Computing Policy



2024-25

Intent

At Manor Farm Academy, we inspire all children to achieve their full academic potential: we have high expectations and provide children with the opportunities to be successful. We believe that the teaching of Computing is crucial to the pupils understanding of how to access 21st Century life. We promote independence, creativity, exploration and connectivity within our curriculum. We teach the pupils how to use various platforms to enable them to connect with others, be creative and formally present their learning. Our Computing curriculum has been carefully planned and is reflective of the modern world. We strive to equip pupils with the knowledge and skills they need to access basic computing skills to support them in everyday tasks and be able to access the modern world of work. The pupils will learn a range of developing skills from how to use a keyboard, cameras and filming equipment, how to debug and re-programme apps and how to create their own game! We offer a varied and exciting computing curriculum which challenges and motivates pupils to learn through computing.

We will deliver a curriculum that:

- Is current and reflects the changing world.
- Celebrates all aspects of computing from the use of cameras, iPads, programmable toys, filming equipment, computers and laptops.
- Embraces the creativity of individuals to express themselves through their work.
- Encourages individuality in presenting their learning.
- Promotes independence.
- Builds upon skills and knowledge from previously taught sessions.
- Ensures that pupils have the skills they need to access the modern world.

Implementation

Manor Farm Academy follows a comprehensive progression document to best embed and cover every element of the computing curriculum. The knowledge/skills statements build year on year to deepen and challenge our learners. We follow the Teach Computing Curriculum, a scheme accredited and funded by the Department of Education. The scheme is structured in units that are based on a spiral curriculum. This means that themes are revisited regularly, at least once in each year group.

Computing is taught weekly in KS1 and KS2 and the skills that the children learn are used across the wider curriculum. We recognise that all classes have children with a wide range of abilities and our curriculum has this in mind. All lessons build on the

learning from the previous lesson and, where appropriate, activities are scaffolded so that all pupils can succeed and thrive. Pupils that require it are provided with additional resources such as visual prompts to ensure they reach the same learning goals as the rest of the class. Through challenge in the curriculum tasks deepen understanding of a concept and this challenges pupils to apply their learning in different contexts and make connections with other learning experiences.

We achieve this in a variety of ways:

- setting tasks which are open-ended and can have a variety of responses;
- setting tasks of increasing difficulty (not all children complete all tasks);
- providing resources of different complexity that are matched to the ability of the child;
- challenge is provided to children through questioning and task.

The Subject Leader for Computing will lead and monitor, evaluate, review and celebrate good practice.

In addition:

• The Computing Subject Leader will seek appropriate and relevant training and the opportunity to keep developing their own subject knowledge, skills and understanding, so they can support curriculum development and their colleagues throughout the school.

Impact

Computing at Manor Farm Academy is delivered through our 4 academy values: respect, ambition, individuality and curiosity. Through this, children experience engaging and challenging computing teaching. We constantly ask the WHY behind their learning and not just the HOW. Learners discuss, reflect and appreciate the impact computing has on their learning, development and wellbeing. Finding the right balance with technology is key to an effective education and a healthy lifestyle. The way we implement computing helps children realise the need for the right balance and one they can continue to build on in their next stage of education and beyond. We encourage regular discussions between staff and pupils to best embed and understand this.

At Manor Farm Academy, our pupils:

By the end of EYFS and each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study. This information is from the EYFS 2020 Framework and the 2014 Computing National Curriculum.

In EYFS, Pupils should be able to:

- Explore and investigate the uses of technology and how things work
- Find out about how technology is used in familiar places such as homes and schools
- Learn to select and use technology for a particular purpose
- Be aware of sensible amounts of 'screen time'

By the end of key stage 1 children should be taught to:

• understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions

- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs

• use technology purposefully to create, organise, store, manipulate and retrieve digital content

• recognise common uses of information technology beyond school

• use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

By the end of key stage 2 children should be taught to:

• design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

• use sequence, selection, and repetition in programs; work with variables and various forms of input and output

• use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

• understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content

• select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

In addition, we measure the impact of our curriculum through the following methods:

- Using teacher assessment, a Computing log will be completed at the end of each lesson. This will identify the pupils that have exceeded and those who may need a little extra support.
- Though Project Evolve a knowledge map will be created at the start and end of each unit to establish the development of skills within the pupils' E-Safety learning.