



St Peter's Church of England (Aided) Primary School

Computing Policy

The Governing Body of St Peter's Church of England (Aided) Primary School adopted this policy on 05/05/2015.

Signed: _____ (*Chair of Governors*)

Signed: _____ (*Head Teacher*)

Review every 3 years

This policy reflects St Peter's Primary School's values and philosophy in relation to the teaching and learning of and with computing. It sets out a framework within which teaching and non-teaching staff can operate and gives guidance on planning, teaching and assessment.

Introduction

The 2014 national curriculum introduces a new subject, computing, which replaces ICT. This represents continuity and change, challenge and opportunity. It gives schools the chance to review and enhance current approaches in order to provide an even more exciting and rigorous curriculum that addresses the challenges and opportunities offered by the technologically rich world in which we live.

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.

The E-Safety Policies including Acceptable Use and Data Security should be read in conjunction with this policy.

Aims and Objectives

Early years (see also EYFS policy)

It is important in the foundation stage to give children a broad, play-based experience of ICT and computing in a range of contexts, including outdoor play. ICT is not just about computers. Early years learning environments should feature 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 toys such as metal detectors, controllable traffic lights and walkie-talkie sets etc. Recording devices can support children to develop their communication skills. This is particularly useful with children who have communication difficulties.

The new National Curriculum states that pupils should be taught to:

	Key Stage 1	Key Stage 2
Computer Science	<p>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following a precise sequence of instructions</p> <p>Create and debug simple programs</p> <p>Use logical reasoning to predict the behaviour of simple programs</p>	<p>Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>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</p> <p>Use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs</p> <p>Understand computer networks including the internet; how they can provide multiple services such as the World Wide Web</p> <p>Appreciate how [search] results are selected and ranked</p>
Information Technology	<p>Use technology purposefully to create, organise, store, manipulate and retrieve data digital content</p>	<p>Use search technologies effectively</p> <p>Select, use and combine a variety of software (including internet services) on a range 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</p>
Digital Literacy	<p>Recognise common uses of technology beyond school</p> <p>Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.</p>	<p>Understand the opportunities networks offer for communication and collaboration</p> <p>Be discerning in evaluating digital content</p> <p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content</p>

Teaching and Learning

Through teaching computing we prepare children to participate in a rapidly changing world where work and leisure activities are increasingly transformed by technology.

An interactive and practical teaching style should be adopted to equip children with the skills necessary to use technology to become independent learners. This should be achieved by:

- Assisting the pupils to use computing with purpose and enjoyment.
- Assisting the pupils to develop the necessary skills to make full use of computing.
- Encouraging the pupils to become independent users of computing.
- Helping the pupils to realise the benefits of computing both inside and outside school.
- Meeting the requirements of the National Curriculum as fully as possible and helping the pupils achieve the highest standards of achievement.
- Celebrating success in the use of computing including displaying of learners' work in classrooms and public areas and on the school website.

Assessment and Recording

On-going formative assessment is an integral part of good practice. Children are formatively assessed continuously in Computing by teachers in the course of their teaching, through observation, questioning and analysis of work. It is the responsibility of the class teacher to assess the progress of individual learners. This involves identifying each child's progress, determining what each child has learned and what, therefore, should be the next stage in his/her learning, so informing future planning. Over the course of each academic year, children complete up to 6 units of work each building on prior knowledge and summative assessment takes place at the end of each unit. Samples of the children's work are kept in individual portfolios in the computer suite and, where applicable, on the schools server. Assessment is carried out against expected levels and achievement is reported to parents at the end of each academic year.

Resources

To support staff in the delivery of the new computing curriculum, Rising Stars Computing scheme of work has been purchased. It is anticipated that this scheme should be adapted to the needs of the children as staff become more familiar with the curriculum.

The school has a dedicated computer suite situated right in the centre of the school building. This is equipped with 20 individual desktop computers with 3 additional computers located in the adjoining library, enabling groups or classes to use at any time. These computers are linked to the school network allowing work to be saved centrally and printed either via a colour laser printer within the suite or a colour photocopier/printer located nearby. Children are given an individual password to enable them to logon to the network using any computer and these remains with them during their time at St Peter's.

In addition to the desktop computers, there is a class set of notebook computers in a powered storage cabinet which can be used in any classroom. The notebooks come with an appropriate range of software.

Also located within the computer suite is a variety of other computing and ICT equipment including; Roamers, voice recorders, microphones for performing, Kindles, Digi-flip video cameras, digital cameras, data loggers and Bee Bots.

Classroom Resources

All classrooms are provided with a laptop linked to either a projector and a smart board or an LCD screen, both of which are interactive. Every classroom has a digital camera and a cd player with multiple headphones or a class set of mp3 players for listening to stories.

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It is anticipated that within the next academic year, tablet computers will be added to the computing resources and the computer suite will have a major refurbishment. Staff are currently consulting on best practice within primary school computing provision.

Monitoring and Evaluation

The everyday use of computing technology is developing rapidly with new technology being produced all the time. This policy therefore will be reviewed and revised on a yearly basis. The Computing Curriculum Co-Ordinator will liaise with staff to monitor the effectiveness of the policy and the Computing Curriculum.

Andy Smith
December 2014