Computing Policy

At Cedars Primary School, teaching and learning is based upon a language rich thematic curriculum where pupils are exposed to a range of experiences to enhance their knowledge, understanding and long term memory. As a result, pupils at Cedars are confident, aspirational, articulate learners who are ready for the next stage of education.

We provide a high-quality Computing education that equips pupils to use computational thinking and creativity to understand and change the world. Strong links are made with Mathematics, Science, and Design and Technology, and provides insights into both natural and artificial systems. The core of Computing in the Early Years includes enabling children to experience different software and hardware, including robotic toys and games. Objectives are taken from 'Knowledge and Understanding of the World – Technology', and have strong cross curricular links across the EYFS. The core of Computing in Key Stage One and Key Stage Two 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.

Computing Intent:

At Cedars Primary School, we understand the immense value that technology plays not only in supporting the Computing and whole school curriculum but overall in the day-to-day life of our school. Our aims are to fulfil the requirements of the National Curriculum for Computing whilst also providing enhanced collaborative learning opportunities, engagement in rich content and supporting pupil's conceptual understanding of new concepts which support the needs of all our pupils.

"A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. 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. Our Computing curriculum aims to develop the heart and mind of every child. Computing teaching at Cedars Primary School, has deep links with mathematics, science and design and technology and our aim is to provide a broad and balanced curriculum whilst ensuring that pupils become digitally literate and digitally resilient. Technology is ever evolving and we aim to develop pupils who can use and express themselves, develop their ideas through, information and communication technology at a suitable level for the future workplace and as active participants in a digital world. The aims of our Computing curriculum are to develop pupils who:

- Are responsible, competent, confident and creative users of information and communication technology.
- Know how to keep themselves safe whilst using technology and on the internet and be able to minimise risk to themselves and others.
- Become responsible, respectful and competent users of data, information and communication technology.

- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Can analyse problems in computational terms, and have repeated practical experience writing computer programs in order to solve such problems.
- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Become digitally literate and are active participants in a digital world.
- Are equipped with the capability to use technology throughout their lives.
- Understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Have a 'can do' attitude when engaging with technology and its associated resources.
- Utilise computational thinking beyond the Computing curriculum.
- Understand and follow the SMART E-Safety rules and school's user agreements.
- Understand the E-Safety messages can keep them safe online.
- Know who to contact if they have concerns.
- Apply their learning in a range of contexts, e.g. at school and at home.
- Know where to locate the CEOP button and how to use it.

Implementation:

To ensure high standards of teaching and learning in computing, we implement a curriculum that is progressive throughout the whole school. Computing is a foundation subject in the National Curriculum and at Cedars Primary, implementation of the computing curriculum is in line with 2014 Primary National Curriculum requirements for KS1 and KS2 and the Foundation Stage Curriculum in England. This provides a broad framework and outlines the knowledge and skills taught in each key stage.

Computing teaching at Cedars Primary delivers the requirements of the National Curriculum through halftermly units. Teachers plan using our Computing long term overview which highlights the coverage of Lancashire skills and Purple Mash skills for each year group and is progressive from year to year. Our Computing progression model is broken down into three strands that make up the computing curriculum. These are Computer Science, Information Technology and Digital Literacy. Computer Science underlines the knowledge and skills relating to programming, coding, algorithms and computational thinking. Information Technology underlines the knowledge and skills relating to communication, multimedia and data representation and handling. Digital Literacy underlines the knowledge and skills relating to online safety and technology uses, all of which are covered at Cedars combined with other subjects or taught discreetly in computing lessons.

Our Computing Progression Model is supplemented by the Purple Mash scheme of work which we follow from Year 1-6, ensuring consistency and progression throughout the school.

We recognise that computing is a specialist subject and not all teachers are computing specialists. The Purple Mash scheme of work enables clear coverage of the computing curriculum whilst also providing support and CPD for less confident teachers to deliver lessons. All teachers at Cedars Primary School are Purple Mash trained.

At Cedars Primary School, teachers use the Purple Mash scheme of work alongside the Computing Progression Model. Computing lessons are broken down into weekly units, usually with two units taught termly. Units are practical and engaging and allow computing lessons to be hands on. Units cover a broad range of computing components such as, coding, spreadsheets, Internet and Email, Databases, Communication networks, touch typing, animation and online safety.

When teaching computing, teachers should also follow the children's interests to ensure their learning is engaging, broad and balanced. Teachers should ensure that ICT and computing capability is also achieved through core and foundation subjects and where appropriate and necessary ICT and computing should be incorporated into work for all subjects using our wide range of interactive ICT resources.
Through our Purple Mash subscription our teachers can deliver thematic, cross curricular lessons that also follow children's interests and provide flexibility. Purple Mash has an online portal of age-appropriate software, games and activities as well as topic materials and materials to support children's learning in other subject areas for all key stages. Through pupils computing lessons they will also use the Purple Mash software to 'make music' using the 2Sequence program, design and make using the 2Animate software and make links with maths through spreadsheets using 2Calculate.
Computing teaching at Cedars Primary is practical and engaging and a variety of teaching approaches and activities are provided based on teacher judgement and pupil ability. We have a wide range of resources to support our computing teaching including but not limited to, iPads, laptops, bee-bots, video recorders, and cameras. Pupils may use laptops or iPads independently, in pairs, alongside an adult or in a group with the teacher. Teachers and pupils are also aware of the importance of health and safety and pupils are always supervised when using technology and accessing the internet.
Pupils at Cedars Primary are fully encouraged to engage with ICT and technology outside of school. Each teacher and pupil at Cedars Primary, has their own unique Purple Mash login and password. Computing work can be stored and saved using pupil log in details and homework or '2do's' can also be set for pupils to access and complete tasks at home that link with their current class learning. Each class has a display board that also displays a range of computing/ICT related work. Parents at Cedars Primary are also encouraged to support the implementation of ICT and computing where possible by encouraging use of ICT and computing skills at home during homework tasks and supporting pupils beyond the classroom. Computing knowledge organisers, with key vocabulary and devices, are sent home half termly. These enable children to learn vocabulary before they are exposed to the unit of learning. Parents are encouraged to talk about these with their children.

Alongside our curriculum provision, pupils at Cedars, also have the opportunity to participate in after school computing clubs ran by teacher or teaching assistants. Examples of clubs that have been run in the past include coding club and Purple Mash club. These clubs aim to provide additional computing support and enjoyment whilst further challenging pupils who possess exceptional computing abilities.

Special Educational Needs Disability (SEND) / Pupil Premium /Gifted and Talented

All children will have Quality First Teaching. Any children with identified SEND or in receipt of pupil premium funding may have work additional to and different from their peers in order to access the curriculum dependent upon their needs. As well as this, our school offers a demanding and varied curriculum, providing children with a range of opportunities in order for them to reach their full potential and consistently achieve highly from their starting points.
At Cedars Primary School, we provide a variety of opportunities for computing learning inside and outside the classroom. Computing and safeguarding go hand-in-hand and at Cedars we provide a huge focus on internet safety inside and outside of the classroom. Additional to all pupils studying an online safety unit through their computing lessons, every year we also take part in National Internet Safety Day in February. The Computing co-ordinator, alongside class teachers, will plan additional internet safety lessons and activities to take part in, following a specific yearly theme. Internet Safety assemblies are also held as well as parent workshops and home activities. Finally, at Cedars we actively encourage parent partnership

within the computing curriculum and outside of school. Parents are made aware of e-safety issues through the school website, Facebook page, links, letters, parent presentations, shared activities and guidance.

Impact:

Our Computing Curriculum is high quality, well designed and is planned to demonstrate progression and build on and embed current skills. We focus on progression of knowledge and skills in the different computational components, including discreet vocabulary progression, which form part of the units of work. If children are working at an expected level within the curriculum, they are deemed to be making good or better progress.

We measure the impact of our curriculum through the following methods:

- Pupil discussions and interviewing the pupils about their learning (pupil voice).
- Governor monitoring with our subject computing link governor.
- Moderation staff meetings with opportunities for dialogue between teachers.
- Photo evidence and images of the pupils practical learning.
- A reflection on standards achieved against the planned outcomes.
- Learning walks and reflective staff feedback (teacher voice).
- Dedicated Computing leader time.

Review Approval Body:

Date Approved: October 2023

Next Review Date: October 2025

Subject Leader: Jemma Vaisnys