



Curriculum Statement for Computing

Intent

Computing, in line with the National Curriculum, is based around understanding and developing a variety of skills linked with technology, to ensure each child is engaged and challenged at the appropriate level for them. The Computing programme at Stoborough aims for all pupils to develop their understanding of the concepts, practices and perspectives that underpin programming and other aspects of computer science, while providing ample opportunity for creative, collaborative project work in which pupils can acquire the information technology (IT) skills they will need to adapt in an ever-changing digital world. With the aim of embedding this programme within the teaching of other subjects, pupils will gain a broader vision of technology and discover how it can be used as another platform to inform and communicate. We also aim to include elements of digital literacy and online safety to give pupils the opportunity to become safe, respectful and responsible members and participants of this digital world.

Aims

At Stoborough CE Primary we aim to deliver a high-quality computing education that:

- develops understanding on how systems work and how to apply this through programming.
- provides opportunity to use information technology to create programs, systems and a range of content.
- embeds the use of information technology within the teaching of mathematics, science and design and technology.
- enables pupils to become digitally literate in order to prepare them as active participants in a digital world whilst remaining safe, respectful and responsible.

Implementation

In Key Stages 1 and 2, Computing is taught as a discrete subject each week. Where meaningful, units have been created to make links with other subjects, such as Science, Art and Music, to enable the development of further transferable skills. We follow the Kapow scheme of work at Stoborough which develops the three strands of Computer Science, Information Technology and Digital Literacy for our pupils. The Kapow scheme is organised into five key areas, creating a cyclical route through which pupils can develop their computing knowledge and skills by revisiting and building on previous learning. The five areas are:

- Computer systems and networks
- Programming
- Creating media
- Data handling
- Online safety

In Early Years Foundation Stage (EYFS), the teaching of computing knowledge and skills is weaved through the curriculum topics and practised in continuous provision.

We have invested in high-quality computing resources, comprising of a computer suite, a class set of iPads, laptops and Chromebooks. This ensures that all year groups have the opportunity to use a

range of devices and programs for many purposes across the wider curriculum, as well as in discrete computing lessons.

At Stoborough School, we have an agreed set of effective teaching principles for all sequences of learning:

1. Previous learning is reviewed to develop fluent recall.
2. To avoid overloading working memory, material is presented clearly in small steps with opportunities for pupils to practise, eventually leading to independence – ‘I do, we do, you do.’
3. Effective questioning – helps children to practise new information and make connections with prior learning as well as checking understanding.
4. Teachers provide scaffolds so all learners can achieve and so they can have a wider impact in the class.
5. Teachers check for understanding and give systematic feedback

How are *all* learners supported to make progress?

We ensure that *all* children at Stoborough receive quality first teaching, including:

- Clearly designed lessons
- Appropriate use of modelling, explaining and questioning to engage with higher levels of critical thinking skills
- High expectations for all, including an expectation that pupils will accept responsibility for their own learning and work independently
- Regular use of encouragement and authentic praise to engage and motivate pupils
- Challenges to further their knowledge through verbal feedback
- Targeted scaffolding for children who need more support, including word banks with key vocabulary
- Key vocabulary is used in class and explained and is also on knowledge organisers

Impact

In Early Years Foundation Stage (EYFS) observational assessments are completed throughout the year to identify computing objectives that have been met alongside the child’s next step in learning.

In Key Stages 1 and 2, evidence of learning is saved into a portfolio of children’s work inside their own folder on the school network. Each unit has a unit quiz for pupils to complete so teachers can assess pupils against learning objectives.

The subject leader will monitor outcomes regularly to ensure age-related progression of knowledge and skills are evident so our pupils leave us equipped for their next stage of education, in an ever-increasing digital world.