

# St. Mark's Catholic Primary School



## Computing Policy

Written by: St. Mark's Primary School	Approved level: Governors/Headteacher
Approved by:	Review Date:

## **Introduction**

At St Mark's Catholic Primary School, we follow the Knowsley City Learning Centre Computing Scheme of Work. The Knowsley Computing Scheme is a curriculum that meets the needs and interests of all learners. It contains a range of fun, exciting and creative activities, all based on the essential requirements of the National Curriculum Computing Program of Study. It ensures full coverage of the National Curriculum and allows for a broad and deep understanding of the three areas of Computing: Computer Science, Information Technology and Digital Literacy.

## **Framework**

At St Mark's Catholic Primary School, pupils begin their computational learning in Nursery and Reception where they are given opportunities to become familiar with technology and are provided with activities through the Early Years Foundation Stage framework through strands including 'Understanding the World', 'Literacy', 'physical development', 'Communication and Language', 'Personal, Social and Emotional Development', 'Expressive Arts and Design' and 'Mathematics'.

In Key Stage One and Two, our pupils follow the breadth of study depicted in the National Curriculum, which outlines pupils should be taught:

- Essential Skills
- Computer Science
- Information Technology
- Digital Literacy

## **Aims**

In St Mark's Catholic Primary School we aim to ensure that all pupils can:

- 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
- 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

## **Intent**

At St Mark's Catholic Primary School, our vision is to support pupils in becoming creative, independent learners and ensure they develop a healthy relationship with technology. We value and recognise the contribution that technology can make for the benefit of all pupils, staff, parents, governors and society. We strive to provide safe opportunities in computing to motivate, inspire and raise standards across the curriculum. Everyone in our school community will be equipped with the digital skills to meet developing technology with confidence, enthusiasm and prepare them for a future in an ever-changing world.

We want our pupils to be creators and innovators not just mere consumers of digital content. The idea of the pupils as digital creators is what underpins our planning and computing units. Our pupils are taught to understand that technology is an integral part of modern life and the key to the future is to harness and understand technology's potential. Computing is a constantly evolving subject that involves solving complex problems, being able to collaborate with others, learn from mistakes and refine solutions.

The Knowsley City Learning Centres programme is designed to be easy to follow, with logical sequenced steps that will equip all pupils with the essential skills and knowledge they need to use technology safely and creatively. It has numerous cross circular links with art, mathematics, science and design and technology.

Here at our school we believe safety is paramount. We promote and model a balanced digital life, recognising that amongst the many positives that technology has to offer, risk exists and pupils need to be taught to manage their digital lives properly. We strive to model and educate our pupils to use technology creatively, positively, responsibly and safely. Our curriculum supports the key aims of the government's Internet Safety Strategy (Digital Literacy / UK Council for Child Internet Safety (UKCCIS) framework) of supporting pupils to stay safe and make a positive contribution online, as well enabling teachers to develop effective strategies for understanding and handling online risks.

### **Implementation**

At St Mark's Catholic Primary School, the requirements of the Computing Curriculum are taught through half-termly units, where the pupils have access to a computer/laptop or iPad. The curriculum at our school is carefully mapped out to ensure that pupils acquire knowledge, vocabulary and skills in a well-thought out and progressive manner, with each teacher following the Knowsley Computing Scheme of Work and progression document. The Knowsley scheme highlights the knowledge, skills and vocabulary for each year group and is progressive from year to year. New learning is based upon what has been taught before and prepares pupils for what they will learn next. Every unit has a clear end point and an end product which pupils work towards on their learning journey. We teach computing both discretely and cross curricular when clear links with other subjects are present.

Our Computing units and progression model is broken down into four strands that make up our computing curriculum. These are Essential Skills, Computer Science, Information Technology and Digital Literacy.

Essential Skills: ensure the pupils have the core basic skills to use multiple devices, this is designed to promote independence.

Computer Science: underlines the knowledge and skills relating to computational thinking, coding, algorithms and networks.

Information Technology: underlines the knowledge and skills relating to digital communication, creating multimedia content and data representation/handling.

Digital Literacy: underlines the knowledge and skills relating to online safety and technology in society.

## **Impact**

At St Marks Catholic Primary, in our Computing curriculum the pupils revisit each objective several times, via different themes, helping to ensure the best results are achieved. We encourage pupils to document their own learning in electronic pupil journals. These journals can also be used to showcase and celebrate computing work as well as providing evidence of the pupil's knowledge and digital skills. We monitor to ensure the pupils have learnt the things we have taught them and if they are struggling, we can introduce additional support the next time they encounter that objective. We measure the impact of our curriculum through the following methods:

- Pupil discussions and interviewing the pupils about their learning (pupil voice).
- Pupil journals and assessment/feedback on content creation.
- Moderation staff meetings with opportunities for dialogue between teachers.
- Photo evidence of the pupil's practical learning.
- Video analysis through recording of performance or practical learning in lessons.
- Pupil self-reflection.
- Learning walks and reflective staff feedback (teacher voice).
- Dedicated Computing leader time.
- Formative and summative approaches using assessment tool Insight.

## **Curriculum Links**

Computing has numerous cross circular links with Art, Mathematics, Science and Design and Technology. There are also many opportunities to create links through lessons such as Geography when using google maps and many other subjects via the safe use of suitable search engines. Links are encouraged whenever possible to help support overlearning and recall of knowledge, skills, understanding and vocabulary.

## **Equality, Inclusion and Support**

At St Marks Catholic Primary School we recognise the responsibility to provide a broad and balanced curriculum for all pupils. When planning lessons, teachers will adapt as necessary, to provide relevant and appropriately challenging activities in order to ensure a fully inclusive curriculum. This will ensure all pupils are given equal opportunities to develop their knowledge, skills, understanding and vocabulary.