

Palace Wood Primary School



Computing Policy

Date Policy Written: Autumn 2020

Date for Review: Autumn 2023

Signature of Headteacher:

This policy has been impact assessed by Donna Finch in order to ensure that it does not have an adverse effect on race, gender or disability equality.

Introduction

Computing (principally but not exclusively computers) is used in many ways for the presentation, analysis and storage of information, but also to model, measure and control external events, to solve problems and to support learning in a variety of contexts, not least through the use of the internet, across the whole curriculum. The term computing is understood to incorporate ICT.

The use of computing is an integral part of the school life and is a key skill for everyday life. Computers, tablets, programmable robots, digital and video cameras and recording devices can be used to acquire, organise, store, manipulate, interpret, communicate and present information. As such, Palace Wood primary school recognises that its pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively.

The purpose of this computing policy is to state how the school intends to make this provision.

Aims

- Provide a relevant, challenging and enjoyable curriculum for ICT and computing for all pupils.
- Meet the requirements of the national curriculum programmes of study for computing.
- Use computing as a tool to enhance learning throughout the curriculum.
- To respond to new developments in technology.
- To equip pupils with the confidence and capability to use computing throughout their later life.
- To enhance learning in other areas of the curriculum using computing.
- To develop the understanding of how to use computing safely and responsibly.

The national curriculum for computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication
- 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.

Rationale

The school believes that computing:

- Gives students immediate access to a rich source of materials
- Can present information in new ways which help pupils understand, assimilate and use it more readily
- Can motivate and enthuse pupils
- Can help children focus and concentrate
- Offers potential for effective group working
- Has the flexibility to meet the individual needs and abilities of each student aims

Objectives

Early years

It is important in the foundation stage to give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. Computing is not just about computers. Early years learning environments should feature ICT scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to explore using non-computer based resources such as metal detectors, controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills. This is particular useful with children who have English as an additional language.

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 that programs execute by following a sequence of instructions
- Write and test simple programs
- Use logical reasoning to predict and computing the behaviour of simple programs
- Organise, store, manipulate and retrieve data in a range of digital formats
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

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

- Design and write 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; generate appropriate inputs and predicted outputs to test programs
- Use logical reasoning to explain how a simple algorithm works 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 • Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Resources

The school acknowledges the need to continually maintain, update and develop its computing resources to keep up with the pace of new technologies. The school will do this by:

- Investing in software that will effectively deliver the strands of the computing curriculum
- Investing in software that will support the use of computing across the curriculum
- Investing in new hardware as appropriate to support effective teaching and learning
- Engage in a rolling programme of hardware replacement to ensure that school hardware remains functional

Monitoring and evaluation

The subject leader is responsible for monitoring the standard of the children's work and the quality of teaching. The subject leader is also responsible for supporting colleagues in the teaching of computing, for being informed about current developments in the subject, and for providing a strategic lead and direction for the subject in the school.

Equal opportunities

We will ensure that all children are provided with the same learning opportunities whatever their social class, gender, culture, race, disability or learning difficulties. As a result we hope to enable all children to develop positive attitudes towards others. All pupils have equal access to ICT. Resources for SEN children will be made available to support and challenge appropriately.

Health and safety

- The school is aware of the health and safety issues involved in children's use of computing and the school will dispose of redundant computing equipment responsibly, safely and appropriately.
- Computing equipment should be treated with the same care as any other electrical equipment.
- Pupils should be encouraged from the earliest age to consider and adjust their posture when using the keyboard in order to avoid strain to the arms and back.
- Staff should consult the SENCo with regard to any implications of the use of computing for known medical conditions e.g. Epilepsy, visual impairment.
- Staff using digital projectors should be made aware of the safety guidelines and follow the safety guidelines in them. Further details can be obtained from the network manager.
- All portable electrical equipment is checked every 12 months by an external contractor.
- A member of staff will ensure safe movement of laptops and Ipads around the school.
- 2020 Covid Statement (This will be in place until government guidance suggests otherwise)
-Computing lessons on a rota and equipment is wiped down after use.

Security

Users are reminded of the following:

- All pupils and parents will be aware of the school rules for responsible use of computing and the internet and will understand the consequence of any misuse.
- The school's computers should not be used at any time for downloading, copying or storing illicit or offensive material.
- All use of the school's computing resources should be in line with this policy.

Please also refer to the Staff Acceptable Use policy and Online Safety policy.