



Copnor Primary School - Computing Policy

Aims

- All children, regardless of educational need, will receive their Computing entitlement as set out within the National Curriculum
- Children develop a range of computational thinking skills: algorithms, algorithm evaluation, decomposition, generalisation and abstraction (*Computer Science*) mainly through the medium of programming
- Children are provided with a range of opportunities to become confident users of technology (*Digital literacy*)
- Children understand common uses of technology in home, school and the wider world and start to appreciate the value of networks and the Internet (*Information Technology*)
- Through Computing and integrated into all aspects of the wider curriculum e-safety helps pupils to become safe and responsible digital citizens (*e-safety*)
- Children become discerning in their use of computing tools, selecting information, tools and media for their suitability and purpose

Rationale

Computing enables children to understand how technology works, where it works and to become confident users of it. Computing science promotes problem solving and through debugging develops independent learning and resilience. Information technology helps pupils to understand the role of technology in the world around us. Digital literacy prepares them to become confident and creative users of technology. E-safety prepares children to make good choices and keep themselves safe.

Provision

Coverage

Digital literacy and e-safety will be embedded in cross-curricular contexts to support teaching and learning in other curriculum subjects. Teachers will be responsible for the embedding of these skills with support and guidance from the Computing leader. The fundamentals of Computing science will be taught discretely with reference to Maths, Science and DT curricular where appropriate.

Balance

In KS1 there will be a greater proportion of digital literacy, starting at approximately 80% in Year 1. This will fall, year on year to approximately 50% by Year 6. Computer science will start at approximately 20% and rise to about 50% in an inverse manner. Information Technology will be covered in Years 2 and 5. E-safety will be covered regularly throughout all years.

Teaching strategies

Our overall aim is to develop resilient, problem-solving pupils. With this aim in mind pupils are not allowed to do work for each other. They must not touch each others' keyboards or other control devices and must limit help to oral instruction and gestures. It is not the teacher or other adults' job to fix pupils programming or provide ready-made solutions. Rather teachers are in the class to promote strategies and hints for debugging and problem solving. In Digital Literacy teachers should structure their lessons in ways that they see fit for their class and cross-curricular topic.

Organisational strategies

Each year group has 12 hours of Computing provision each term. Units are divided into weekly, hourly sessions. Unit length will vary widely, according to the project under development.

Resources

Pupils have access to one dedicated computer suite in the KS2 block. There are desk top computers in the shared area KS1 for class use. There are trolleys of tablets for use in each area of the school.

Constant technological advances necessitate additions to and updating of both hardware and software.

Pupils and staff **may not** install software on curriculum machines without permission from the ICT leader or technician due to potential copyright and viral issues. A record of all software installations and licenses purchased will be maintained by the technicians.

The school has a commitment to maintain the recommended minimum ratio of 1 curriculum machine: 8 children and appropriate budgeting will be made to ensure hardware can be upgraded or replaced on a rolling program. All electrical equipment will be maintained and checked for safety annually in accordance with current school requirements. Any obsolete equipment will be disposed of in accordance with WEEE requirements.

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.

SEN

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. Screen magnifiers, access devices such as switches or large key keyboards. The computing leader will advise or seek specialist advice for staff where necessary.

Gifted & Talented

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.

Health & Safety

All staff are responsible for ensuring that all children are able to use equipment safely. Children should be sat with monitors at eye level and with access to appropriate keyboards and mice. No member of staff or child should be allowed to move heavy equipment such as monitors or hard drives unless supervised or appropriate advice being given on how to safely do so.

Assessment, Recording and Reporting

Staff will ensure that Assessment for Learning opportunities are utilised in lessons by children to enable them to recognise skills and learning. Each Scratch unit is arranged with an exemplar self assessment tool for pupils to complete.

Assessment in all curriculum areas will be stored and maintained electronically on the server. MIS systems will be maintained by Administration staff, allowing staff to access SIMS data and other files on the network. Children's abilities and progress will be commented upon annually in teachers' reports to parents.

CPD

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

Professional materials

Staff have a limited right to professional materials created or stored on the school network. Data that is created for professional reasons shall remain the property of the school and the creator. However if the school wishes to share this data outside of the school then the creator must give his or her specific permission.

Completion Date: March 2016 Toby Simmonds (governor)

Review Date: July 2018