Copeland Road Primary Computing Policy

Last reviewed on:	March 2023
Next review due by:	March 2024

'Computers are now part of everyday life. For most of us, technology is essential to our lives, at home and at work. 'Computational thinking' is a skill children must be taught if they are to be ready for the workplace and able to participate effectively in this digital world'.

Curriculum Aims

Our curriculum aims to ensure that all pupils:

- 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.

Early Years and Foundation Stage

Computing is taught within EYFS through Purple Mash. The children have access to the Beebots and remote control cars, both introduce the early stages of programming. Online Safety is an important aspect and the children use the picture book Penguin Pig to understand staying safe online. The children have access to the study centre and use Millie's Mouse Skills and Millie's Keyboard skills to develop typing on a desktop computer.

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 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

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

All of our children are entitled to a continuous and progressive computing curriculum, which meets their individual needs. The computing curriculum has been planned using national curriculum guidance and in conjunction with the Purple Mash scheme of work. The children in Class 4 have access to Micrbits and Class 6 use VEX GO equipment. Teachers will be encouraged to make cross-curricular links especially in the teaching of IT. However, many aspects of computer science will need to be taught discretely.

<u>Responsibilities</u>

Class teachers are responsible for:-
- Differentiating and adapting lessons to cater for all ability levels, ensuring SEN (Special Educational Needs), MAT (More Able and Talented) and EAL (English as an Additional Language) are suitably challenged to meet their needs

- Incorporating IT, where appropriate, when planning classroom activities

- Understanding and utilising the range of software available in school and its use in relation to cross curricular activities

- Loading and running programs

- Recognising and dealing with common faults and mistakes that can arise when using computing hardware and software

- Maintaining own knowledge and skills of computing in accordance with educational developments

- Ensuring children are responsible, respectful and safe when using IT

- Reporting problems or faults to the *ICT School Services Shared Engineer Portal*

  (SE Portal)

The Computing coordinator is responsible for:-
- Assisting SLT with coordinating, developing and implementing the schools policy on Computing

- Promoting and overseeing staff INSET activities relating to Computing development

- Developing strategies for the efficient deployment of existing computing resources in the school

- Consultation with the Head Teacher and staff regarding Computing objectives

- Liaising with Durham County Council staff and other educational establishments on matters relating to Computing

- Arranging for the upgrading or replacement of hardware and software as appropriate

- Organising/managing the duties of the technician who visits school fortnightly

- Completing school action plans and evaluations relating to Computing

- Updating school policies relating to Computing

Darren Hobson is responsible for the schools compliance with the Data Protection Act and the role of Copeland Road's GDPR officer is also Darren Hobson. All staff are responsible for protecting the data they use as part of their role.

The Computing Co-coordinator is the schools online safety officer, responsible for the online safety policy. It is also their responsibility to provide staff with support around the implementation of Purple Mash, Digital Literacy, Be Internet Legends as well as the sharing of information from the Digital Resilience Officers and promoting Safer Internet Day each year.

Maintenance is carried out by the school's technician who visits the school fortnightly to give technical support and maintain the network to its optimum capability. In addition, he completes network tasks as designated by the Computing Co-ordinator. Any issues arising from the use of computing equipment/software need to be recorded on the ICT School Services Shared Engineer Portal (SE Portal). The Computing Co-ordinator will decide on whether issues can be dealt with using co-ordinator knowledge or by the technician.

When working with tools, equipment and materials, in practical activities and in different environments, including those that are unfamiliar, pupils should be taught:

- to <u>never</u> look into the projector lens
- the appropriate and safe use of all equipment, especially scanners and photocopiers due to the bright lights.

Staff Development

To implement this vision effectively, all staff need to be confident in all areas of the computing curriculum. Staff who have identified areas of development in computing will be identified and through communication between the Computing co-ordinator and the Headteacher, relevant courses will be located or training brought into/held at school. Training will also be offered on new hardware and software purchased. In addition, the Computing co-ordinator and/or other staff will be able to support staff members in using various programmes.

The Computing Co-ordinator keeps up to date with the latest technological advancements and curriculum developments by attending conferences, network and school cluster meetings. Information is then fed back to the rest of the school during staff meetings. Software copyright is a serious issue and is taken seriously by Copeland Road Primary. Only software which we have purchased the correct user site license will be loaded onto all stations in the study centre so that staff know it is acceptable to use on all machines and tablets.

Home/ School Links

To foster these links, the school has set up its own website to promote the school, highlight the children's achievements and inform the parents of termly dates, key policies, school staff and governors etc. It has a newsfeed/blog facility that allows key pieces of information to be posted. Visitors the website can access a wealth of information from online safety to Health & Well-being. The link for the website is https://www.copelandroad.durham.sch.uk/

We also use Arbor; this communication tool between school and parents provides effortless communication via email and text. More information can be found at https://arbor-education.com/