

Stowford School Curriculum Statement for Computing





Intent:

The Stowford curriculum for computing aims to ensure that all children:

can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation

can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems

can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems

are responsible, competent, confident and creative users of information and communication technology.

The intent is for children to follow a structured sequence of lessons, helping teachers to ensure that they have covered the skills required to meet the aims of the national curriculum. The content allows for a broad, deep understanding of computing and how it links to children's lives. It offers a range of opportunities for consolidation, challenge and variety. This allows children to apply the fundamental principles and concepts of computer science. They develop analytical problem-solving skills and learn to evaluate and apply information technology. It also enables them to become responsible, competent, confident and creative users of information technology.



Implementation:

Each lesson contains revision, analysis and problem-solving. Through the sequence of lessons, we intend to inspire children to develop a love of the digital world, see its place in their future and give teachers confidence. Cross-curricular links are also important in supporting other areas of learning. The lesson plans and resources help children to build on prior knowledge at the same time as introducing new skills and challenges.

In both key stages safety is a continuing focus that runs alongside other skills and knowledge. In KS1, the focus is on developing the use of algorithms, programming and how technology can be used safely and purposefully.

In KS2, lessons still focus on algorithms, programming and coding but in a more complex way and for different purposes. Children also develop their knowledge of computer networks, internet services and the safe and purposeful use of the internet and technology. Data Handling is featured more heavily in UKS2. Skills learnt through KS1 and LKS2 are used to support data presentation. An example of keywords has been included, showing the progression of specific language involved in children's learning so that teachers can also assess understanding and progress through vocabulary.

The computing subject leader keeps up to date and develops subject knowledge for themselves and for staff. A whole schools view is gained by ensuring continuity and progression of skills. Through monitoring, the subject leader focuses on children learning and progress. This is based on learning walks, discussion with pupils and staff, looking at books and professional discussions. This then becomes linked to CPD and opportunities to share good practice.

The computing curriculum provides a rich experience for all children in which they can develop skills to explore, access knowledge and make connections across all learning.

Assessment: End-of-unit assessments are available, enabling staff to feel confident in the progression of skills and knowledge and that outcomes have been met.



Impact:

The Stowford computing curriculum is enjoyed across the school. Teachers have high expectations and quality evidence will be presented in a variety of forms. Children use digital and technological vocabulary accurately, alongside a progression in their technical skills. They are confident using a range of hardware and software and produce high-quality purposeful products. Children see the digital world as promputing of their world, extending beyond school, and understand that they have choices to make. They become confident and respectful digital citizens going on to lead happy and healthy digital lives.