Computing Policy

Written by: Aisha Ibrahim
Date: June 2021
Review date: July 2023

Computing Policy

Introduction:

'A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world' (National Curriculum, 2014).

Our vision is to develop and expand pupil's understanding of information technology, computer science and digital literacy throughout their primary school life. It is vital that children are encouraged to develop their digital literacy through active methods and tools which engage their learning to become digitally literate. At Mayespark Primary School, children are given opportunities to develop their computing skills to operate and manipulate technology safely throughout their education, in order to prepare them for the wider world.

Aims and objectives:

- To teach and meet the requirements of the National Curriculum programmes of study for computing.
- To provide a curriculum which clearly shows progression that challenges and engages pupils.
- To ensure the school's technological infrastructure to teaching computing is used to enhance learning throughout the curriculum.
- To respond to new developments in technology.
- To develop children's digital literacy to equip pupils with confidence for later life.
- To ensure children are aware of the dangers online and provide strategies for children to deal with situations that occur in their lives.

EYFS:

Despite computing not being explicitly stated within the Early Years Foundation Stage statutory framework, pupils should be given opportunities to use technology to solve problems and produce creative outcomes.

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

- *understand what algorithms are; how they are implemented as programs on digital devices; and those 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. (National Curriculum, 2014)*

By the end of key stage 2 pupils 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*
- *use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. (National Curriculum, 2014)*

Online safety:

Online safety has a high profile at Mayespark Primary School for all stakeholders. We ensure this profile is maintained and in accordance with the document*, Teaching online safety in schools* (2019) to ensure that all pupil needs are met. Online safety is taught every half-term.

Resources:

Pupils have been given safe access to online education opportunities outside of school.

These are:

- Times Tables Rockstars
- PurpleMash
- Oxford Owl
- Reading planet
- Google classroom

All children have a username and password provided by Wonde consisting of either letters and numbers (KS2) or emojis (KS1). Pupils have been shown how to log on and how to keep their passwords safe from others.

Planning:

In Mayespark Primary School, computing is taught once a week. Units are planned in accordance with the National Curriculum. Schemes of work incorporate PurpleMash units, Mayespark plans and/or Rising Stars. All teachers are expected to adapt lessons and resources to address misconceptions and meet the need of all pupils. The medium-term plans enable pupils to achieve objectives and facilitates a clear progression each year. A progression document allows staff and parents to understand how skills and knowledge develop throughout the school. Cross-curricular links are encouraged and taught where appropriate links can be made.

Inclusion:

At Mayespark Primary School, we aim to enable all children to achieve to their full potential. This includes children of all abilities, social and cultural backgrounds, those with disabilities, EAL speakers and with SEND.

Assessment and monitoring:

Pupil attainment is assessed in accordance with the school policy. The assessment guidelines enable staff to accurately identify attainment of pupils. Work should be saved in 'documents' or on Purplemash if completed online and offline tasks that are recorded on paper should be stored in pupils' computing files.

Children are encouraged to self, peer and group assess work in a positive way using online collaborative tools. Formative assessment is undertaken throughout lessons and pupils are very much encouraged to be involved in that process. Summative assessment is undertaken at the end of a unit using an assessment grid.

Role of subject leader:

The computing subject leader is responsible for the teaching, assessing and resourcing in the school. The curriculum leader is expected to develop staffs' professional development. The subject leader will ensure resources are available to use by all staff and children have access to relevant resources to facilitate their learning. The subject leader will assess and monitor progression in the school and will evaluate the curriculum annually to ensure all children are receiving quality lessons.

Health and Safety:

Mayespark Primary School takes all necessary measures to ensure both staff and pupils are aware of the importance of health and safety. Staff and pupils are reminded about safety, including the dangers of electricity.