Computer Curriculum Policy

Intent

At Stanford in the Vale C of E Primary School, we recognize the integral role that technology plays in education and in everyday life. We are committed to providing a high-quality computing education that equips pupils with the necessary skills, knowledge, and attitudes to thrive in an increasingly digital world. Our aim is to ensure that all pupils become confident, responsible, and creative users of information and communication technology (ICT), and develop the ability to apply computational thinking and creativity in a variety of contexts.

As stated in the National Curriculum, "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 use this knowledge through programming."

Our intent is to provide a broad and balanced computing curriculum that fosters digital literacy, resilience, and creativity, ensuring that pupils are prepared for the future and are able to engage actively with the digital world. We also aim to integrate computing across all subjects, allowing children to make connections and use technology to express and develop their ideas in a range of contexts.

Our Computing curriculum aims to develop pupils who:

- Are responsible, competent, confident, and creative users of ICT.
- Understand how to keep themselves safe online and minimise risks when using technology.
- Respect and use data and information technology competently.
- Evaluate and apply technology, including new or unfamiliar tools, to solve problems.
- Can analyse problems using computational thinking and have practical experience writing computer programs to solve these problems.
- Understand and apply fundamental principles of computer science, including abstraction, logic, algorithms, and data representation.
- Are digitally literate and can use technology in their everyday lives.
- Understand the importance of governance and legislation related to how information is stored, shared, and manipulated.
- Have a 'can do' attitude when engaging with technology and its resources.
- Use computational thinking beyond the computing curriculum in other subjects.
- Follow the SMART E-Safety rules and understand how to stay safe online.
- Know how to seek help if they have concerns or encounter issues online.

Implementation

The computing curriculum at Stanford in the Vale is implemented following a progressive framework that aligns with the National Curriculum for Computing (2014) and incorporates resources such as Purple Mash to enhance learning. Our curriculum is designed to build on prior knowledge and skills at each key stage, ensuring that pupils develop a comprehensive understanding of computing across three key areas: **Digital Literacy**, **Information Technology**, and **Computer Science**.

- **Digital Literacy** focuses on understanding how to use technology responsibly, ethically, and safely, including online safety.

- **Information Technology** covers the use of technology to manipulate and communicate data, including multimedia, communication networks, and software tools like spreadsheets and databases.
- **Computer Science** is centred on teaching pupils the principles of coding, algorithms, and computational thinking, as well as practical programming skills.

We use the **Purple Mash** scheme of work for children from Year 1 to Year 6, ensuring a consistent, structured, and engaging approach to computing across the school. The scheme provides a range of thematic, cross-curricular lessons, incorporating areas such as coding, animation, online safety, spreadsheets, email, databases, and multimedia design. It offers flexibility to adapt lessons based on pupil interests and ensures that computing is integrated into other subjects wherever appropriate.

Lessons are delivered in practical, hands-on sessions, providing pupils with opportunities for deeper learning and engagement. The curriculum is delivered by class teachers. Purple Mash offers a wide array of tools that help teachers differentiate lessons and provides CPD (Continuing Professional Development) support to help non-specialist teachers feel confident in delivering computing lessons.

In addition to Purple Mash, we encourage pupils to use technology to enhance their learning in other subject areas, such as using the 2Sequence program to create music, the 2Animate software to produce animations, and the 2Calculate program to link computing with mathematics.

Impact

The impact of our computing curriculum is evident through pupils' growing confidence, competence, and creativity in using technology. Pupils develop the ability to use ICT to solve problems, communicate effectively, and understand the digital world around them. They gain a solid understanding of computer science concepts and are equipped to use technology responsibly and creatively.

Our curriculum is carefully structured to ensure clear progression, with pupils building on prior knowledge and developing new skills each year. Pupils make good or better progress when they follow the curriculum, showing growth in both practical and theoretical understanding of computing.

Assessment in Computing

Effective assessment is essential to tracking pupils' progress and informing teaching. Assessment in computing involves ongoing observations, discussions, and the review of pupils' work. Teachers assess pupils informally within lessons, adjusting support to meet individual needs, and provide personalised feedback through the Purple Mash platform. Formal assessments are used to evaluate learning at the end of each unit, where pupils may complete practical tasks or answer questions to demonstrate their understanding.

We use a variety of assessment methods to evaluate the impact of our computing curriculum, including:

- **Pupil Voice:** Discussions with pupils about their learning, to gauge their understanding and interest.
- **Teacher Observations:** Continuous monitoring of pupils' work and performance during lessons.
- **Subject Leader Monitoring:** Regular checks by the Computing Subject Leader, including visits and 'drop-in' sessions to observe lessons and provide support.
- **Evidence Collection:** Photos, videos, and examples of pupils' practical work to showcase progress and achievement.

- **Learning Walks:** Observing the teaching of computing across the school and gathering staff feedback to inform future planning.

Role of the Computing Coordinator

The Computing Coordinator is responsible for supporting the delivery of the computing curriculum and ensuring consistent high-quality teaching across the school. The role includes:

- **Monitoring and Evaluation:** Reviewing examples of pupils' work, conducting drop-in lessons, and evaluating lesson plans to ensure effective implementation of the curriculum.
- **Staff Support and CPD:** Supporting staff with their professional development, offering advice on lesson planning, and ensuring teachers are confident in delivering computing lessons.
- **Curriculum Review:** Ensuring that the curriculum remains up-to-date, reflects current technological trends, and meets the needs of all pupils.

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Next Review: February 2026

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