Holy Trinity Church of England Primary School

Computing Policy

Purpose

This policy reflects the school values and philosophy in relation to the teaching and learning of computing and the application and use of ICT. It sets out a framework within which teaching and non-teaching staff can operate and gives guidance on planning, teaching, and assessment. The policy should be read in conjunction with the national curriculum for Computing which sets out what pupils in different year groups will be taught and how ICT can facilitate or enhance work in other curriculum areas.

This document is intended for:

- All teaching staff

- All staff with classroom responsibilities

- School Governors

- Parents

Copies of this policy are kept centrally and are available from the Head Teacher, the Subject Leader and all Class Teachers. It will also be published on the School website.

Introduction

The Computing curriculum, along with the use of a variety of information communication technologies, prepares pupils to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technology.

We recognise that Information and Communications Technology is an important tool in both the society we live in and in the process of teaching and learning. Pupils use ICT tools to find, explore, analyse, exchange and present information responsibly and creatively. They learn how to employ ICT to enable rapid access to ideas and experiences from a wide range of sources.

Our vision is for all children and staff in our school to become confident users of ICT so that they can develop the skills, knowledge, and understanding which enable them to use appropriate ICT resources effectively as powerful tools to positively impact teaching and learning.

Aims of the teaching of Computing

The schools aims are:

- To enable children to become autonomous, independent users of ICT, gaining confidence and enjoyment from their Computing activities.

- To develop a whole school approach to Computing ensuring continuity and progression in all strands of the Computing National Curriculum.

- To use ICT as a tool to support teaching, learning and management across the curriculum.

- To provide children with opportunities to develop their Computing capabilities in all areas specified by the curriculum.

- To ensure ICT is used, when appropriate, to improve access to learning for pupils with a diverse range of individual needs, including those with SEN and disabilities.

- To maximise the use of ICT in developing and maintaining links between Burnley College, the local community including parents and other agencies.

The national curriculum for Computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation

- 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.

In order to fulfil the above aims it is necessary for us to ensure:

- A continuity of experience throughout the school both within and among year groups.

- The systematic progression through Key Stages 1 and 2.

- That all areas of the National Curriculum for Computing are given appropriate coverage.

- That all children have access to a range of ICT resources.

- That cross curricular links are exploited where appropriate.

- That children's experiences are monitored and evaluated.

- That resources are used to their full extent.

- That resources and equipment are kept up to date as much as possible.

- That staff skills and knowledge are kept up to date.

- That e-Safety is embedded at every opportunity.

Teaching and Learning Objectives

Early Years Foundation Stage:

It is important in the Early Years 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 drive a remote-controlled toy. Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills.

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 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.

By the end of 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.

<u>Organisation</u>

Each class is allocated a time in the computer suite to accomplish their Computing objectives and to apply the use of ICT to other subject areas. This scheme of work is integrated to ensure that

delivery of Computing is linked to subjects and takes on board the statutory requirements of other national curriculum subjects. Individual systems in classrooms and two laptop trolleys support the development of Computing capability by enabling further development of tasks from the computer room; encourage research and allow for the creative use of ICT in subjects. Digital projectors and smart boards are located in all of the classrooms, library and computer suite. These are used as a teaching resource across the curriculum.

Planning

Teacher's planning is differentiated to meet the range of needs in any class including those children who may need extra support, those who are in line with average expectations and those working above average expectations for children their age. A wide range of styles are employed to ensure all children are sufficiently challenged:

- Children may be required to work individually, in pairs or in small groups according to the nature or activity of the task.

- Different place of working.

- Different groupings of children - groupings may be based on ability either same ability or mixed ability.

- Different levels of input and support.

- Different outcomes expected.

The Computing subject leader will review teachers' Computing plans to ensure a range of teaching styles are employed to cater for all needs and promote the development of Computing capability.

Equal Opportunities

We believe that all children have the right to access the Computing curriculum and related ICT resources.

It is our policy to ensure this by:

- Ensuring all children follow the national curriculum for Computing.

- Keeping a record of children's ICT use to ensure equal access and fairness of distribution of ICT resources.

- Providing curriculum materials and software which are in no way class, gender or racially prejudiced or biased.

- Monitoring the level of access to computers in the home environment to ensure no pupils are unduly disadvantaged.

Internet Safety

Internet access is planned to enrich and extend learning activities. The school has acknowledged the need to ensure that all pupils are responsible and safe users of the Internet and other communication technologies. Each class has been taught how to stay safe on the internet and use the 'Think then

Click' Lancashire policy. Every child has signed this agreement which is displayed in their classroom. Although the school offers a safe online environment through filtered internet access we recognise the importance of teaching our children about online safety and their responsibilities when using communication technology. This is emphasised during lessons, including those cross-curricula, where the internet is used (also refer to e-safety policy).

Management Information Systems (MIS)

ICT enables efficient and effective access to and storage of data for the school's management team, teachers and administrative staff. The school complies with LA requirements for the management of information in schools.

We currently use SIMs which operates on the school's administrative network and is supported by the LEA School's ICT Services Westfield Centre.

All teaching staff have read-only access to Assessment Manager and the SENCO module.

Only trained and designated members of staff have authority and access rights to input or amend data.

The school has defined roles and responsibilities to ensure data is well maintained, secure and that appropriate access is properly managed with appropriate training provided.

Assessment and Recording

Computing is assessed both formatively and summatively against the key objectives shown in the national curriculum for Computing. Formative assessment occurs on a lesson by lesson basis based on the lesson objectives. These are conducted informally by the class teacher and are used to inform future planning. Activities are planned at the end of each unit of work which enable summative assessments to take place where children's ICT capability is assessed. This work is accompanied by a description of the context in which pupils completed the task and how it was undertaken. The children complete a self-assessment sheet at the end of each unit of work.

School Liaison, transfer and transition

The school is connected to the Lancashire intranet which enables the transfer of information electronically.

Email is now used frequently to liaise with the LA, governing body, other schools and where possible parents.

Our school management information system enables the transfer electronically of data to aid transition to or between or within schools.

We also use text many parents to keep them up-dated with school news and events.

Inclusion

We recognise ICT offers particular opportunities for pupils with special education needs and gifted and/or talented children and/or children with English as an additional language for example.

ICT can cater for the variety of learning styles which a class of children may possess.

Using ICT can:

- Increase access to the curriculum.

- Raise levels of motivation and self-esteem.

- Improve the accuracy and presentation of work.

- Address individual needs.

We aim to maximise the use and benefits of ICT as one of many resources to enable all pupils to achieve their full potential. If the situation arises, the school will endeavour to provide appropriate resources to suit the specific needs of individual or groups of children.

Roles and Responsibilities

Senior Leadership Team

The overall responsibility for the use of ICT rests with Senior leadership team of a school. The Head, in consultation with staff:

- Determines the ways ICT should support enrich and extend the curriculum.

- Decides the provision and allocation of resources.

- Decides ways in which developments can be assessed and records maintained.

- Ensures that ICT is used in a way to achieve the aims and objectives of the school.

- Ensures that there is a Computing Policy and identifies a Computing leader.

Computing Leader

Mrs. J Stevenson is the designated Computing leader to oversee the planning and delivery of Computing within the school.

The Computing leader will be responsible for:

- Raising standards in Computing as a National Curriculum subject.

- Facilitating the use of ICT across the curriculum in collaboration with all subject leaders.

- Providing or organising training to keep staff skills and knowledge up to date.

- Advising colleagues about effective teaching strategies, managing equipment and purchasing resources.

- Monitoring the delivery of the Computing curriculum and reporting to the Headteacher on the current status of the subject.

The Subject Leader

There is a clear distinction between teaching and learning in Computing and teaching and learning with ICT. Subject leaders should identify where ICT should be used in their subject schemes of work. This might involve the use of short dedicated programmes that support specific learning objectives or involve children using specific applications which they have been taught how to use as part of their Computing study and are applying those skills within the context of another curriculum subject. Subject Leaders work in partnership with the Computing Leader to ensure all National Curriculum statutory requirements are being met with regard to the use of ICT within curriculum subjects.

The Classroom Teacher

Even though whole school co-ordination and support is essential to the development of Computing capability, it remains the responsibility of each teacher to plan and teach appropriate Computing activities and assist the leader in the monitoring and recording of pupil progress in Computing.

Monitoring

Monitoring Computing will enable the Computing leader to gain an overview of Computing teaching and learning throughout the school. This will assist the school in the self-evaluation process identifying areas of strength as well as those for development. In monitoring the quality of Computing teaching and learning the Computing leader will:

- Scrutinise plans to ensure full coverage of the Computing curriculum requirements.

- Analyse children's work.

- Observe Computing teaching and learning in the classroom.

- Hold discussions with teachers.

- Analyse assessment data.

- A regular review of this policy by the computing leader.

Health and Safety

We will operate all ICT equipment in compliance with Health and Safety requirements. Children will also be made aware of the correct way to sit when using the computer and the need to take regular breaks if they are to spend any length of time on computers. Health and Safety at work Act (1 January 1993), European Directive deals with requirements for computer positioning and quality of screen. This directive is followed for all administration staff. Whilst this legislation only applies to people at work we seek to provide conditions for all children which meet these requirements. The school has an alarm system installed throughout. Each computer system has individual security against access to the management system. The files and network system are backed up regularly. The virus checker is updated regularly.

Home school links

Children are given the option to complete some homework tasks, when appropriate, using ICT out of school. Teachers are sensitive to the fact that children may not have access to ICT or may not wish

to use it to complete tasks out of school. A school email address has been given to parents and is listed on the school headed notepaper. Parents who are new to the area use this method. We have a school website which will promote the school's achievements as well as providing information and communication between the school, parents, and the local community.

Appropriate legislation, including copyright and data protection

All software loaded on school computer systems must have been agreed with the designated person in the school.

All our software is used in strict accordance with the licence agreement.

We do not allow personal software to be loaded onto school computers.

Please refer to the school's data protection policy.

Effective and efficient deployment of ICT resources

ICT resources are deployed throughout the school (such as class camera's, two laptop trolley's and class talking pegs etc.) to maximise access, to enhance teaching and learning to raise attainment.

To enable regular and whole class teaching of Computing the school has a computer suite which all classes in Foundation and Key Stages 1 and 2 use weekly to develop their Computing skills.

A curriculum `peer to peer' network enables internet access on all machines as well as storage and access to shared files.

J. Stevenson

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