



Kingsway Primary School

Computing Policy

Rationale

- A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world.
- Computing has an important role in enhancing and extending learning across the whole curriculum, at all levels. Computing skills are taught discretely and then applied during work in other areas of the curriculum as a way of enriching and supporting learning.
- The Computing in the National Curriculum (2013) expectations split the teaching and learning of Computing into three strands: Computer Science, Digital Literacy and Information Technology. It is therefore important that children recognise the difference between what makes each one relevant to their future, as well as their everyday lives.
- The use of a computer and other equipment such as iPads, can help increase motivation, raise self-esteem and improve the accuracy and presentation of work in all areas of the curriculum.
- Throughout this policy, we outline how we, as a school, will deliver the requirements of the key stage 1 (KS1) and key stage 2 (KS2) computing programmes of study, and ensure that our pupils have the digital skills they need.

INTENT

Our intention in teaching computing is that all children will:

- Develop their computing capability, including their knowledge and understanding of the importance of information, of how to select and prepare it in order to communicate with others by using technology.
- Develop their skills in using hardware and software independently and effectively.
- Develop their ability to apply computing skills as a tool to support learning wherever possible in all other areas of the curriculum.
- Appreciate the relevance of computing in our society, and be aware of its advantages and limitations.
- Develop positive attitudes towards computing, including confidence and enjoyment and to use it in a safe and responsible way.
- Be inspired to continue to learn and apply the skills they learn further at secondary school, university, and beyond in the workplace.
- Be able to use digital literacy skills to find, evaluate, create, and communicate information and media for a range of purposes in a range of contexts.
- Develop understanding of technology and how it is constantly evolving.
- Develop a knowledge of how a range of information and computer technologies work to create, store and communication information and data (E.g. to learn about how the internet works).

Objectives

We will:

- Meet the national curriculum requirements for computing by implementing a scheme of work to allow pupils to develop the specific computing skills as set down in the new curriculum.
- Encourage the use of computing to develop knowledge, skills and understanding across the wider curriculum (through raising the awareness of opportunities available).
- Nurture awareness amongst pupils and staff of the capabilities and limitations of computing as well as the implications of its development for society.
- Allow staff to develop professionally; enhancing teaching, management and administrative skills through: INSET, courses and time provided for individual development during the school day.

Overview

Early years foundation stage (EYFS)

Although computing is not a statutory part of the EYFS, we will ensure that children of reception age receive a broad, play-based experience of computing through the use of new technologies to support the attainment of the Technology Early Learning Goal: **Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.**

Key stage 1

Pupils will be taught to:

- Understand what algorithms are, and how they are implemented.
- Create and debug simple programs.
- Predict the behaviour of simple programs.
- Create, organise, store, manipulate and retrieve digital content.
- Recognise common uses of ICT beyond school.
- Use technology safely and respectfully, keeping personal information private, and to identify where to go for help and support when they have concerns online.

Key stage 2

Pupils will be taught to:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems, and solving problems.
- Use sequence, selection, and repetition in programs.
- Work with variables and various forms of input and output.
- Explain how some simple algorithms work, and how they can detect and correct errors.
- Understand computer networks, how they can provide multiple services, and the opportunities they offer for communication and collaboration.
- Use search technologies, understand how results are selected and ranked, and be able to critically evaluate digital content.
- Select, use and combine a variety of software on a range of devices to design and create programs, systems and content that accomplish specific goals.

- Use technology safely, respectfully and responsibly, recognise acceptable behaviour and identify a range of ways to report online concerns.

Assessment, Recording and Reporting

- The pupil's work in Computing is assessed continuously throughout the topics that are taught. Records are kept in the form of teacher evaluations, saved work in the pupil electronic files and use of Microsoft Teams. Progress is tracked on a cohort assessment record via Insight. Children's efforts in computing lessons are reported to parents in the end of year report, where comments on coverage and performance can also be found.

IMPLEMENTATION

- Pupils will have the opportunity to develop their Computing skills in the core and foundation subjects. Opportunities provided by the class teacher will enable the children to work both individually and in small groups. Computing lessons will ensure that all pupils have a rich and interactive learning experience including:
 - Accessible resources to enable teachers to teach computing through unplugged activities. These activities focus on computational thinking skills without the use of laptops.
 - Practical activities which involve the pupils manipulating programmable hardware to apply programming skills such as coding and debugging.
 - Teacher modelling on interactive whiteboard screens.
 - Individual and group activities using a range of software on laptops and iPads.
- Pupils will have experience with networked laptops, printers, Sphero Indis, Microbits, crumble-kits, data logging equipment, calculators, digital media, interactive whiteboards, laptops and iPads. They will also have experience with the internet and a variety of software that allows teachers to provide for progression of skills, concepts and applications.

Acceptable use statement

The computer system is to be used by pupils to further their education and by staff to enhance their professional activities including teaching, administration, research and management. An acceptable use of the internet agreement provides guidelines for pupils and staff on the use of the internet. Only software authorised by the school is to be installed or used. The school reserves the right to examine or delete any files held on its computer systems and to monitor internet sites visited.

Equal Opportunities

All staff, the Headteacher and the Leader for Computing are to ensure all pupils have equal access to opportunities for developing their computing capabilities.

Special Educational Needs and Disability

Pupils with SEND may be given greater access to computers or other technology, personalising learning and striving to remove barriers, this will support inclusive provision and maximise both teaching and learning opportunities in all areas e.g. use dictation and 'read aloud' features. As an inclusive school, Computing is made accessible to all children, including those with Special Educational Needs, by providing them with suitable software and tasks, and with extra support in the use of resources and software packages available.

Resources

The school has laptops and iPads for classroom use. All classrooms have a teacher laptop and interactive whiteboard. EYFS have iPads that can be used. Years 1-4 have a set of class laptops which can be used. Years 5 and 6 have their own personal 1:1 devices. Programmable toys, crumble kits and Micro:bits are also available.

Welfare and Health and Safety

All computer equipment will undergo Portable Appliance Testing annually. Any equipment that fails this check is withdrawn from use until repaired. Staff must report any concerns about equipment to the an IT technician by logging a ticket via email to "Foresight Help Desk"- helpme@foresightuk.com Children are taught the correct way to turn on, use and turn off the computers and software they have access to. Children should not be responsible for moving the laptop trolley around the school. Food and drink should not be consumed near any computing equipment. A technician checks electrical installations periodically.

Internet use at Kingsway

- An adult should always supervise children when they are accessing information from the internet.
- Expected staff conduct is shared with staff annually.
- Pupils are taught about acceptable use of computing devices and the internet annually.

Further policies and agreements relating to the computing policy:

- Data Protection Policy
- Internet Agreement
- Anti-bullying Policy
- Safeguarding Policy
- Staff Code of Conduct