Webheath Academy Primary School

Computing & IT Policy

Approved, ratified and adopted by the Local Governing Body on 29th April 2024.
Chair: David Sullivan
This policy will be reviewed annually or when circumstances or advice and guidance changes.

Contents   **Page**

Our Vision

Through the teaching of Computing, Webheath Academy Primary School prepares pupils to participate in the constant, fast paced evolution of the digital world through the delivery of a broad and embedded Computing curriculum using computers and digital devices.

Information Technologies (IT) play an increasingly significant role in society and it is important that our learners can utilise technology to help promote their development and independent learning skills as well as being given the opportunity to access a wide range of ideas and experiences. Using technology can enhance and support children's learning across the curriculum and it is essential that we help children to develop the necessary knowledge, skills and understanding to be successful in the future. We aim to give children the capability to enjoy and achieve when using technology as well as staying safe. Internet safety is paramount, is delivered weekly in computing lessons as well as being celebrated annually through SID (Safer internet day.)

Intent

- Children will enjoy using technology as a tool for learning; tackling all applications with confidence and a sense of achievement.
- Children will develop practical computing skills and will be able to apply these in solving relevant and worthwhile problems.
- Children will have access to a range of computing solutions and will learn to select the most suitable equipment and applications to complete a task.
- Children will develop an understanding of how technology can be used safely and responsibly.
- Pupils will receive a progression of experiences through the primary phase and towards the secondary curriculum following the Computing programmes of study.
- We will provide a relevant, challenging and enjoyable curriculum for computing for all pupils.
- We will enhance teaching and learning by embedding computing skills across other areas of the National Curriculum including adapting to any specific updates.
- To develop the use of Showbie, the online journal and used across the curriculum as a workflow tool.
- All children will be given equal opportunities to access computing resources.
- To enable children to become active producers rather than passive consumers of technology.
- To develop computational skills which include – Logical thinking, Spotting patterns, Abstraction, Decomposition and Debugging.
- Digital Literacy –children being able to express themselves through Information and communication technology at a suitable level will prepare learners for their transition into future workplaces and as active participants in an increasingly digital world.

- A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world…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."

Curriculum

The National Curriculum for computing aims that children;

- Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation and communication.
- Can analyse problems in computational terms and have repeated practical experiences of writing computer programs in order to solve problems.
- Can evaluate and apply information technology to solve problems.
- Are responsible, competent, confident and creative users of information and communication technology.
- To ensure high standards of teaching and learning in computing, we implement a curriculum that is progressive throughout the whole school. Our implementation of the computing curriculum is in line with 2014 Primary National Curriculum requirements for KS1 and KS2 and the Foundation Stage Curriculum in England. This provides a broad framework and outlines the knowledge and skills taught in each key stage. We use and follow the Kapow scheme of work from Year 1-6, ensuring consistency and progression throughout the school.
- Both Teach computing and the Kapow scheme of work enable clear coverage of the computing curriculum whilst also providing support and CPD for less confident teachers to deliver lessons. The Kapow Lessons are broken down into weekly units, usually with one unit taught per half term. Units are practical and engaging and allow computing lessons to be hands on. A high-quality computing education which equips pupils to use computational thinking and creativity to understand and change the world. 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.
- Units cover a broad range of computing components such as *Digital literacy, Online safety, Computational thinking, Computers and hardware, Cross-curricular application and Coding.*

Early Years

In the Foundation Stage children are given a broad, play-based experience in Computing in a range of contexts, including outdoor play. Early years learning environments feature Computing scenarios based on experience in the real world; such as role play. Children will gain confidence, control and language skills through these opportunities and will explore unplugged resources such as play sets, recording devices, toys, construction sets and many more.

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
- Develop a curiosity about computing and software and hardware.

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

Progression and Continuity

In KS1 and KS2 teachers follow the National Curriculum (2014) for Computing which outlines the skills that need to be taught in each year group. Teachers are encouraged to use the Teach Computing resources which support each strand of the National Curriculum and form part of our progression document. Though teachers are encouraged to offer a breath of skills through a variety of platforms to ensure children's skills are broaden and far-reaching. As of September 2024, Kapow schemes of work for computing will be rolled out and used as a basis for our own Webheath curriculum.

Discrete computing is taught weekly and computing skills are embedded into other subjects across the wider curriculum. Teachers are responsible for producing medium term plans which will identify the progression of skills and highlight all technology enhanced learning across the curriculum. Class teachers are also responsible for preparing weekly plans which specify the learning objective for each lesson and provide tasks to promote limitless learning opportunities.

Progress and Achievement

Pupil's computing progress will be monitored to ensure quality and progression of skills is maintained. Children's experiences and understanding is recorded and forwarded to the next class teacher and the next school. Teachers regularly assess capability through observations and looking at completed work. Assessing Computing is an integral part of teaching and learning and is central to good practise. The class teacher is responsible for identifying children who are underachieving in a particular area and provide extra support. Showbie, the digital online learning portfolio, has been rolled out and used throughout the school to save and share work. Work relating to online safety will be evidenced within class PSHE folders. In Key Stage 2, children have individual log ins and personal cloud-based storage in order to create an on-going portfolio of work for each child. Achievement and attainment will be assessed regularly and recorded on Arbor.

Inclusion

We recognise that all children are entitled to equal opportunities to access computing and computer-based equipment. In order to ensure that all children with special educational needs achieve to the best of their ability, it may be necessary to adapt the delivery of the computing curriculum. We set suitable learning challenges and adapt or support each child's individual needs. We have specialised equipment to help some children with physical needs to use the computing equipment independently. We recognise that technology can provide an important motivational tool for SEN pupils. Some pupils, with specific SEND and EAL, may require greater access the technology to support their learning in other curriculum areas.

Roles and Responsibilities

Responsibilities of the Subject Lead
- Monitor the implementation of this policy.
- Monitoring the implementation and delivery of the Computing curriculum across the school.
- Offer guidance to teachers to ensure that pupils progress and develop skills in Computing.
- Ensure a continuous and evolving training programme and co-ordinate individual staff training requirements.
- The Computing subject lead is responsible for monitoring the standard of children's work and quality of teaching. This may be through observations, discussions with pupils or teachers or samples of work in all areas of the wider curriculum.
- Prepare, monitor and review the Computing action plan in consultation with SLT.
- Co-ordinate the development and maintenance of the school website in collaboration with staff/pupils/parents/governors.
- To liaise with Concero, our IT Services Provider, to ensure hardware is maintained and accessible for all.

Responsibilities of Staff
- Deliver the National Curriculum entitlement to Computing by following the programmes of study.
- Follow the school's progression documents to plan appropriate Computing lessons.
- Ensure regular computing access for all pupils in all areas of the curriculum.
- Formatively assess children's progress in Computing referring to the progression documents and record on Arbor.
- Discuss the Responsible Internet Use policy with their class at the beginning of each academic year and ensure it is implemented.
- To ensure that children are aware and understand the importance of being safe online and what to do if they encounter something they are concerned about. (Please refer to Online Safety for more information).
- To report issues with technology to Concero helpdesk in a timely fashion.
- Staff and pupils are encouraged to be aware of health and safety issues (see health and safety policy) relating to potential hazards such as:
    - Trailing wires
    - Wet play areas
    - Children's/adults working positions
    - Bright lights from the IWB projectors
    - Light reflecting on the monitor

Online safety

The safety and well-being of children using the internet is of great importance. Online safety aims to inform practitioners and children about the dangers of the internet and how to use it safely. All staff have received the relevant training for online safety and encourage children to use the internet safely at school and at home.

The school has an Acceptable Internet Use policy (AUP). At the beginning of each academic year all pupils, staff and volunteers are required to sign an AUP agreement. Parents are encouraged to support the implementation of technology and computing where possible by encouraging use of computing skills during home-learning tasks and through the school website. Parents will be made aware of online safety during transition meetings and encouraged to promote this at home.

Keeping Children Safe in Education (KCSIE) 2023

The KCSIE document empowers the school to protect and educate pupils, students, and staff in their use of technology and establishes mechanisms to identify, intervene in, and escalate any concerns where appropriate. The breadth of issues classified within online safety is considerable and ever evolving, but can be categorised into four areas of risk:

content: being exposed to illegal, inappropriate, or harmful content, for example: pornography, fake news, racism, misogyny, self-harm, suicide, anti-Semitism, radicalisation, and extremism.

contact: being subjected to harmful online interaction with other users; for example: peer to peer pressure, commercial advertising and adults posing as children or young adults with the intention to groom or exploit them for sexual, criminal, financial or other purposes.

conduct: online behaviour that increases the likelihood of, or causes, harm; for example, making, sending and receiving explicit images (e.g. consensual and nonconsensual sharing of nudes and semi-nudes and/or pornography, sharing other explicit images and online bullying, and

commerce: risks such as online gambling, inappropriate advertising, phishing and or financial scams.

Considering the 4Cs (above) provides the basis for our effective online policy which compliments this policy.

Use of Mobile phones

Year 5 and 6 children are permitted to bring mobile phones with parental permission. School has carefully considered how this is managed on the premises; Children switch off phones when arriving at school, the devices are locked away by teachers until the end of the day, children may utilise them on their way home to contact parents and carers.

British Values

Children at Webheath Academy Primary School demonstrate the following Modern British values whilst learning about Computing by:

Democracy
- Listening to everyone's ideas in order to form a majority
- Working as part of a team and collaborating to use computing devices effectively
- Showing initiative and understanding how they can contribute positively to the lives of those living and working in the locality of the school and to society more widely

Rule of Law
- Developing knowledge of lawful computing behaviours
- Demonstrating respect for computing laws

Individual Liberty and responsibility
- Taking responsibility for our own computing behaviours.
- Challenging stereotypes and bias. Exercising rights and personal freedoms safely through knowledge of online safety.

Respect, Harmony and Tolerance
- Showing respect for other cultures when undertaking research using computing devices.
- Providing opportunities for pupils of all backgrounds to achieve in computing

Resources

The school acknowledges the need to continually maintain, update and develop its resources to provide quality provision and experiences for pupils. Resources, if not classroom based, are located centrally with timetabled access for all. Significant investment has been made in computing resources and staff training over recent years; this is supported by our IT services provider Concero and Sync. All teachers have access to laptops and iPads for use in the classroom. A rolling programme of re-investment is planned to ensure that resources remain well maintained and up to date.
- Each classroom has at least one networked computer
- There are currently 223 I pads between organised into groups of 30 from Years 1to 6 and 18 in Reception. Each year group have 30 iPads available for their year group only, enabling constant use either 1:1 or 1:2 for any aspect of the school day
- There are 30x HP 255 G8 Notebook PCs
- 58 Acer laptops
- 30 x HP ProBook 445 G10 Notebook PC

- School has 10 x interactive screens across various point in school and 7 projectors for classes that do not have interactive screens.
- The Group Training Room has 2 sets of 30 laptops; timetabled so each year group has access via a calendar booking system to enable discrete teaching of the computing curriculum when laptops are needed. The devices are also available for classes to use in "bookable" slots to promote use across the wider curriculum.
- Each year group has access to a range of software and apps as well as online resources such as Writers' toolbox, Showbie and Purple Mash.
- Each classroom has an interactive whiteboard, which should be used daily to enhance teaching and learning. Small group areas are available in both Upper and Lower KS2 for intervention groups. These have large monitors which can be connected to laptops and iPads.
- In addition to computers, there is a range of ICT resources including digital cameras, easy speak microphones, Beebots, listening stations, digital microscopes and data loggers.

Future Plans

The school has an on-going Computing action plan which outlines plans and priorities in the short and medium term. The Computing lead has set out priorities which include; raising the profile of the subject through forensic examination of the schemes of work and curriculum provision to ensure that children have the most comprehensive and up to date learning through Kapow.

Subject leads and the Headteacher are continually assessing the effectiveness of the current curriculum offer, and are managing the imminent whole school changeover to the Kapow scheme of work. This includes a rolling programme to update equipment, staff training on collaborative approaches and breadth of curriculum and developing our school website.

We are currently investigating options to relaunch a 1-2-1 device scheme on a rolling basis through KS2 to further embed the use of technology within our classrooms.