

Intent

At St Augustine's we believe a high-quality computing education equips pupils to use computational thinking and creativity to both better understand and change the world. Computing is a significant part of everyone's daily life and children should be at the forefront of new technology.

Being well resourced and providing innovative and engaging opportunities in computing is key to successful learning and retention for students. At St Augustine's we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills is needed to enable their effective employment.

We also recognise the importance of responding to new developments in technology, and aim to equip pupils with the confidence and capability to use ICT and computing throughout their lives.

Computing as a discrete subject has a number of key components, each of which we aim to teach from as early an age as possible. These can be categorised as:

Computer science - Pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.

Information technology - Pupils are equipped to create programs, systems and a range of content in order to develop products and solutions.

Digital literacy - Pupils are taught to use digital technology as a means to express themselves, including a critical understanding of technology's impact on the individual and society.

Computing skills are used across the curriculum in subjects such as mathematics, science and design and technology. In addition, at St Augustine's we firmly believe in the importance of delivering a high quality E-Safety curriculum. As technology develops, so does the need for a better understanding of how to use it in a responsible manner. The education of pupils in E-Safety is therefore essential to ensure that children are equipped with the skills to recognise risks online, to be critically aware of the materials and content they may access, and to understand how to accurately validate information accessed via the internet.

Implementation

Pupils participate in regular Computing and E-Safety lessons at St Augustine's. In addition, these elements are regularly incorporated into other subjects, given the cross-curricular nature of computing and the opportunities to expand and develop lessons that its inclusion provides.

The delivery of Computing and E-Safety at St Augustine's is planned in line with the national curriculum and allows for clear progression, with lessons designed to enable pupils to achieve the subject objectives always consolidating and building upon prior learning.

When teaching Computing and E-Safety as discreet lessons, staff are able to use resources and schemes of work designed to achieve the stated objectives within the Computing and E-Safety Curriculum. Staff have access to the 'Rising Stars Scheme' alongside Purple Mash both in school and at home in order to achieve this.

St Augustine's recognises the need to maintain, update and develop its resources and to make progress towards a consistent, compatible system by investing in order to effectively deliver the strands of the national curriculum and support the use of Computing across the school.

This includes:

- Interactive whiteboards with sound, DVD and video facilities in every classroom.
- 60 Chromebooks (30 for KS1 & 30 for KS2) for use throughout the school.
- A fully resourced ICT suite with desktop computers and printer.

Lessons are planned to provide for and include all children, including those with SEND, higher achieving / gifted and talented pupils, pupils with EAL needs and pupils from all social and cultural backgrounds.

Key Stage 1

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.

Key Stage 2

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 also use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; and identify a range of ways to report concerns about content.

Impact

The impact of Computing and E-Safety at St Augustine's can be determined using teacher assessment. On a termly basis each class provides assessment data collated in accordance with each year group's key objectives.

This assessment data clearly indicates individual pupil progress made over the course of the whole academic year, and each child can be deemed as working towards the expected standard, at the expected standard or exceeding the expected standard.

After the implementation of the Computing and E-Safety curriculum, children at St Augustine's Catholic School will be digitally literate and equipped to use technology effectively and safely. Children will understand the consequences of using the internet and be fully aware on how to keep themselves safe online. They will also be able to use these computing skills across a variety of disciplines where appropriate.

Finally, confidence in this subject will enable our children to become independent and competent in key life skills such as problem-solving, logical thinking and critical evaluation.