

COMPUTING POLICY

*St. Joseph's
Catholic
Primary School,
a Voluntary
Academy*

Computing Policy

“Growing in love, in the spirit of Christ, for the benefit of all”

Intent

As a Catholic Academy, religious education and faith development are at the heart of our school curriculum developing the Catholicism and spirituality of our pupils.

All pupils at St. Joseph's have the right to have rich, deep learning experiences that balance all the aspects of computing.

The computing curriculum is split into three strands:

- Computer Science (programming or coding, and problem solving)
- Information Technology (using spreadsheets, creating presentations and manipulating graphics)
- Digital Literacy (encompassing e-safety and teaching pupils how to select the most appropriate digital content).

With technology playing such a significant role in society today, we believe 'computational thinking' and 'creativity' are skills children must be taught if they are able to participate effectively and safely in this digital world. At St. Joseph's, the core of computing is computer science in which pupils are introduced to a wide range of technology including laptops and iPads, allowing them to continually practice and improve the skills they learn. This ensures that they are able to become digitally literate so that they are able to express themselves and deepen their understanding of information and computer technology, a skill which is imperative for the future workplace and as active participants in a digital world. Throughout the year, children are exposed to different areas of online safety to ensure they can use technology effectively and safely. At St. Joseph's online safety is covered each lesson throughout the year to ensure pupils know how to become responsible digital citizens. This will leave them prepared for the possible consequences of an ever-developing digital world, but excited by the infinite opportunities it has to offer.

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

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- 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.

Implementation

The curriculum at St. Joseph's is rooted in the teachings of the Catholic Church; the Early Years Foundation Stage Curriculum and the National Curriculum.

At St. Joseph's, Purple Mash is used to teach each strand of the computing curriculum. Each lesson begins with an e-safety starter to expose children to a range of scenarios that they may encounter in their everyday life, enabling them to become responsible digital citizens. All pupils will experience all three strands in each year group, but the subject knowledge imparted becomes increasingly specific and in-depth, ensuring that prior learning is built upon. Each lesson gives pupils the opportunity to recall and retrieve prior learning to ensure that key vocabulary and knowledge is embedded. Pupils also review and consolidate their learning at the end of the lesson.

Substantive and disciplinary knowledge.

Substantive knowledge in computer science includes: logic, algorithms, decomposition-breaking down into parts and abstraction- removing unnecessary detail.

Substantive knowledge in Information Technology teaches children how to use a range of software to collect, present and analyse data.

Substantive knowledge in Digital Literacy teaches children about the dangers of being online, how to stay safe and how to report concerns.

All lessons start with an E safety starter, where pupils discuss scenarios and present their ideas to demonstrate their understanding.

Disciplinary knowledge in computing (identified in national curriculum) aims to ensure that all pupils:

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- 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
- 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.

Equal opportunities

All children are provided with equal access to the computing curriculum. We aim to provide suitable learning opportunities regardless of gender, ethnicity or home background. A range of scaffolding techniques are used to ensure that all pupils can access lessons and make progress.

Health and Safety

Children are taught how to use technology safely, including e-safety. Pupils in EYFS use technology to support their learning across the different areas of learning.

E safety

E safety is a top priority at St Joseph's. We ensure that e-safety is taught at the start of every Computing lesson, in addition to the online safety units of work, which are part of the Digital Literacy strand of the curriculum. Online safety is also a part of the new RSE framework, as a result online safety lessons are also taught within our RSE and PSHE curriculum. Children also participate in Safer Internet Day each year.

Roles and responsibilities:

The subject lead for computing at St Joseph's is Amy Marriott

It is the role of the computing lead, alongside the overall curriculum Leader, and under the guidance of the Senior leadership team:

- To organise computing within the curriculum and to ensure progression and development.

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- To lead / assist with and monitor planning and quality of delivery of the computing curriculum.
- To keep up to date with the developments within computing and carry out staff meetings when required.
- To monitor and update resources and draw up a subject development plan.

Impact

Our curriculum has ambition for high achievement of all pupils irrespective of background and starting point.

After the implementation of this curriculum, our pupils will be digitally literate and able to participate in the digital world. Our approach to the curriculum results in a fun, engaging and high-quality computing education. Pupils will be equipped, not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly their safety. The biggest impact we want on our pupils is that they understand the consequences of using the internet and that they are also aware of how to keep themselves safe online.

Much of the subject-specific knowledge developed through the computing curriculum equip pupils with experiences which will benefit them in secondary school and will allow them to become more independent and develop key life skills such as problem solving, logical thinking and self-evaluation.

Reviewed: September 2024

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