

Eccleston Mere Primary School

Computing Policy



Approved by: V.Atherton / R Mugan

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Next review due January 2023
by:

Curriculum Vision Statement

At Eccleston Mere Primary School, we recognise that social, moral, spiritual, and cultural development is central to the education of all pupils and as such, permeates the whole curriculum and ethos of the school.

Our broad and challenging curriculum is designed to enable children to develop interpersonal skills and become resilient learners who think creatively and critically.

Provision is bespoke to our pupils and evolves according to the ever- changing local, national and global landscape. The aim of our curriculum is to develop pupils, who are well-equipped to take their place in society, as citizens of the future.

We aim to:

- Promote a love of learning.
- Offer memorable learning experiences that are fun and engaging.
- Develop independence, resilience and confidence within our pupils.
- To tailor our curriculum to make use of our locality, taking pride in the achievements of St. Helens and the landscape that surrounds us.
- Enable children to be creative and think differently.
- Prepare citizens who are ready to take on the challenges of the 21st Century.
- Provide expert teaching, set upon a backdrop of our safe, secure learning environment.

We believe that Computing is an essential part of the curriculum; a subject that not only stands alone but is woven and should be an integral part of all learning. Computing, in general, is a significant part of everyone's daily life and children should be at the forefront of new technology, with a thirst for learning what is out there. Computing within schools can therefore provide a wealth of learning opportunities and transferrable skills explicitly within the Computing lesson and across other curriculum subjects.

Subject Intent Statement

Through the study of our robust Computing curriculum, children will develop a wide range of fundamental skills, knowledge and understanding that will equip them for the rest of their life. Children must be taught the art form of 'Computational Thinking' to provide them with essential knowledge that will enable them to participate effectively and safely in the digital world. The Computing curriculum is made up of three main strands: Computer Science, Information Technology and Digital Literacy.

Computer Science - Pupils are taught the principles of:

- how computer systems work (input, process, output)
- finding and fixing mistakes in a computer program (Debugging)
- using logical thinking to solve problems
- using step by step instructions to make something happen effectively (Algorithm) (could be away from the computer)
- a list of instructions that tells a computer exactly what to do (Program)

Information Technology - Pupils then have the knowledge to use IT to:

- create presentations, documents and use data to convey meaning.
- be creative to convey a message effectively.
- store and manipulate content.
- retrieve digital content.

Digital Literacy - Pupils then become digitally literate so that they are:

- prepared for the future phases of education and the workplace.
- responsible and safe users of technology at school and at home.
- able to collaborate effectively.

- able to develop spiritual, moral, social and cultural skills.

Effective teaching in EYFS / KS1 / KS2

In EYFS, children learn about technology through a broad, play-based experience of computing in a range of contexts, including outdoor play. Early years learning environments will feature computing scenarios based on experience in the real world, such as in role-play. Children will gain confidence, control and language skills through opportunities to 'paint' on the whiteboard or program a toy. Recording devices will support children to develop their communication skills.

In Key Stage 1, the children will learn to understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. They will be taught to create and debug simple programs and use logical reasoning to predict the behaviour of simple programs. They will be shown how to use a range of technology purposefully to create, organise, store, manipulate and retrieve digital content as well as recognise common uses of information technology beyond school. They will be taught to use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. Each of these skills will be taught through exciting half termly units.

In Key Stage 2, the children will design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. They will use sequence, selection, and repetition in programs, use logical reasoning to explain how some simple algorithms work and correct errors in algorithms and programs. Children will be taught to understand computer networks, including the internet, and the opportunities they offer for communication and collaboration. They will use search technologies effectively, learn to appreciate how results are selected and ranked, and be discerning in evaluating digital content. Children will be taught to select, use and combine a variety of software (including internet services) on a range of digital devices to create a range of programs, systems and content that accomplish given goals. They will use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

How work is evidenced

In EYFS, work will be evidenced through recordings of children's responses to questions, detailed observations and work recorded in portfolios and books. In Key Stage 1 & 2, when appropriate, children's work is printed, marked and filed into a computing folder. If able, children also save their work into their own individual folders on the Pupil Home network. At times, computing work may be difficult to record and therefore photographs or pupil self-assessment target sheets may evidence work covered. Work may also be evidenced through classroom displays.

Assessment

In Computing, strategies for formative assessment will include: observations of children working; responses to questions; marking and examining children's work and monitoring of pupils' self-assessment target sheets. The cumulative evidence gathered from on-going formative assessment will be used to complete a Computing summative assessment grid at the end of each unit/half term.

Marking and Feedback

Children will be given oral and written feedback, when necessary. In accordance with the school's marking policy, marking of printed work will include a positive comment, indication of support or verbal feedback and some evidence of EBIs or NS. Children are given the opportunity to show their work to each other and are offered rewards such as dojos, stamps or stickers.

SMSC / Cultural Capital / British Values

Computing makes a contribution to the teaching of SMCS, British values and citizenship as children learn to work together in a collaborative manner. They develop a sense of global citizenship by using the Internet and email to

research and communicate. Through the discussion of moral issues related to electronic communication, children develop a view about the use and misuse, and they also gain a knowledge and understanding of the interdependence of people around the world. They formulate and articulate their opinions of their own work, and the work of other people, and express these with awareness and sensitivity towards others.

Learning Environment

In each classroom, E-Safety information must be displayed throughout the year. Additional Computing displays should celebrate children's work, include key vocabulary and make reference to 'sticky knowledge'. Classes are strategically timetabled so that they can readily access laptops and iPads. Other resources are available for use, when needed e.g. microphones/bee-bots/3D printer.