



Computing - 3I's

Intent

At Stobhillgate First School we recognise that pupils are living in a rapidly changing world, in which ICT is playing an ever-increasing role. We aim, therefore, to equip children with the skills to adapt to new technology and to give them confidence to use ICT to further their learning and assist them in everyday life.

We recognise that pupils are entitled to a broad and balanced computing education with a structured, progressive, approach to the learning how computer systems work, the use of IT and the skills necessary to become digitally literate and participate fully in the modern world.

Aims

The school's aims are to:

- Provide a broad, balanced, challenging and enjoyable curriculum for all pupils.
- Develop pupil's computational thinking skills that will benefit them throughout their lives.
- Meet the requirements of the national curriculum programmes of study for Computing at Key Stage 1 and 2
- To stimulate interest in new technologies.
- To equip pupils with the confidence and skills to use digital tools and technologies throughout their lives.
- To enhance and enrich learning in other areas of the curriculum by cross curricular use of ICT
- To develop the understanding of how to use computers and digital tools safely and stay safe online.

Implementation

At Stobhillgate First School we teach both discrete Computing lessons to develop knowledge, skills and understanding but also provide a range of opportunities throughout school to employ Computing skills across the curriculum.

Foundation Stage

Technology forms an element of the EYFS goals (Understanding the World). It aims to ensure that:

1. children recognise that a range of technology is used in places such as homes and schools
2. they select and use technology for particular purposes.

In Key Stage 1 the children will learn to understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. They will be taught to create and debug simple programs and use logical reasoning to predict the behaviour of simple programs. They will be shown how to use a range of technology purposefully to create, organise, store, manipulate and retrieve digital content as well as recognise common uses of information technology beyond school. They will be taught to use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. Each of these skills will be taught through exciting half termly units.

In Key Stage 2, the children will design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. They will use sequence, selection, and repetition in programs, use logical reasoning to explain how some simple algorithms work and correct errors in algorithms and programs. Children will be taught to understand computer networks, including the internet, and the opportunities they offer for communication and collaboration. They will use search technologies effectively, learn to appreciate how results are selected and ranked, and be discerning in evaluating digital content. Children will be taught to select, use and combine a variety of software (including internet services) on a range of digital devices to create a range of programs, systems and content that accomplish given goals. They will use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

If you were to walk into Computing lessons at Stobhillgate you would see:

- Proficient users of technology who are able to work both independently and collaboratively.
- Computing hardware and software being utilised to enhance the learning outcomes of our children, across the curriculum.
- Clear progression in technical skills.
- A learning buzz as children engage in programming, instruct floor robots, prepare online safety presentations and design body confidence video campaigns.

Impact

After the implementation of this computing curriculum, children at Stobhillgate will be digitally literate and able to join the rest of the world on its digital platform. They will be equipped, not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly – safely. The biggest impact we want on our children is that they understand the consequences of using the internet and that they are also aware of how to keep themselves safe online.

As children become more confident in their abilities in Computing, they will become more independent and key life skills such as problem-solving, logical thinking and self-evaluation become second nature.