Holbrook Primary School

Computing Policy

Introduction

The use of information and communication technology is an integral part of the National Curriculum and is a key skill for everyday life. Computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Holbrook Primary School we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively. The purpose of this policy is to state how the school intends to make this provision.

Aims

- Provide a relevant, challenging and enjoyable Computing curriculum for all pupils.
- Meet the requirements of the national curriculum programmes of study for Computing
- Use Computing as a tool to enhance learning throughout the curriculum.
- To respond to new developments in technology.
- To equip pupils with the confidence and capability to use Computing throughout their later life.
- To enhance learning in other areas of the curriculum using Computing.
- To develop the understanding of how to use Computing safely and responsibly.

The National Curriculum for computing aims to ensure that all pupils:

- 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 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.

Rationale

The school believes that Computing:

- Gives pupils immediate access to a rich source of materials.
- Can present information in new ways which help pupils understand access and use it more readily.
- Can motivate and enthuse pupils.
- Can help pupils focus and concentrate.
- Has the flexibility to meet the individual needs and abilities of each pupil.

Objectives
Early years

It is important in the foundation stage to give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. ICT is not just about computers. Early years learning environments should feature ICT scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to 'paint' on the whiteboard or programme a toy. Recording devices can support

children to develop their communication skills. This is particular useful with children who have English as an additional language. Children have 'free flow' access to laptops permanently within the classroom as a tool for developing core computing skills.

Key Stage 1
By the end of 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 a sequence of instructions
- Write and test simple programs
- Use logical reasoning to predict and computing the behaviour of simple programs
- Organise, store, manipulate and retrieve data in a range of digital formats
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

Key Stage 2
By the end of key stage 2 pupils should be taught to:
- Design and write 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; generate appropriate inputs and predicted outputs to test programs
- Use logical reasoning to explain how a simple algorithm works 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
- Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Resources and access
The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible pc system by investing in resources that will effectively deliver the strands of the National Curriculum and support the use of Computing across the school. Teachers are required to inform the ICT Computing Subject Leader of any faults as soon as they are noticed via the online forum. Resources if not classroom based are located in the resources room.
ICT and computing network infrastructure and equipment has been sited so that:
- Every classroom from FS2 to Year 6 has a laptop connected to the school network and an interactive whiteboard with sound, DVD and video facilities.
- There is a trolley of 32 Laptops that are connected to the school network
- Pupils in FS have 'free flow' access to laptops permanently within the classroom as a tool for developing core computing skills.
- The school has access to an ICT and computing technician who is in school weekly.
- A governor will be invited to take a particular interest in Computing in the school.

Planning
The school has adopted the Switched on Computing Curriculum to ensure that there is progression and coverage across the school. This is used alongside Cornerstones to plan individual and sequences of lessons to meet the Computing Curriculum objectives.

Inclusion
At Holbrook we plan to provide for all pupils to achieve, including boys and girls, higher achieving pupils, gifted and talented pupils, those with SEN, pupils with disabilities, pupils from all social and cultural backgrounds, children who are in care and those subject to safeguarding, pupils from different ethnic groups and those from diverse linguistic backgrounds. Children have access to laptops at Home Learning club every Friday to provide opportunities for those unable to access technology at home. Laptops are also available at breakfast club.

Equal Opportunities
Teachers at Holbrook Primary School are aware of the issues related to gender and Computing and, in particular the difference in performance between boys and girls. Teachers need to consider this in their planning and delivery of the Computing Curriculum.

Assessment and Recording
Formative ongoing assessment is key to the planning and teaching of the Computing Curriculum. Teachers record the progress of pupils

Monitoring and Evaluation
The quality of the teaching in Computing, the standards attained by pupils and their progress will be a feature of the school's monitoring of learning, teaching and pupil progress.
The Subject leader for Computing with review the progress of pupils through records, learning walks, scrutiny of work, classroom visits and pupil conferencing.
The Subject Leader for Computing will report annually to Governors.

Health and safety
The school is aware of the health and safety issues involved in children's use of ICT and computing. All electrical appliances in school are tested accordingly. It is advised that staff should not bring their own electrical equipment in to school but if this is necessary, then the equipment must be pat tested before being used in school. This also applies to any equipment brought in to school by, for example, people running workshops, activities, etc. and it is the responsibility of the member of staff organising the workshop, etc. to advise those people. All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the ICT technician via the Fronter forum.

Security
- The ICT and computing technician will be responsible for regularly updating anti-virus software.
- Use of Computing will be in line with the school's 'acceptable use policy'. All staff, volunteers and children must sign a copy of the schools AUP.
- Parents will be made aware of the 'acceptable use policy'.
- All pupils and parents will be aware of the school rules for responsible use of Computing and the internet and will understand the consequence of any misuse.

Conclusion
This policy should be considered alongside other relevant policies. It will be reviewed by the governing body as part of its schedule of review policy.

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