



## Computing Policy

### Mission Statement:

St Mary's is a welcoming school who: learn together; live out Catholic values; celebrate all achievement and believe all is possible in Christ's hands.

### Intent

From their first day to their last at St Mary's, we support our children on a journey of learning and faith.

In learning, we want our children, by the time they leave our school: to be numerate and literate, to have received their full entitlement in all areas of the curriculum, and to have the opportunities to succeed in areas of particular interest to them.

At St Mary's, we believe that Computing is an integral part of preparing children to live in a world where technology is continuously and rapidly evolving, so much so that children are being prepared to work with technology that doesn't even exist yet. Therefore, we believe that it is important that our children are provided with a high-quality computing education which equips them to use computational thinking and creativity to understand and change the world. The Computing in the National Curriculum (2013) splits the teaching and learning into three stands (Computer Science, Digital Literacy and Information Technology). It is therefore important that children recognise the difference between what makes each one relevant to their future and everyday lives.

As children progress through KS1 and KS2 we want them to:

- Understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- Analyse problems in computational terms, and have repeated practical experiences of writing computer programs in order to solve such problems
- Evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- Be responsible, competent, confident and creative users of information and communication technology

### Implementation

When planning and teaching computing at St Mary's, we believe that it is an essential part of the curriculum; a subject that not only stands alone but is woven and should be an integral part of all learning. Teachers use the Purple Mash scheme of work to inform the planning of their computing lessons alongside other programs such as Scratch for coding. The school has a computing suite, laptops and iPads, ensuring that children can use computers for a range of purposes and that it is used across the wider curriculum, as well as in discreet computing lessons.

Through the framework of the 2014 National Curriculum, Science taught at St Mary's School, aims to ensure that all children:

- develop age-appropriate, accurate knowledge
- are prepared for a life in an increasingly technological world
- understand what algorithms are, how they are implemented as programs on digital devices, and understand that programs execute by following precise and unambiguous instructions
- design, write and debug programs that accomplish specific goals
- use logical reasoning to predict the behaviour of programs and to detect and correct errors
- use sequence, selection and repetition in programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common use of information technology beyond school
- use search technologies effectively
- select, use and combine a variety of software on a range of devices
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns and recognising acceptable and unacceptable behaviour
- fulfil the requirements of the 2014 National Curriculum for Computing

#### Roles and Responsibilities:

The Science Subject Leader will:

- Establish a secure profile of Computing in school.
- Manage the implementation of the school policy, updating the policy and scheme of work on a regular basis in line with new initiatives
- Order, update and allocate appropriate and sufficient resources
- Model high quality teaching of Computing
- Identify needs and arrange INSET so that all staff are confident in teaching and assessing Computing
- Keep abreast of new developments and communicate these to staff
- Take an overview of the whole school planning to ensure that there is continuity and progression between year groups and learning is effectively planned for
- Support staff in developing pupils' capability within Computing
- Attend appropriate courses and maintain links with the Lancashire advisory team
- Monitor and evaluate standards in teaching and learning in Computing e.g.: looking at pupils' work and conducting pupil interviews
- Contribute to the School Development Plan on an annual basis to maintain and raise standards
- Assist colleagues in the planning and delivering of lessons
- Report to governors
- Use assessment of Computing to inform future planning
- Identify opportunities for Computing in the wider school curriculum.

The class teachers will:

- Plan and deliver Computing lessons to their class.
- Assess the work and progress of pupils and communicate to the subject leader.
- Identify any other opportunities for Computing in the wider school curriculum.
- Have responsibility for the teaching, learning and assessment of Computing and report on pupil progress to parents.

## Impact

### Assessment, Record Keeping and Reporting:

By building on their knowledge of computer science and how digital systems work, children are equipped to use information technology to create programs, systems and a range of content. Our computing curriculum also ensures that children become digitally literate- able to use and express themselves and develop their ideas through information and communication technology- to prepare them to become active participants in a digital world. They will be equipped, not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly - safely. As children become more confident in their abilities in Computing, they will become more independent and key life skills such as problem-solving, logical thinking and self-evaluation become second nature.

Assessment for learning is continuous throughout the planning, teaching and learning cycle. Pupil attainment is recorded in a manner to assist the class teacher, inform the subject leader of standards and to report attainment to parents.

Computing skills are taught and the assessment of the acquisition of these skills are assessed by: observation of pupils, discussion, practical activities, differentiation and use of open ended questions, marking with some opportunities provided for self-assessment and target setting, work moderations of online folders and assessment tasks.

### Review:

The subject leader will review the policy annually. Policy produced March 2021