Cawston Church of England
Primary Academy

Computing Curriculum

Diocese of Norwich Education and Academies Trust

Computing Vision

Our vision at Cawston is to give all children a lifelong love of Computing by **'Growing Excellence'** in all that they do.

- We begin by **'Planting'** knowledge, skills and enquiries throughout their time learning computing as they move between classes and key stages. Each skill and knowledge gained helps them to develop what they need to develop and progress onto the next stage.
- Jesus said that seeds will flourish if they are nurtured properly. All of the skills and knowledge a child needs in Computing are carefully developed by **'Nurturing'** them through quality first teaching, using excellent resources such as chromebooks and programmes such as Scratch. We use the Knowsley curriculum to support quality first teaching and planning.
- Once all of this has been achieved, we will see them **'Flourishing'** as they apply all that they have learnt and communicate their findings in different ways including written, digital and oral work.

Key Stage 1 National Curriculum Expectations	Key Stage 2 National Curriculum Expectations
Pupils should be taught 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.	Pupils should be taught 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.

Intent

At Cawston, we aim to ensure that all children embrace and feel confident in applying new technology in a safe and responsible way both in school and at home. We want our pupils to make links between Maths, Science and Design and Technology to enable them to use and develop these skills as they move through school and become responsible digital citizens. “A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. At the core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content.” National Curriculum. Technology is always evolving, and we aim to develop their ideas through this as they become active and responsible participants in a digital world.

Implementation

In EYFS, computing teaching links to pupils’ everyday use and experiences of technology. They are taught how to use and select technology for a particular purpose and recognise these at home and school. Children are supported to use a range of technologies available in the classroom to enhance their child-initiated play and to learn how technology interacts with their everyday lives. In Key stage 1 and 2, lessons are taught discreetly and applied across the curriculum. All children use a range of technology including laptops. The children will have the opportunity to build on previous skills to further develop their digital competency, through understanding algorithms, following instructions, creating, and debugging programs, with E-safety at the forefront or the Computing Curriculum. E-Safety is taught primarily through the ‘Knowsley’ scheme of work. Across the school, Computing and PSHE support each other in teaching the children how to be safe on the internet on social media and gaming sites. This includes identifying ways bullying can happen online, noticing what is and is not acceptable online and giving children ways to seek support if they suffer any cyber bullying. Computing lessons are delivered using the ‘Knowsley’ scheme of work. The Knowsley scheme of work enables clear coverage of the computing curriculum whilst providing support and engaging activities to deliver high quality computing lessons.

Impact

Children will build on previous knowledge and skills each year and be able to leave schools as confident, creative, and safe learners of computing. Children will be embedding new skills and improving their vocabulary through a range of units of work across the year. By the end of Key Stage 2, our children at Cawston will be confident and creative digital learners, that will allow them to become competent and safe in the digital world that we now live in.