COMPUTING POLICY

Revised: Summer 2021

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DEFINITIONS

The following terms shall have the following meanings for the purposes of this document:

the School   means Clifton All Saints Academy
DT   means Design Technology
ICT   means Information and Communications Technology
KPIs   means Kay Performance Indicators

CURRICULUM INTENT

The School values Computing for its contribution across the curriculum as well as an individual subject. In computing the School wants the children to engage with ever-changing technology and be prepared for the increasing contribution that technology makes to their lives. The School will provide a range of opportunities for them to engage with a variety of technology, creating opportunities for design, composition, operation and evaluation, whilst also ensuring they know and understand practical ways of keeping themselves safe when using technology inside and outside of school.

"A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. It has deep links with maths, science and DT and provides insights into both natural and artificial systems. The core of computing is Computer Science, but the curriculum also ensures that pupils become digitally literate and able to express and develop ideas through ICT, at a level suitable for the workplace and as active participants in a digital world."
National Curriculum 2014.

AIMS

The National Curriculum for Computing aims to ensure that all pupils:
- 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.

CURRICULUM IMPLEMENTATION

The teaching and implementation of the Computing Curriculum the School is based on the National Curriculum and uses the Teach Computing scheme of work to ensure a well-structured approach to this rapidly developing subject. The School implements a curriculum that is progressive throughout the whole school. Teachers plan lessons for their class using a progression of skills document and lesson plans from the Teach Computing scheme. The School encourages the children to practice using some of the tools and activities at home to further develop their skills. The School also endeavour to include many of the skills and practices within the rest of the curriculum.

Throughout the curriculum, the children are reminded about Internet Safety and keeping themselves safe online, and this is refreshed and strengthened whenever *technology* is used.

Early Years Foundation Stage
There are no specific goals relating to Computing or Technology.

Key stage 1
Pupils are taught 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 should be taught 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.

CURRICULUM IMPACT

Children at the School are excited to use different types of technology to enhance their learning, as well as learning new skills to be able to support them in their learning and the world of work going forward. They are encouraged to use laptops and iPads in other lessons for research and other activities. Children learn about all different aspects of technology and how it supports our world. Most children meet age-related expectations.

ASSESSMENT

Ongoing assessments take place throughout the year. Teachers use this information to inform future lessons; ensuring children are supported and challenged appropriately. Attainment and progress towards the KPIs is recorded using Balance software. Teachers update this each term. This data is analysed to inform and address any trends or gaps in attainment. Attainment and attitude to learning in Computing is reported to Parents annually in our school reports.

The curriculum overview can be found here.