



CE Stanford in the Vale Primary School



Computing Policy

Intent

"The framework for setting out the aims of a programme of education, including the knowledge and skills to be gained at each stage (intent)."- Ofsted Education Inspection Framework

At Stanford in the Vale CE School, we are aware of the crucial role that technology plays not only in enhancing the Computing and general school curricula, but also in the daily operations of our institution. Our goals are to meet the demands of the National Curriculum for Computing while also enhancing possibilities for collaborative learning, engaging students in rich content, and fostering their conceptual grasp of novel ideas in ways that meet the needs of all of our children.

"A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world...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 intent is to give children a broad and balanced curriculum while ensuring that they become digitally literate and digitally resilient. At our school, computing instruction has connections to mathematics, science, design, and technology. We strive to produce students who can use and express themselves, develop their ideas through information and communication technology at a level appropriate for the future workplace and as active participants in a digital environment because technology is constantly changing.

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.
- 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.

Implementation

"The translation of that framework over time into a structure and narrative, within an institutional context (implementation)" - Ofsted Education Inspection Framework

We use a progressive curriculum throughout the entire school to achieve excellent standards of computing teaching and learning. Our computing programme is being implemented in accordance with the Foundation Stage Curriculum in England and the 2014 Primary National Curriculum standards for KS1 and KS2. The knowledge and abilities taught in each key stage are outlined in this broad framework.

Our computing progression model divides the computing curriculum into three parts:

- digital literacy
- information technology
- and computer science.

The field of computer science emphasises knowledge and abilities related to coding, programming, algorithms, and computational thinking. Communication, multimedia, and data representation and handling knowledge and skills are highlighted by information technology. The term "digital literacy" highlights the knowledge and abilities related to technology use and online safety that are all addressed, whether collectively or separately.

We use and follow the Purple Mash scheme of work 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. Computing lessons are taught by our teaching staff with additional support from our member of staff in charge of IT Support. 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.

Lessons are broken down into weekly units, usually with two units taught per half-term. 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 can follow the children's interests to ensure their learning is engaging, broad and balanced. Teachers should make sure that students are able to use ICT and computing in core and foundational courses, and if appropriate and necessary, ICT and computing should be integrated into all subject-related work using our extensive collection 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. Computing lessons 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

Impact

"The evaluation of what knowledge and skills learners have gained against expectations (impact)" - Ofsted Education Inspection Framework

Our computing curriculum is of the best quality, carefully organised, and designed to show growth while building upon and embedding existing abilities. We emphasise the development of knowledge and abilities in the many computational components, and similar to other topics, discrete vocabulary development is a component of the work units.

Children are considered to be making good or better progress if they are following the curriculum.

Assessment in Computing

Effective assessment involves careful observation, analysis and review by practitioners of each child's knowledge, skills and understanding, in order to track their progress and make informed decisions about planning for the next steps of learning.

Teachers are always making assessments regarding the children's learning. This can take place within a lesson, whereby the teacher makes adjustments to scaffold children to help them to achieve and after a lesson to inform the next lesson. Children's online work is

marked in accordance with Purple Mash. Notes are made by the class teacher based on examples of work to praise and share, as well as areas that need addressing; presentation, basic skills errors and further support/misconceptions and next lesson notes. This ensures that children receive personalised feedback to help them to improve and progress with their learning.

On-going, formal assessments

We assess the effectiveness of our curriculum using the following techniques:

- Pupil discussions and interviewing the pupils about their learning (pupil voice).
- Monitoring with our subject computing lead visits.
- Opportunities for dialogue between teachers.
- Photo evidence and images of the pupils practical learning.
- Video analysis through recording of performance in lessons.
- A reflection on standards achieved against the planned outcomes.
- Learning walks and reflective staff feedback (teacher voice).
- Dedicated Computing leader time.
- Monitoring of children's work.

Role of the Co-ordinator

The Computing Co-ordinator will also support staff development, alongside the head teacher and outside advisors. Throughout the year, the Computing Co-ordinator will:

- Look at examples of work throughout the year. This 'book look' is recorded in the co-ordinator file.
- Carry out 'drop in' sessions to see Computing learning in action. This will include looking at planning, talking to teachers/teaching assistants and the children.
- Support CPD of staff.

Policy Written: February 2023

Next Review: February 2025

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