

Our Computing Curriculum

Intent

Sacred Heart's curriculum is closely designed around our school's mission and value statements and to support the development and needs of the pupils and families we serve. Our curriculum is designed to allow children to *endeavour*, *enrich and enjoy* their learning.

At Sacred Heart, for the Glory of God, we aim for pupils **to make safe choices, think critically and become creative.**

Pupils' spiritual, moral, social and cultural development is a core strength. Children are challenged to think hard and to empathise with the feelings and actions of others, seeing points of views and beliefs other than their own. The curriculum is designed develop knowledge and skills that are progressive, as well as transferable, throughout their time at Sacred Heart and also to their further education and beyond.

Technology is changing the lives of everyone. Through teaching computing, we equip our children to participate in a rapidly changing world where work and leisure activities are increasingly transformed by technology. It is our intention to enable children to find, explore, analyse, exchange and present information. We also focus on developing the skills necessary for children to be able to use information in an effective way. Computing skills are a major factor in enabling children to be confident, creative and independent learners and it is our intention that children have every opportunity available to allow them to achieve this.

'The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems, and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world'.

Computing Long Term Plan

Implementation

The **'Every Lesson Should'** Rainbow document outlines the core learning activities that are the foundation for any Computing lesson delivered in 'The Sacred Heart Way'.

Computing knowledge and skills within the **Dawn Curriculum** have been mapped out in **the Rainbow Skills** document. This document ensures that learning is sequential and progressive for all year groups. **The Rainbow Skills** document is used alongside adapted Purple Mash Scheme of to inform teaching and learning. **Vocabulary** has been progressively mapped out and defined for each year group.

Purple Mash

We use and follow the Purple Mash scheme of work from EYFS, Year 1-6, ensuring consistency and progression throughout the school. Lessons are broken down into weekly units that are practical and engaging and allow computing lessons to be hands on.

When teaching computing teachers can follow the children's interests to ensure their learning is engaging, broad and balanced.

Computing teaching is practical and engaging and a variety of teaching approaches and activities are provided based on teacher judgement and pupil ability. We have a wide range of resources to support our computing teaching. Pupils may use laptops or iPads independently, in pairs, alongside a IT support or in a group with the teacher. Teachers and pupils are also aware of the importance of health and safety and pupils are always supervised when using technology and accessing the internet.

Our pupils are fully encouraged to engage with ICT and technology outside of school. Each teacher and pupil at has their own unique Purple Mash login and password.

Computing and safeguarding go hand in hand and a we provide a huge focus on internet safety inside and outside of the classroom. Additional to all pupils studying an online safety unit through their computing lessons, every year we also take part in National Safer Internet Day in February. The Computing co-ordinator alongside class teachers will plan additional internet safety lessons and activities to take part in following a specific yearly theme. Internet Safety assemblies are also held as well as shared with the parents internet safety information on our school website.

The Purple Mash scheme of work enables clear coverage of the computing curriculum whilst also providing support and CPD for less confident teachers to deliver lessons. Units cover a broad range of computing components such as coding, spreadsheets, Internet and Email, Databases, Communication networks, touch typing, animation and online safety. Through our Purple Mash subscription our teachers can deliver thematic, cross curricular lessons that also follow children's interests and provide flexibility. Purple Mash has an online portal of age-appropriate software, games and activities as well as topic materials and materials to support children's learning in other subject areas for all key stages.

Computing lessons will also use the Purple Mash software to 'make music' using the 2Sequence program, design and make using the 2Animate software and make links with maths through spreadsheets using 2Calculate. Computing work can be stored and saved using pupil log in details and homework or '2do's' can also be set for pupils to access and complete tasks at home that link with their current class learning.

Cultural Capital

We understand the importance of supporting opportunities for all children despite their age, gender, race, religious beliefs, cognitive and physical differences. Computing should be integrated within different cultures and experiences of people, for example, farmers using technology to maximise yield of crops. The Purple Mash Computing Scheme of Work is a comprehensive set of resources aligned to the National Curriculum for Computing, Technology and Digital Competence. The Scheme of Work is intended to facilitate teachers in achieving the very best outcomes for all children. It exposes children to a wide variety of digital tools, technological skills and innovations to enable them to become informed members of the digital community.

Enrichment and Computing Ambassadors

Computing Ambassadors are those children who have shown a love of computing and the ability to shine and excel in this subject. Pupils with a passion for computing apply to be Computing Ambassadors in KS 2 and are appointed following a careful recruitment process.

Their role in school is to help raise the profile of computing by helping with Computing Club. These activities support the development of computational thinking and creativity through both physical and unplugged computing and provide support to other children and staff across our school.

Online Content

Impact

The impact of the curriculum is monitored rigorously by the subject leader to ensure all children benefit from access to the Dawn Curriculum. Such monitoring is used to inform the quality of learning and understanding that pupils have gained.

Upon leaving Sacred Heart, we aspire that our children will have enjoyed and valued learning computing through exploring the depth of each objective within a stimulating environment that encourages children to discuss, reflect and appreciate the impact that Computing has on their learning, development and wellbeing. Finding the right balance with technology is key to an effective education and a healthy lifestyle. We feel the way that we implement Computing within cross curricular channels at Sacred Heart helps children realise the need for the right balance and one they can build on in their next stage of education and beyond.

Computing Rainbow Skills