



Bilton Church of England Junior School

Computing

'Computing is concerned with how computers and computer systems work, and how they are designed and programmed. Pupils studying computing will gain an understanding of computational systems of all kinds, whether or not they include computers. Computational thinking provides insights into many areas of the curriculum, and influences work at the cutting edge of a wide range of disciplines.' (Computing at school 2014)

Information & Communication Technology (ICT)

ICT (principally but not exclusively computers) is used in many ways for the presentation, analysis and storage of information, but also to model, measure and control external events, to solve problems and to support learning in a variety of contexts, not least through the use of the Internet, across the whole curriculum.

Introduction

Computing and ICT is important because its use is widespread in the modern technological world and is likely to continue to grow.

Computing and ICT skills are recognised as cross-curricular within the National Curriculum and their use is called for or assumed in all subjects to support and enrich pupils' learning. It is also a knowledge and skills area in its own right. As in other areas of the curriculum we incorporate the requirements and recommendations of the National Curriculum into our planning and assessment at class, year and school level. At present, we are attempting to move away from teaching Computing and ICT as a discrete subject and moving more towards using it as a tool to enhance and improve our work in other curriculum areas through the teaching of appropriate and relevant skills as and when needed.

Aims

- To help to prepare pupils to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technologies.
- To enable pupils to find, explore, analyse, exchange and present information responsibly, creatively and with discrimination.
- To enable pupils to gain access to ideas, knowledge and experiences from a wide range of resources, people, communities and cultures.
- To promote initiative and independent learning, enabling pupils to make informed judgments about when and where to use ICT to the best effect and to consider its implications for home and work, both now and in the future.
- To facilitate cross curricular work.
- To allow teachers to use ICT to provide efficient and effective systems for planning and for assessment, recording and reporting.
- To provide teachers with the necessary hardware to use ICT as a teaching tool.

Strategies for the use of Information and Communication Technology

In order to ensure that valuable areas of experience are covered, Computing and ICT use is integrated into the curriculum followed throughout the school. Pupils will have experiences of a variety of software that allows teachers to provide for progression of skills, concepts and applications. Each year group have been given information regarding age appropriate knowledge, understanding and skills and are free to teach these in any way they deem suitable. This will enable them to incorporate Computing and ICT more easily into their existing topic work giving children a relevant, purposeful experience of using ICT to enhance their learning instead of performing isolated and sometimes irrelevant tasks. Planning support is available for year groups from the Computing/ICT Co-ordinator and ICT technician. Pupils will have the opportunity to work individually, in pairs and in small groups, and will experience the frequent use of Computing and ICT in their own classrooms through use of various devices. Pupils will become increasingly independent in their use of ICT and the choice of device and software required for any given curriculum activity. This aim should be kept in mind from the earliest contacts pupils have with devices, by informing them clearly why they are using a device for a particular activity. An after school Code Club is also run by the Computing Co-ordinator and a Code Club volunteer to further enhance the knowledge and skills of Coding amongst our pupil.



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Excellence in Computing / Information and Communication Technology use is celebrated on the school website and in displays around the school of text, pictures, graphs and charts produced by pupils using devices as well as sharing videos, audio files that they have done on the school website.

Equal Opportunities

All pupils should develop positive attitudes towards computing, they should develop an understanding of the potential of computing and show confidence and enjoyment in its use.

Priority will be given to ensuring equality of access and quality of experience for all pupils according to need and irrespective of race, gender, disability, age and class. Those who are most proficient with the technology will be encouraged to share their expertise and confidence.

Specialised access software and hardware will be available for pupils with special educational needs. All reviews of provision for pupils with special needs should include consideration of a child's access to devices.

Consideration should be given to the most appropriate input device for all pupils but especially those with special needs.

Strategies for Ensuring Progression and Continuity

A year by year break down of age appropriate knowledge, skills and understanding have been given to each year leader. This enables them to embed the teaching and use of these skills into existing topic work making learning in computing more relevant as well as providing the children the opportunity to use computing to enhance the work that they are doing and achieve something that is sometimes impossible without the use of ICT. By giving staff the knowledge, skills and understanding progression for all four years it enables them to support less and to challenge the more able pupils by seeing what knowledge, skills and understanding they should have and what they should be moving towards.

Assessment and recording

Each child has his/her own user area on the network in which to save work done during his/her career at the school. This can easily be accessed at any time by staff for monitoring and assessment in computing against the N.C end of year expectations and a best fit judgement is given. A standards portfolio of children's work, showing end of year expectations for each year, is also being put together by each year group to assist staff when making judgements at the end of year. The Year 6 staff meet with colleagues from secondary schools regarding transfer and information is exchanged at this point. An annual report to parents details progress in Computing/ ICT.

Resources

- The school is fully networked (both hard and wireless).
- There are two trolleys of laptops; 1 in Oak house and the other in Chestnut.
- There is 1 trolley of learn pads, which is located in the learning resources area.
- Each classroom also has at least one desk top computer.
- Additional banks of computers are situated in corridors in both buildings for small groups of children to use.
- Computers are also located in the learning resources area and in the staff workroom.
- 1 PC is also set up for LSA's to record First aid and Behaviour on Iris system.
- A number of Alpha Smart keyboards are stored in the ICT resource cupboard and some classrooms.
- Every main teaching area is equipped with an interactive white board.
- Printers are located in the staff work room, Sycamore house and in the learning resources area.



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Time allocation and organisation

All children have access to the laptops, learn pads and class/corridor based machines.

Laptops

1 lesson dedicated use each week for each class. Additional sessions can be booked by signing up on the Google timetable on line which is set up separately for the two sets of laptops.

Learnpads

Learn pads are also booked by signing up on the Google timetable on line which is set up separately for learn pads.

Pupils may have access to computers / laptops at lunchtimes and breaks with the permission and under the supervision of a member of staff.

Computers in classrooms and corridors

These are available at any time and are frequently used by supervised small groups or individuals.

Children are taught by their class and/or group teacher in all year groups. There are opportunities for teachers to swap classes in order to harness expertise from time to time.

Computers in the staff workroom

In the staff workroom teachers and teaching assistants have access to a computer that connects to the admin server as well as a further machine connected to the curriculum network.

Training

From time to time the co-ordinator may apply for whole staff training time - possibly in response to new or improved hardware/software capability or other developments - either as part of the school's INSET or at a staff meeting, as the need arises. Other training may be given as necessary, dealing with smaller (eg. year) groups regarding other aspects of Computing, possibly with particular subject relevance.

Sanctions for Inappropriate Use

When using the internet the children are now shown an 'acceptable usage' message that reiterates the safe and correct use of the internet. At the bottom of this page they are required to click a message agreeing to these terms and then proceeding to Google.

If the children have used the internet and searched for something inappropriate or made repeated attempts to access blocked content their internet access will be removed for a period of time to be decided by the teacher and / or ICT Co-ordinator depending on the severity of the issue.

If other elements have been used inappropriately e.g. word processing software or drawing software etc children can either miss a playtime / playtimes (depending on the severity of the incident) or have their computer access removed completely, again for a period of time decided by the class teacher and / or ICT Co-ordinator.

At the highest level of misuse, e.g. repeated searching for pornographic material, drugs, persistent cyber bullying etc, we will contact parents and the child may be issued with a fixed term exclusion.