



Computing Intent

At Neville's Cross, we believe that Computing is an important part of a child's educational development and strive for a culture where the use of digital technologies is seamlessly integrated into all aspects of learning, where and when appropriate, so that our children are ready to thrive in the ever-changing digital world. Our computing curriculum is taught from Nursery through to Year 6 and progressively builds skills in three key areas: Information Technology, Computer Science and Digital Literacy. Children will build the necessary bank of knowledge and skills to become creators of future technology rather than just consumers.

There is a key emphasis on learning skills such as programming, debugging and exchanging of information using high quality IT equipment such as Chromebooks, iPads, apps and programmes. Our children are taught how to access information, evaluate its suitability, summarise it, store it, share it with others and tailor it to meet their own needs. Through this approach, we ensure our pupils become digitally literate, so they are able to use a range of technology and express themselves safely: we want our children to be masters of technology and not slaves to it.

Aims:

Computing will be used to raise standards both discretely and across the curriculum through a commitment to high quality teaching and the implementation of sufficient resources. We aim to keep pace with educational developments in Computing in order to prepare our children for the twenty first century. Each child should be able to choose and access ICT related tools and use them with confidence to meet curriculum needs. We have a commitment to teachers having the necessary tools e.g. laptops and interactive whiteboards to do their jobs effectively. Staff should be supported by administrative ICT to reduce workload and give a more efficient access to a greater amount of data. The school ICT infrastructure should be robust and reliable, ensuring efficiency and appropriate access. Therefore, this school is committed to change and the effective management of that change.

Roles

The co-ordinator should monitor the subject by;

- Sampling pupil's work to review progression and continuity and provide support for colleagues planning and completing learning walks around the school to see how Computing is being used.
- Disseminate resources (web sites, equipment and software) whilst maintaining an up to date knowledge and understanding of Computing issues.
- Plan and where appropriate, deliver suitable INSET.
- Know the capability of the staff.
- Liaise with the Senior Leadership Team on all Computing issues

All teachers share the responsibility for improving the computing skills and knowledge of the pupils in their care.

It is the role of all subject leaders to ensure effective use of Computing hardware and software in their subjects.

Teaching and Learning

Computing should be taught both discretely and (where appropriate) should be integrated into all subjects across the curriculum. In this way, specific Computing skills can be taught to pupils and then pupils can apply their new skills in other curriculum subjects. Pupils should experience a broad program of Computing skills that cover each of the strands of the National Curriculum 2014, as outlined below;



Before National Curriculum

In EYFS, children use a range of resources of technology to support their journey to reaching the Early Learning Goal. Early Computing comes under the umbrella of “Understanding the World,” particularly within the aspect of technology.

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; recognize acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Planning

In Reception, Key Stage 1 and Key Stage 2 the school will use a range of resources including the Kapow Primary Computing Scheme of Work for regular discrete Computing sessions. Each half term, children will tackle a different aspect of Online Safety, which will be taught systematically. Teachers will also use the guidance provided by the Computing Lead to support their use of cross-curricular Computing. All areas of the Programme of Study will be covered each year as appropriate to each class. Key Stage 2 children will have access to their own email account (Office 365) and will be able to save and share work across the curriculum using G-Suite for Education.



Assessment and Recording

An online portfolio of evidence will be kept for each year group using the online portfolio app, Seesaw, and in it are pieces of work or photographs which each class has created. Class teachers also keep a record of which pupils in their class are 'developing', 'expected' or 'exceeding' expectations for each of their Computing units of work.

Equal Opportunities

Each child, regardless of gender, ability or social and cultural background, has an equal entitlement to IT capability.

Special Educational Needs

Each child will have access to appropriate Computing activities that allows them to develop in their learning. This may be through support with communication through to development of understanding in a particular area of the curriculum.

Health and safety

Children will be taught how to safely handle technical equipment. Computer equipment will be inspected annually. However, if potentially dangerous faults are found, they should be reported to the head immediately and the equipment should be withdrawn from use.

For safe internet and e-safety guidelines, please read Neville's Cross Primary School's Online Safety policy (which is separate).