



COMPUTING CURRICULUM INTENT

In our rapidly changing world, technology is changing the lives of everyone. The use of digital technology in the world around us is continually increasing and evolving at an extremely fast pace, so our curriculum aims to equip our children with the skills and knowledge they need in our ever-evolving society.

We acknowledge that technological devices and software are an integral part of everyday life and that society is becoming more and more reliant on technology to guide, innovate and develop practice in many sectors of work, education, and daily life.

Our curriculum recognises that all children from all backgrounds and with all abilities, including those with special educational needs, have the right to learning experiences in all aspects of computing.

We want our children to become digitally literate and to be competent, independent users of technology, gaining confidence and enjoyment from their learning activities. We also want them to develop creativity, resilience, problem-solving and critical thinking skills in addition to the extremely important skill of staying safe and acting responsibly when online.

We want the use of technology to support learning across the whole school curriculum and to ensure that our curriculum is accessible to every child.

IMPLEMENTATION

At Bishop's Itchington Primary School, we base our curriculum around the Teach Computing curriculum, developed by The National Centre for Computing Education (NCCE) to ensure that our children receive a high-quality computing education.

We use a wide range of hardware such as laptops, iPads, floor robots, Micro:bits and data-loggers to ensure children have hands-on experiences of real life computing. Furthermore, a wide range of software is used such as the Microsoft Office suite, Scratch, Purple Mash, Tinkercad and Charanga to ensure children can apply their skills to a variety of different situations.

Key stage 1 Pupils will learn how to:

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- 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.

Key stage 2 Pupils will learn how to:

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

- understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

ONLINE SAFETY

Educating children with the skills to stay safe online is one of our key safeguarding priorities at Bishops Itchington Primary. Children take part in weekly online safety sessions where teachers use Project Evolve as a framework, along with a variety of other resources, to ensure children are educated regularly on how to stay safe online at school, at home and in the wider world. We also communicate regularly with parents through newsletters and online safety parent evenings to support them to keep our children safe online.

IMPACT

By the end of Year Six at Bishop's Itchington Primary School, pupils should feel confident in using a range of technology and applying the computing skills and knowledge they have learnt to a variety of real-life situations and other curriculum subjects. They will be ready to continue their learning journey at secondary school and will have the skills and knowledge necessary to excel at this.

Children will also know how to stay safe online and how to use technology responsibly and respectfully.