

At St. Joseph’s

we aim to promote a learning community

based on the Gospel values of

Love, Trust and Respect

where the achievements of everyone are recognised and celebrated

Living, Learning and Loving together with Christ

**Computing Curriculum**

At St. Joseph’s our computing curriculum has been designed so that it enables children to participate safely in an ever-changing world.

**Vision statement**

At St. Joseph’s we recognise that technology can allow pupils to share their learning in creative ways. We understand the accessibility opportunities technology can provide for our pupils when used safely and effectively. Our knowledge-rich curriculum has to be balanced with the opportunity for pupils to apply their knowledge with skill and creativity in the three areas: Information Technology, Digital Literacy and Computer Science.

**Intent**

Computing is taught as a subject in its own right and also supports pupil’s learning in other subjects. Cross-curricular activities offer many opportunities for pupils to learn and apply skills taught in computing.

Within computing lessons pupils learn to use a wide range of computing skills including:

* Word processing to write stories, poems or letters
* Databases to record information
* Spread sheets to create tables, charts and graphs
* Desktop publishing to design posters, leaflets or cards
* Garage Band to create musical scores
* Internet and online safety
* Digital camera (iPad) to record what they have done in class
* Computer coding to give instructions and make something happen
* Raspberry Pi and Micro- Bit (KS 2) to become familiar with circuit boards and to program code
* Code.org to program lines of code
* Use a green screen for special effects including photographs and video
* EYFS – programming Beebots to move on a 2-D grid using co-ordinates of North, South, East and West

**Our beliefs**

**We believe that the development of skills within Computing does not only stand in its own right but teaches the pupils vital skills that can be easily transferred into other areas of the curriculum.** Computing can be hands on; it can promote resilience, develop problem solving skills and open pupil's eyes to the digital world.

**How this is implemented at St. Joseph’s**

Year 1 to 6 follow medium term plans taught in half termly blocks to ensure pupils are able to develop depth in their computing knowledge and skills and where this can be used and linked to other subjects and topics.

Our curriculum also ensures a balanced coverage of computer science, information technology and digital literacy. The pupils will have experiences of all three strands in each year group. The subject knowledge becomes increasingly specific and in-depth, with more complex skills being taught, thus ensuring that learning is scaffolded and all National Curriculum requirements are covered.

Computer Science starts in EYFS where pupils use BeeBots for basic programming and iPads to teach basic early IT skills.

In Year 1-6 pupils use code.org and are taught the geographical language of North, South, East and West to move a character or item on a grid. As the skills progress, pupils will learn how to duplicate code and become more efficient in programming. Pupils will also learn how to test and debug codes.

Years 4-6 can use the Raspberry Pi or Micro- Bit computer for more complex programming.

We access a range of resources to support the teaching and learning for all three areas of computing.

We use Purple Mash, a cross curricular website for primary school children, which enables them to explore and enhance their knowledge in a fun and creative way.

We have a computing suite to cater for a full class and iPads that are compatible with the newest applications. We use a variety of applications with additional resources to enhance learning – this includes using a green screen for photography and animation.

Internet safety is paramount and is embedded within our curriculum. We have an E-Safety Policy that provides guidance for teachers and pupils about how to use the internet safely. Each year group participates in lessons on e-safety. Pupils understand how to stay safe when using technology and Internet safety days are held to address current issues. We have a variety of resources we use including Google Internet Legends.

**Impact of Computing at St. Joseph’s**

The impact of St Jospeh’s Computer Curriculum is to equip pupils with the skills to use computational thinking with creativity. The core of computing is 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. Building on this knowledge and understanding, pupils are equipped to use Information Technology to create programs, systems and a range of content.

We aim for all pupils to have Digital Literacy skills in order to give them the means to be able to use and express themselves and to develop their ideas through information and communication technology, with a focus on e-safety.