexts such as currency exchange; gathering information in a variety of ways, including questionnaires and recording and presenting results in a variety of formats. |
| **Personal and social education** | Select data from given information presented in a range of numerical and graphical ways. Gather information in a variety of ways, including simple questionnaires or databases to support understanding of PSE-related issues [and in KS3 access and select data from relevant information presented in a variety of ways and from different sources], [and in KS4 select from and interpret a variety of methods of presenting data, including pie charts, scatter graphs and line graphs] to support understanding of PSE-related issues. |
| **Physical education** | Develop their number skills by using mathematical information and data. They use the language of position (including co-ordinates and compass points) and movement, as well as data handling and measures in athletic and adventurous activities. They use scale in plans and maps. They measure and record performances, *e.g. time, distance and height*, and use the data to set targets and improve their performance. |
| **Religious education** | Develop skills in the application of number by using information such as ordering events in time, by measuring time through the calendars of various religions, by calculating percentages of tithing, and by considering the significance of number within religions. They interpret results/data and present findings from questionnaires, graphs and other forms of data in order to draw conclusions and ask further questions about issues relating to religion and the world. |
| **Science** | Work quantitatively to estimate and measure using non-standard and then standard measures, recording the latter with appropriate S.I. units. They use tables, charts and graphs to record and present information. With increasing maturity they draw lines of best fit on line graphs, use some quantitative definitions and perform scientific calculations. |

**Numeracy Action Plan**

| **Objectives** | **Actions** | **Who?** | **When?** | **Resources?** | **Impact** |
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| Establish a Lead Numeracy Team to establish links in each faculty and promote the use of numeracy. | Seek a volunteer from each faculty to meet once per term. |  |  | Time. | Each faculty has a Lead they can discuss numeracy issues with. Numeracy will be a ‘regular’ item on all faculty meeting agendas. |
| Get all staff to a high level of competence of numeracy. | Ask all staff to complete a staff numeracy audit.  Provide numeracy CPD support once per term.  Numeracy handbook/banner to be produced and displayed in all classrooms to ensure consistency across whole school. |  |  | Numeracy audits, printing costs.  Time, staff to lead CPD.  Handbook, banner, printing costs. | Staff are confident with teaching numeracy elements in lessons and can highlight areas in lesson plans. Numeracy is taught using consistent methods across the whole school. |
| Establish numeracy levels of students and provide intervention for areas and students as required. | All students to complete diagnostic tests of students to find numeracy age (like reading age).  Gap analyses filled in by all maths class teachers and sent to DGL.  Analysis of whole school results to assign students necessary intervention and support. |  |  | Diagnostic tests, printing costs, gap analyses, time. | All students are numerate in key areas. |
| Establish links with primary school. | Meet with maths/numeracy coordinator at primary school to share policies and resources. |  |  | Time. | Innumerate students are picked up early on in primary school, rather than waiting until secondary. |

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| --- | --- | --- | --- | --- | --- |
| Develop year 11 students’ financial literacy to prepare them for leaving school. | Register for ASDAN certification if required.  Acquire course materials for first teaching in January 2016.  Arrange space in timetable (if possible) for 1 or 2 hours per week. |  |  | Space in timetable, teaching hours, teaching resources. | Students will all leave school with an understanding of personal finance. |
| Numeracy tasks in tutor time. | Students will complete a numeracy related task once per week. |  |  | PPt slide/s (no printing), tutor time. | Students complete explicit numeracy tasks once per week to raise awareness and develop skills. |