



Kingsway Primary School Computing Information



Rationale

Computing (formerly known as ICT) changed vastly with the introduction of the new curriculum in 2014. The focus shifted from finding, analysing and creating information to the three strands that make up the Computing Curriculum today. They are:

- ☞ computer science,
- ☞ information technology and
- ☞ digital literacy.

Purpose of study (from the National Curriculum)

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Aims of Computing (from the National Curriculum)

The national curriculum for computing 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.

Computing at Kingsway

Computing at Kingsway consists of both skills lessons and opportunities to apply skills across the curriculum. Teachers and support staff seek opportunities that allow the children to show their learning and skills development in their curriculum theme projects. These opportunities support a greater depth of understanding. The long-term curriculum plan for Computing ensures that the three strands of the Computing curriculum are balanced.

Foundation Stage teaching and learning for Computing is covered under the heading of Technology. At Kingsway we encourage pupils in our Reception classes to explore everyday items of IT equipment throughout their lessons. E.g. battery operated Walkie Talkies, toy microwaves and vacuum cleaners etc. We aim for the children to be independent users of technology, creating their own evidence of their learning.

Planning for Computing is recorded in weekly plans and the use of IT within other subjects is recorded as appropriate to the task. Staff confidence and expertise will be developed through training sessions provided by the Computing Subject Leader, external agencies and by the Digital Leaders team.

The Digital Leaders are a team of children from Key Stage Two who support the Computing Subject Leader in researching new technologies and training the staff in elements of the Computing curriculum. Every member of the team applies for their place and goes through a formal interview process. They represent the school at events in school and across the GSP.

Assessment and Record Keeping

Staff use on-going formative assessment to keep track of the children's skills development. These assessments are used to inform future lesson planning and to ensure that each pupil is challenged to the best of their ability. Staff training is used to good effect to ensure that staff have the skills they need to enable that pupils have opportunities to achieve well.

Samples of work should be kept for each child. These will be easily identified and will be in a variety of locations. Not all work should be printed; each piece should be stored appropriately to the task. Possible work examples:

- ~ Printed and stored in a theme book, e.g. a word processed document or poster;
- ~ A list of links to a class blog or pupil website;
- ~ Websites where each child has contributed, e.g. a padlet;
- ~ Saved files on the pupil area of the school network, e.g. photos of children working, videos or audio clips.

When files are stored on the school network, they should be saved in an organised way that allows staff to find files easily. A good way to do this is to create a folder for each pupil to save their work. Staff will keep their own records about the levels of support given and if the work was with a partner or independent. Wherever possible, the children will use self-assessment to judge their own successes.