

Computing at The Ellis CE Primary School

Intent

- 👤 At The Ellis CE Primary School, it is our intention to develop pupils who are responsible, ambitious, confident and creative users of technology, who apply computational thinking beyond our Computing curriculum. We want to equip pupils to use computational thinking and creativity that will enable them to become active participants in the digital world. It is important to us that the children understand how to use the ever-changing technology to express themselves, as tools for learning and as a means to drive their generation forward into the future.
- 👤 We intend to provide our children with ICT opportunities and computational knowledge, to such an extent, that they can grow to have careers within the computing and ICT industries!
- 👤 Our children will be taught to use technology responsibly and carefully, being mindful of how their behaviour, words and actions can affect others.
- 👤 Our children will be taught Computing in a way that ensures progression of skills, and follows a sequence to build on previous learning.
- 👤 Our children will gain experience and skills of a wide range of technology in a way that will enhance their learning opportunities, enabling them to use technology across a range of subjects to be creative and solve problems, ensuring they make progress.
- 👤 Our children will be taught to make links between Computing and other subjects, particularly Mathematics and Science (STEM).

Implementation

Across our school we firmly believe that all children can master Computing to enable them to use technology effectively in their everyday lives, we want to ensure that computing is embedded throughout our whole school curriculum, ensuring that rich Computing and ICT knowledge is used effectively, and that opportunities for further enhancing and developing learning using technology is always taken!

All our classes will have a scheduled Computing lesson each week and will be taught Computing alongside other curriculum subjects using a range of devices such as iPads and micro bits.

At The Ellis we use teaching resources from the National Centre for Computing Education (NCCE). Across our school, children will showcase their Computing learning and skills in a variety of ways, some include: our school shared drive, SeeSaw or Class DoJo. Saved work, alongside pupil voice, class discussions and retrieval activities will inform teachers assessment of learning.

Foundation Stage

Children are provided with the opportunities to:

-  use and explore a range of different technological equipment to see how things work, for example, remote control cars, in preparation for their future learning in KS1
-  use technology to support other areas of learning.
-  know and talk about the importance of sensible screen time when using technology to support their own health and wellbeing.

KS1

Children are provided with the opportunities to:

- 🧐 understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
- 🧐 create and debug simple programs.
- 🧐 use logical reasoning to predict the behaviour of simple programs.
- 🧐 use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- 🧐 recognise common uses of information technology beyond school.
- 🧐 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.

KS2

Children are provided with the opportunities to:

- 🧐 design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- 🧐 use sequence, selection, and repetition in programs; work with variables and various forms of input and output

- 🧐 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- 🧐 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
- 🧐 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- 🧐 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
- 🧐 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Impact

- 🧐 Our children will enjoy and value Computing and know why they are doing things, not just how.
- 🧐 Children will understand and appreciate the value of Computing in the context of their personal wellbeing and the technological, creative and cultural industries and their many career opportunities.
- 🧐 The Computing curriculum will contribute to children's personal development in creativity, independence, judgement and self-reflection. They will be able to talk confidently about their work, and share their work with others.

- 🕒 Progress will be evident through the outcomes saved on the shared drive and other available software.
- 🕒 Children will have the vocabulary to be able to talk about the skills they are learning and be able to explain their thinking effectively.
- 🕒 Children (including those with SEND) will be able to access learning appropriate to their personal next steps.

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