



Warden House Primary School Computing Policy

Review date: Term 6 2020

Aims

The National Curriculum states that the computing curriculum equips pupils to develop computational thinking and creative problem solving to understand and change the world around them. Pupils at Warden House Primary School are taught the principles of computer science and practical use of digital information systems to generate original content. This new digital literacy will ensure that pupils are able to participate in future academic and workplace environments.

Pupils will:

- Develop an understanding of the fundamental principles and concepts of computing;
- Use computational thinking to analyse problems and develop a logical and creative approach to problem solving;
- Understand how digital technologies utilise hardware and software and be able to analyse problems and create original digital content;
- Be responsible, safe, literate, competent and confident users of IT who understand the value of technology both inside and outside of learning.

These objectives are derived from the aims and guide our decisions in planning a scheme of work. They will form the basis for evaluation and assessment.

Early Years Foundation Stage

- Know how to operate simple equipment.
- Show an interest in technological toys or real objects such as cameras.
- Demonstrate ability to make toys work through manipulation of moving parts or pressing of buttons to activate.
- Know that computers can store and retrieve useful information.
- Use technology to access a simple program on a computer to achieve a task.
- Recognise that technology is used in a range of places such as homes and schools.
- Select and use technology for a purpose.

Key Stage 1

In Year 1 and 2 pupils will:

- Develop an understanding of algorithms as defined as precise and unambiguous instructions and commands, and how they are used by digital devices.
- Create and debug simple algorithms.
- Use logical reasoning to predict the outcome of an algorithm.
- Use digital technology purposefully to create and organise original content, manipulate digital content, store and retrieve digital content.
- Be a safe and respectful user of digital technology who knows why it is important to keep personal information private, know who/where to go for help if they have any concerns when using online technologies.

Key Stage 2

In year 3, 4, 5 and 6 pupils will:

- Identify problems in the abstract and decompose into smaller parts in order to design, write and debug algorithms that are purposeful including control of, or simulation of physical systems.
- Understand that computers require an input and produce an output and be able to develop complex programs using sequences, repetition and variables.
- Understand how computer networks have enabled new opportunities for communication and collaboration, and how the WWW and the Internet have created new services.
- Understand how search technologies use algorithms to filter results and appreciate how the Search Engine Results Pages are ranked. Be a discerning and evaluative user of digital content.
- Select, use and combine information in a variety of software products on a range of digital devices to create systems and content that accomplish a purpose. This may include creating a range of programs, searching the WWW effectively, collecting, analysing, evaluating and presenting data and information.
- Use technology safely, respectfully and responsibly and recognise acceptable / unacceptable behaviour and be able to decide to take the appropriate actions. Be able to identify a range of ways to disclose and report concerns about online content or inappropriate contact.

Differentiation and SEN

Pupils with special educational needs will be entitled to the same access of computing as their peers. In planning lessons teachers will identify the learning goals for the majority of the pupils as well as extension activities to deepen and widen knowledge. Consideration will be given to modifying tasks, or providing peer or adult support, for pupils with difficulties. It is important to note that pupils with learning difficulties may achieve well in computing and should be given every opportunity to provide support for others.

Teachers will liaise with the SENCO on the use of computing and digital devices to improve involvement in the curriculum.

Cross curricular links

Computing is rooted in mathematics, science and design technology and provides insights into systems, both natural and artificial. E-safety is also an essential component of PSHE. Safeguarding issues arising from concerns related to E-safety to be referred to the Designated Safeguarding Lead via the My Concern system.

Equal opportunities

All pupils are entitled to equal access to the wide variety of digital computing technologies and ICT equipment within school in order to develop their personal capability. However to tackle the digital divide and to provide opportunities for pupils from less privileged backgrounds, additional support can be provided to identified target pupils. When pupils work in groups care will be taken to ensure that all pupils are active and have equal access to the digital device.

Pupils with computing and digital communications devices at home are encouraged to use it for educational benefit and parents will be offered advice about what is appropriate. For pupils who do not have access to digital technologies at home there will be extra-curricular activities.

Health & safety

Pupils are encouraged to use digital technologies safely and appropriately. When using the range of mobile digital devices available throughout the school they are encouraged to sit comfortably using

both hands on the keyboard where appropriate. Further guidance is available in the school's health and safety policy.

Assessment, recording and reporting

Pupils are continuously and formatively assessed in Computing and ICT by teachers through regular observation of progress against stated objectives to meet age group expectations. A summative assessment is made 2 times a year and children's levels are recorded on the computing assessment grid on the T-drive. Questioning and analysis of the work is presented in line with the school's general policy for assessment and reporting.

Management and administration

The curriculum will be planned to allow pupils a wide range of activities to cover and teach the programmes of study for computing. Teachers will use the key stage plans to ensure that pupils have sufficient access to experiences and equipment to receive a balanced experience of computing.

The role of the subject coordinator

The subject coordinator will work with the school management team to ensure implementation of the school's computing policy. The coordinator and enquiry hub will be responsible for monitoring curriculum coverage and the quality of teaching and learning. The coordinator and enquiry hub will plan and lead the development of all school staff in computing and provide regular reports on the level of resources.

Review

This policy will be reviewed by the Enquiry team as part of the schools two-year review cycle to evaluate the school's progress towards its computing targets, with additional required action to be identified and tracked by the Computing coordinator.

Progress will be discussed with the school senior leadership team and reported to the governors.

This evaluation will form the basis for an action plan, which will then inform the school Short Term Plan.

Written by: Mr A Atkinson