



Copnor Primary School

Computing Policy

This policy sets out how Computing is taught within Copnor Primary School.

Policy Availability

This policy is available to parents and carers via the school website

www.copnorprimary.co.uk/information/policies.

If you require this policy in printed format, please contact the school office.

Rationale

Computing aims to prepare pupils to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technology. Copnor Primary School recognise that computing is an important tool in both the society we live in and in the process of teaching and learning. Pupils use different tools to find, explore, analyse, exchange and present information responsibly and creatively. They learn how to employ computing to enable rapid access to ideas and experiences from a wide range of sources. E-safety prepares children to make good choices and keep themselves safe.

Our vision is for all teachers and learners in our school to become confident users of ICT so that they can develop the skills, knowledge and understanding which enable them to use the appropriate resources effectively as powerful tools for teaching & learning.

Aims

To provide a broad, balanced, challenging and enjoyable curriculum for all pupils ensuring continuity and progress in all strands of the Computing National Curriculum. The children will, therefore, be able to:

Computer Science

- To understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representations.
- To allow children to become confident coders to help them solve problems.
- To create opportunities for collaborative as well as independent learning on a range of devices.
- To develop the children's understanding of technology and how it is constantly evolving and improving.

Digital Literacy

- To enable children to become autonomous, independent users of computing, gaining confidence and enjoyment from their activities
- To develop the pupils' computational thinking skills that will benefit them throughout their lives.
- To allow children to explore a range of software and hardware, allowing them to evaluate how to use it to solve problems.
- To promote pupils' spiritual, moral, social and cultural development.
- To develop the understanding of how to use computers and digital tools safely and stay safe online.

Information Technology

- To enhance and enrich learning in other areas of the curriculum by cross-curricular use of ICT.
- To ensure ICT is used, when appropriate, to improve access to learning for pupils with a diverse range of individual needs, including those with SEN and disabilities.

Provision

The Computer curriculum at Copnor Primary School is taught in accordance with the legal requirements set out in the National Curriculum. The curriculum has been designed so all children have access to a range of ICT resources. Children will have a number of different computing experiences. Cross-curricular links will be exploited where appropriate.

Early Years Foundation Stage (EYFS)

The main area within the EYFS statutory framework related to computing is the Understanding the World - Technology strand, although each area of the framework enables the staff to prepare children for studying the computing curriculum. The classrooms might contain a role-play area with a range of technology, both functioning and model / broken devices, or a variety of electronic toys, such as remote-controlled cars, walkie-talkies and interactive pets, as part of the continuous provision. Children need to select and use technology for a particular purpose, rather than simply being given a device.

The pedagogical approaches used for this age group will also be carefully considered, which includes the need to tinker, or play, with a device, in order to discover how it functions.

Key Stage One (KS1) and Key Stage 2 (KS2)

In KS1 and KS2, there is a progression in the skills the children learn and demonstrate and in the complexity of the technology and software they use. The children will use technology in order to learn programming e.g. by using programmable toys and programs on screen. They will also develop their computational thinking e.g. be filming, exploring how games work, correcting bugs in programmes, using interactive toys, cracking codes and developing their project management abilities. The use of digital images, the filming and editing of videos, the creation of digital music and the creation of digital art are some of the ways the children will be able to show and develop computing creativity. The internet will also be a key area of the curriculum, with research, image finding and the exploration of how the internet works part of their computing lessons. They will also explore how the school's own computer network is used to store information and retrieve information as appropriate. The use of communication software-such as Word and PowerPoint-will be explored as well as how online media such as wikis and blogs/vlogs are used to communicate. The children will learn how emails are used to communicate and will look at the plethora of alternatives that are being developed. Finally, they will explore how technology can improve efficiency and support the storing and analysing of data e.g. through exploring Excel and other databases and the capturing and analysing of data concerned with sound and light around the school.

Pupils with SEND, including the more able

All children will be enabled to access the curriculum in line with the current inclusion policy.

Appropriate resources will be purchased when required. e.g. Clicker software, screen magnifiers, access devices such as switches or large key keyboards. The computing leaders will advise or seek specialist advice for staff where necessary.

Computing science can be a very challenging subject for even the most able children. Starting from a simple idea, children should be encouraged to use computational thinking and generalising to extend the task into new areas of their own choice.

Organisational strategies

Year groups from years 1 to 6 will teach computing for a minimum of one hour a week; however, they will also experience computing in other lessons.

Copnor Primary School long-term planning is used to form the medium-term and short-term plans for computing. On these are the learning objectives, activities to be completed, vocabulary and assessment. The knowledge and skills progression have been created so that the planning is progressive in developing pupil skills and knowledge.

Year R will be introduced to more formal computing lessons during the Summer Term.

Resources

Pupils have access to laptops in each Key stage. Constant technological advances necessitate additions to, and updating of, both hardware and software. There will be a five-year plan in place for the replacement and updating of ICT in the school and this will be updated at least annually.

A record of all software installations and licenses purchased will be maintained by the technicians and will be updated at least termly.

The school operates a Windows based server/client network in all teaching areas, allowing children and staff to access their documents, all appropriate software and the internet to support their teaching and learning.

Roles and responsibilities

The governing body will approve the computing policy and hold the Headteacher to account for its implementation. Although the computing leader will support the teaching and carry out monitoring of the subject across the school, the Headteacher is responsible for ensuring that it is taught consistently across the school.

Staff

Staff are responsible for:

- Delivering computing safely and accurately
- Monitoring progress
- Responding to the needs of individual pupils
- Ensuring that their subject knowledge is up-to-date and seeking support where it is not.

Pupils

Pupils are expected to engage fully in computing and to ensure that they safely and sensibly use the equipment. They are expected to follow the rules of the school and only use the computer software and hardware in the ways they have been taught. The children will be expected to use the internet sensibly and within the parameters set by the school's staff.

Parents/Carers

Parents are expected to support their child in their learning where necessary in homework tasks, so that the work is produced to a good standard.

Health & Safety

The school will keep stakeholders safe by ensuring that:

- E-Safety is taught at least termly. Where the children are required to use the internet, reminders are given to the children.
- Reminders for safe and responsible use of ICT and computing will be displayed across the school and verbal reminders regularly provided to the children.
- All staff are responsible for ensuring that all children are able to use equipment safely.
- Children should be sat with laptops at eye level and with access to appropriate keyboards and mice.
- Staff will supervise the moving of laptops up and down stairs.

- The children will be taught how to carry the laptops to their classroom and how to do so safely while being carefully supervised by the class adults.
- All electrical equipment will be maintained and checked for safety in accordance with current school requirements.
- Before the use of equipment, a member of staff will visually check the computers and other electrical equipment for obvious signs of damage/defect.
- Any equipment identified as being/potentially being faulty will be removed from service until it has been checked by a qualified person.
- The children will also be taught how to visually check equipment as well as being taught about the dangers of electricity.
- Portable Appliance Testing (PAT) will be conducted annually by qualified electricians.
- Any obsolete equipment will be disposed of in accordance with the Waste Electrical and Electronic Equipment (WEEE) requirements (available at <https://www.gov.uk/guidance/regulations-waste-electrical-and-electronic-equipment>).
- The anti-virus software will be regularly updated.
- The use of ICT and computing will be in line with the school's Acceptable Use Policy (AUP).
- Stakeholders will be made aware of the AUP.
- Software/ APPs installed on the school network must have been vetted by the teacher for suitable content before being purchased and installed.
- No personal software will be loaded onto school computers.

Assessment

Staff will ensure that assessment for learning opportunities are utilised in lessons by the children to enable them to recognise skills and learning. Assessment in all curriculum areas will be stored and maintained electronically on the server every half-term. Children's abilities and progress will be commented upon annually in teachers' reports to parents/carers as well. The school has clear expectations of what the pupils will know and understand at the end of each year and key stage.

Monitoring

The Computing subject leader is responsible for monitoring the standards of children's work and the quality of teaching. The subject leader will monitor plans, teaching and learning and work with the Senior Leadership Team/Headteacher in order to evaluate strengths and weaknesses in the school and indicate areas for improvement. The subject leader will regularly evaluate the scheme of work to ensure that the needs of the pupils are being met and that there is progression and continuity of learning through the school.

The Computing subject leaders liaise with the Headteacher and the computer technician/provision from an outside specialist company to check that the resources and equipment are kept up to date.

Continuing Professional Development

All staff are entitled to the following:

- An annual audit of their training needs as part of the performance management process.
- Coaching, mentoring and training in response to this audit if it is considered a priority.
- Training provided for any new software or hardware as it is introduced.

In addition, the Computing subject leaders also monitor the staff skills and their knowledge.

Completion Date: March 2021

Review Date: September 2022