Computing Policy

Date: September 2023
Review Date: September 2024 (Or sooner if there are changes to curriculum or legislation)

Statement

- At Cranford Primary School, we believe that Computing should enable all children to have equal opportunity and frequent access to a wide range of applications.
- We ensure that Computing is an integral part of all curriculum areas and is used to support them using a variety of activities and programmes.
- We will use computing to enhance learning.
- We ensure that all teaching areas are fully equipped with the necessary hardware and access to software to facilitate every child's needs.
- All staff are supported in their own Computing training needs in order that their knowledge in the use of Computing is both developed and consolidated.
- All staff are aware of the variety of Computing applications and confident in their use.

Teaching and Learning

Intent:
To encourage children to interact and explore a variety of different programmes and interacting with technology. We aim to provide a progressive and supportive curriculum where children can understand and apply the fundamental principles and concepts of computer science including algorithms, abstraction, logic, and data representation. Children will analyse problems in computational terms, have repeated practical experience of writing computer programs in order to solve such problems and become competent, confident and creative users of information and communication technology. We also aim to develop children's understanding of internet safety by teaching e-safety within the Computing curriculum.
Implementation:
To provide a progressive curriculum, From Year 1 to Year 6, we use the NCCE 'Teach computing' curriculum. Children are given access to a wide range of technology e.g. interactive whiteboards, IPads, beebots, computers and chrome books. From Early Years till Y6 children are given access to 'Purple Mash' which is one of the programmes used to develop computing skills e.g. coding. To ensure that children are safe, we monitor their activity through teaching e-safety in foundation years whilst in KS2 effective searching is taught. In both KS1 and KS2 knowledge organisers are used to assess prior knowledge and to introduce new topics or concepts. Computing is made cross curricular by using technology across all other subjects taught in the school curriculum.
Impact:
Children will be secure in their understanding of computing, as well as being aware of using technology in a safe way. Children will be competent as they would have developed the necessary skills to be able to complete basic programmes, and in KS2 they would have developed this further by understanding code and programming.

Vision

We believe that Computing should be used in a discriminate manner not merely for the learning of rote skills, but as a tool to enhance learning that could not be achieved by any other means as quickly or as effectively. The use of Computing will enable the development of professional skills through working with others and using the internet and email. Computing aims to provide opportunities to solve problems and to experience activities and environments which could otherwise not be encountered in such a stimulating way. The use of Computing can be used as a stimulus for other work and enhance activities throughout the curriculum e.g. as a tool for staff to produce teaching materials. Computing can provide opportunities to develop physical skills such as hand eye

co-ordination and fine motor control, particularly when controlling the mouse or using a laptop scroll pad. Computing can develop cognitive skills and consolidate concepts about shape and space/knowledge and understanding of the world. Overall, Computing should be exciting, stimulating, creative and challenging for all children.

Background and current practice

Each Nursery, Reception, KS1 and KS2 classes all have an interactive whiteboard and each teacher has access to a desktop. The children are able to move from using their finger as a mouse to using a pen, thus ensuring progression of fine motor skills. The Music room, SEN and EAL rooms have interactive boards for use with inclusion groups or for training.

KS2 has access to a set of 30 chromebooks for use in classes across all subjects.
KS1 and EY's have access to laptops and desktops around the school.

Staff have their own laptops for home use, PPA, subject coordinator and management time. Ipads are used in Nursery and EYs to document the children's activities and learning. Each class also has an Ipad to document and share learning.

The school subscribes to Purple Mash, Oxford Owls, and Bug Club but we are constantly reviewing the software available to pupils both in school and home access. The school website has been re-launched and each year group has a page which they update termly, all newsletters and additional information about the school can be found on the website including policies and the local offer. Newsletters/letters are also emailed to parents.

All up to date software available is accessible via the school system and there are two large music centers provided in the main halls attached to a laptop, projector, DVD//TV and screen. This enables a wide range of multimedia usage in the hall for assemblies, special events and training.

Assessment and record keeping

Computing capability is developed over time. Assessment takes account of the skills developed and individual skills checklists are also available through the Switched On scheme.

The Computing scheme of work from NCCE is used in line with the online resources and the computing curriculum for Year 1 to Year 6 and this has been placed on Google drive, with a shortcut, to ensure all staff can access their year groups' plans as well as look at what the pupils would have covered in previous years. Assessment should be integral to teaching and learning and planned for, using the scheme of work to ensure continuity and progression.

Progress in Computing is tracked using target tracker. Keeping samples of each child's Computing work helps to inform the annual report. Evidence may be stored in a folder, as a digital image on the childrens google drive or within Purple Mash itself.

Foundation Stage

Within the Foundation Stage the children identify the uses of everyday technology. They use Computing and programmable toys to support their learning. Specific software has been purchased for this stage. The children have access to Ipads, laptops and Interactive Whiteboards.

Key Stages 1 and 2

The children follow a scheme of work from NCCE which is directly linked to the National Curriculum. It is supplemented in places with the linked resources from Purple Mash. Assessment is done through teacher assessment using the Target Tracker band descriptors and pupil assessment. Computing is not just taught and assessed explicitly in Computing lessons, but also through cross-curricular lessons and tasks where teachers endeavor to make links across all subjects, wherever possible, providing opportunities for the children to apply their skills.

Progression in Computing

Children need time to consolidate skills by applying them to a wide range of contexts and in a cross-curricular nature. They are encouraged to reflect on their use of Computing and be able to decide when to use it. As children choose Computing tools to meet their needs so they progress. Talking about the use of Computing is an important part of the process.Children will be looking to refer back to what was learnt in previous years to develop long term memory of learning. The Teach Computing Curriculum is built around an innovative progression framework where computing content has been organised into interconnected networks

Monitoring Computing

Looking at planning, displays, using an informed walk, tracking use of software, observations and discussions/questionnaires with children all contribute to effective monitoring.

Cross curricular links

Links are being developed across all areas and are identified within planning as well as within the new scheme of work.

Health and safety

When working with tools, equipment and materials in practical activities and in different environments, children should be taught:
- About hazards, risks and risk control
- To recognize hazards, assess consequent risks and take steps to control risks to themselves and others
- To use information to assess the immediate and cumulative risks
- To manage their environment to ensure the health and safety of themselves and others.
- To explain the steps they take to control risks.
- Security: All equipment is security marked with CPS label (asset tag) with a model number. All equipment is covered over at night/weekends and/or locked in secure trolleys by staff. The school is protected by an alarm system and CCTV. websites are restricted and monitored

Computing Technicians
The school employs Computing Technician whose specific roles relate to the provision of support in computing. This support takes a variety of forms, including:
- dealing with technical queries relating to software and hardware;
- carrying out rudimentary and routine maintenance and repairs of hardware ;
- purchasing and updating equipment;
- supporting admin staff with the use of ICT within their roles;
- responsible for regularly updating anti-virus software
- websites are restricted and monitored?

Equal opportunities: Pupils with SEN/EAL/More Able
At Cranford Primary School, we teach computing to all children, whatever their ability, age, gender or race. Computing forms part of our school curriculum policy to provide a broad and balanced education for all children. We provide learning opportunities that are matched to the specific needs of children with learning difficulties.

● Computing can enhance access to the curriculum; encourage motivation and the development of skills with mild/moderate learning difficulties.
● Software designed to reinforce concepts can be of value and used to target specific learning.
● Modelling and simulation programmes encourage the use of logic and thinking skills, decision making, organisational and planning skills.
● Spell checkers, word banks and calculators can support learners who have difficulties with sequencing and memorising.
● Special equipment is available when requirements are very specific as described in a statement of need.
● When planning use of Computing, teachers take account individual needs and make provision for all children to participate effectively in the curriculum.
● EAL children have diverse needs which need to be considered in terms of support to access Computing.
● More able children should be offered challenging programmes and activities at an appropriate level.
● This policy was developed with reference to the School's Racial Equality Policy.

The World Wide Web
The school has been linked to the internet since 1999. Staff and children enjoy unlimited access. The school website is – http://www.cranfordprimary.com/.

The school has an internet safety agreement for parents to sign which is part of the home school agreement. The school has an Acceptable-use for Internet and related technologies policy. A list of authorised websites have been established and Teachers need to sign in to use You Tube or other sites not on the list to ensure the children's safety so that they cannot access inappropriate sites/material. Class teachers are responsible for providing children with rules whilst in the Computing suite.

Online resources for home use
In recent years there has been a boom in the education opportunities that are available online. We have bought into the following to give pupils safe access to online education opportunities outside of school.
These are:
● Purple Mash
● Oxford Owl
Pupils have passwords that can be used to access these sites. Pupils have been shown how to use them and how to keep their passwords safe from others.

Reviewed: September 2023
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