Computing Policy

Rationale

At Harrold Primary Academy, we recognise that children are living in a rapidly changing world, in which computing is playing an ever-increasing role. We intend to develop dynamic thinkers through an ambitious and relevant Computing curriculum that reflects our school values:

Responsibility - Children are supported to participate in the digital world actively and responsibly.

Readiness - Children are prepared with the skills of computational and logical thinking to enable them to respond effectively to modern day challenges. They are equipped with digital literacy skills to enhance and enrich their learning across the wider curriculum.

Respect - Children learn to become respectful digital citizens, engaging with the internet in a safe and positive way.

Resilience - Children apply their computer science knowledge and refine their skills of debugging to become skilled problem solvers.

Aims of Computing Curriculum

- To develop children's individual computing capability and understanding
- To ensure all children know how to stay safe online
- To enhance teaching and learning in other areas of the curriculum by cross curricular use of computing
- To develop computing as a tool for learning and investigation
- To equip children with the confidence and capability to use IT throughout their education, home and further work life
- To recognise the potential, and deepen the understanding of computing in everyday life
- To stimulate interest in new technologies

Implementation of Policy

As children transition through the school, they are provided with opportunities to gain knowledge and skills in four key areas, building on each layer of understanding as they progress through the school. The key concepts in computing we plan a progression for are as follows:

- E-Safety
- Digital Literacy
- Computer Science
- Coding and Debugging

Children begin each school year with a focus on the fundamental knowledge and skills of E-safety. This supports them to access the wider computing curriculum safely and with confidence.

Children become ambitious and motivated computing learners through relevant problem-solving opportunities and purposeful engagement with digital technology across their wider school life; the computing curriculum incorporates cross curricular links and discrete computing skills. Teachers confidently model the use of technology and critical thinking throughout the school day.

Enrichment and extracurricular activities, such as Stop-Motion Video, Music Technology and Coding Academy enable children to grow confident in following their own interests and lines of enquiry.

Children in Key Stage 1 and Key Stage 2 all spend at least 1 hour per week studying computing. They spend additional time using computing to support other subject learning.

At Harrold Primary Academy, the computing curriculum provision covers the following areas of Digital Literacy:

- Systems skills
- Word processing
- Presentations
- Data Handling
- Multimedia
- Electronic Communication

To ensure progression and continuity throughout the school, the school has developed a [curriculum map](link) which outlines curriculum coverage, progression and context of computing skills and knowledge, alongside cross-curricular learning opportunities.

Expectation in Computing

At the end of **KS1** children should:

- 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.

At the end of **KS2** children should:

- 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.

Health and Safety

At Harrold Primary Academy, equipment is maintained to meet the agreed safety standards. Children are not given the responsibility of plugging in ICT equipment.

Age-appropriate safety rules around online safety are displayed in every classroom. Food and drink should not be consumed near ICT equipment.

It is the responsibility of staff to ensure that ICT equipment is stored securely, cleaned regularly and that their class or themselves leave the laptop trolleys clean and tidy after use.

Staff should ensure that the children are aware of the dangers of continuous use (e.g., eye strain and wrist strain).

An adult should always supervise children when they are accessing information via the Internet. Internet filtering is provided by the Meridian Trust and keyword monitoring is undertaken by the computing subject leader.

E-Safety

At Harrold Primary Academy, staff and children are made aware of the importance of e-safety and are expected to follow the Meridian Trust E-Safety and Acceptable Use Policy, which can be accessed via the following link:

Policies - Meridian Trust

Staff, parents or children with concerns about e-safety should contact the computing leader who can be reached via the school office.

Inclusion and Equal Opportunities

At Harrod Primary Academy, the computing curriculum is concerned with the learning and participation of all children. Teaching is planned with this in mind, and regular assessment of children's needs and understanding alongside targeted resources and support, ensure all children can develop their computing skills. We aim to provide suitable learning opportunities regardless of gender, ethnicity or home background.

The computing subject leader is responsible for:

- Overseeing the implementation of the computing curriculum
- Monitoring the learning and teaching
- Ensuring assessment is relevant and informative
- Making purchasing decisions
- Ensuring all staff are appropriately trained in both computing hardware and software
- Keeping up to date with developments in computing
- Liaising with the technician
- Observing computing lessons
- Monitoring / supporting computing planning
- Preparing policy documents
- Advising colleagues and helping to develop expertise
- Liaising with the staff team
- Contributing to staff computing INSET training

Assessment

At Harrold Primary Academy, children are assessed against their progress in understanding and applying computing against the curriculum map. This will be evident from the work produced in a situation where no teacher support is given once a task has been assigned.

Any questions or concerns regarding this policy should be communicated via email to administration@harrold.academy.