

MERE BROW C OF E PRIMARY SCHOOL

A Policy for Computing



What is Computing?

Computing consists of three main areas; Digital Literacy, Computer Science and Information Technology. It may sometimes be referred to as ICT. Computing is a tool for effective communication in all aspects of life, at school and in the outside world, locally, nationally and internationally. The study of computing develops children's abilities to listen, speak, read and write for a wide range of purposes, using language, to learn and communicate ideas views and feelings. Children can create their own programs and understand how computers need to follow specific instructions (algorithms). It enables children to express themselves creatively and imaginatively, through using computing as a tool. Computing enables children to access media in a different way and can engage children in a multitude of ways. It also enables the children to use their knowledge and skills and understanding when exchanging information across a range of different situations and for different audiences using information technology.

Intent

We aim for all children to leave Mere Brow school equipped with knowledge to use technology to enhance their learning. They will develop their computational thinking and use technology creatively. Every classroom has access to laptops and iPads. This should allow children to dual learn two major operating systems in the current world. iPads are remotely controlled, and apps installed purposeful for the children's education. The school's scheme of work has been adapted to suit the curriculum of Mere Brow, whilst ensuring the National Curriculum is taught. The Scheme of Work intends to help children to connect their learning on a wider level. A skills overview shows the stages of computing, and an overview of software taught and what would be expected from each year group.



Implementation

The National Curriculum 2014

The Scheme of Work breaks down the three areas of the National Curriculum:

Digital Literacy – Online Safety

Information Technology – Multimedia and Technology in our lives

Computer Science – Coding and Programming.

KS1

COMPUTER SCIENCE

Co2/1.1 understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions

Co2/1.2 create and debug simple programs

Co2/1.3 use logical reasoning to predict the behaviour of simple programs

INFORMATION TECHNOLOGY

Co2/1.4 use technology purposefully to create, organise, store, manipulate and retrieve digital content

Co2/1.5 recognise common uses of information technology beyond school

DIGITAL LITERACY

Co2/1.6 use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies

KS2

COMPUTER SCIENCE

Co2/1.1 design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

Co2/1.2 use sequence, selection, and repetition in programs; work with variables and various forms of input and output



Co2/1.3 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

INFORMATION TECHNOLOGY

Co2/1.4 understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration

Co2/1.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content

Co2/1.6 select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

DIGITAL LITERACY

Co2/1.7 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Planning, Evaluation and Recording.

A Scheme of Work has been developed by the Computing Subject Lead so to tailor the learning for Mere Brow. Computing is primarily taught by the Subject Lead.

Subject topics are used to help children make connections in their wider learning. A focus on multimedia is taught across the Key Stages in the Autumn term – this is so they are equipped with the skills to use ICT to enhance learning in other subjects. This includes word processing software, presentation creating software and video software.

In order to fulfil National Curriculum requirements in Computing, resources are reviewed annually by the subject lead and headteacher and planned purchases can be made with regard to the school's funding.

An online journal (Seesaw) is also used to help document and evidence children's learning.



Special Educational Needs and Disability (SEND)

Computing can greatly support children with SEN and we encourage the use of ICT with SEND children at Mere Brow. Children with SEN are taught computing skills and are encouraged to take part when and where possible, and may tailor their teaching dependent on the individual's progress. Where applicable children's SEN Support Plan incorporate objectives that can be enhanced through computing and teachers keep these objectives in mind when planning work.

We provide learning opportunities for all pupils by setting achievable learning goals and challenges responding to particular individual and diverse needs and to ensure that all pupils irrespective of gender, ability, including gifted pupils, ethnicity and social circumstances, have access to the curriculum and make the greatest progress possible.

Differentiation should always be incorporated into all lessons and can be done in various ways:

- Stepped Activities – our success stars which become more difficult and demanding but cater for the less able in the early sections.
- Common Tasks which are open ended activities/investigations where differentiation is by outcome.
- Resourcing which provides a variety of resources depending on abilities eg. Levelled programs.

IMPACT

Children at Mere Brow will show progression in their skills and leave Mere Brow much more confident with their use of technology. They should have the knowledge and skills to transfer to the wider world and help with their next transitional stage of education.

Teachers are encouraged to use computing in other lessons to enable children to practice and improve skills. It is expected that all children will produce a piece of work aided by ICT at least once per term in a different subject. Continuity and progression are ensured by a detailed skills document which links to the Scheme of Work and is monitored by the subject leader.

A class monitoring form will be completed at the end of each topic so to see which children are developing or secure in these areas.

Parents are welcome to discuss their child's needs at any stage of the academic year with teachers. Parents evening appointments are also offered in the Autumn Term. Computing will be reported formally to parents annually in the children's full end of term report before the end of the summer term. Parents are given the opportunity to discuss their child's progress. Teachers use the information gathered from their half-termly assessments to help them comment on individual children's progress in Computing.

Monitoring and Evaluation

The subject lead will continue to monitor and evaluate computing through the school. INSET days and staff meetings are also used to support staff and are led by the Computing lead.

Role of the subject lead:

- 1) The organisation of resources including an annual review
- 2) Monitoring and evaluating planning and assessment
- 3) Checking all areas of are being covered in the classroom
- 4) Monitoring that each child is receiving his/her entitlement of the curriculum.

Reviewed and adopted by the FGB.

October 2020

Next review date Autumn 2023

Signed: J.Rowe

Date : October 2020

