St Peter in Thanet Church of England Junior School

Policy for Computing and ICT

Our Computing and ICT Policy has been written by the school, building on the Kent LEA exemplar policy and government guidance.

Introduction

The use of technology in the 21st century is a part of everyday life for education, business and social interaction. It is essential that we harness the power of ICT to ensure that St Peter's is a dynamic learning environment where we help pupils to enjoy and achieve. We believe that computing and ICT can make a significant contribution to teaching and learning in all areas of the curriculum.

Purpose

A high-quality computing and ICT education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world. We aim to help our pupils become confident, independent and responsible users of ICT in an increasingly technological and interconnected world. We would like to be an e-confident school where ICT is embedded in all aspects of school life including planning, teaching and learning and assessment.

Aims

We aim to ensure that all pupils:

- Develop computational thinking – the ability to solve problems in a creative, logical and collaborative way and to provide opportunities for it to be developed through repeated programming activities and opportunities to build understanding and apply the concepts of computer science.
- Become responsible, competent, confident and creative users of information and communication technology.
- Have a growing awareness of how technology is used in the world around them and of the benefits that it provides. They are supported to evaluate and use information technology, including new or unfamiliar technologies. Are provided with opportunities for communication and collaboration which develop understanding of the purposes for using technology and these are used to bring together home and school learning experiences.
- Technology is used imaginatively to engage all learners and widen their learning opportunities,

- Pupils have access to a variety of devices and resources and are encouraged to reflect on the choices they make to use them.

Rationale

St Peter's believes that Computing and ICT:
- Gives the 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.
- Offers potential for effective group working.
- Has the flexibility to meet the individual needs and abilities of each pupil.

Attainment

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Curriculum coverage and progression

Planning for Computing is implemented using the National Curriculum Programme of Study for Computing. The new National Curriculum states that pupils should be taught to:

Aspects of Computing curriculum	Key Stage 2
Computer Science	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 Appreciate how [search] results are selected and ranked
Information Technology	Use search technologies effectively 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

Digital Literacy	Understand the opportunities [networks] offer for communication and collaboration Be discerning in evaluating digital content Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

- Long term planning demonstrates coverage and progression of the key objectives for Computing.
- Medium term planning takes account of differentiation and progression
- Opportunities for embedded ICT to support learning and teaching are identified in curriculum planning although some discrete ICT teaching will be carried out.
- The computer science aspects of Computing will be taught discretely through programming.
- E-Safety is developed through computing lessons and PSHE and builds the skills and understanding of Digital Literacy.
- Opportunities to use new technologies, including the iPad will be planned for.

Principles of teaching and learning
Teaching and Learning Styles
ICT can personalize learning and can deliver a more engaging, exciting and enjoyable learning process that encourages better learning outcomes. Teachers will use a variety of strategies depending on the need of the pupils. ICT can facilitate whole class teaching, group work, individual or paired work. ICT has the potential to enhance different kinds of learning and support pupils with additional needs (more and less able).
We encourage the use of the Internet and iPads to support teaching and learning (see e-safety policy). The school has a managed wireless network to enhance the use of the Internet and is currently running a 1:1 iPad scheme with three cohorts of pupils. All teaching staff have iPads and email may be used by some pupils.

Inclusion and Equal Opportunities
- Children's individual needs will be addressed through provision of resources, learning styles and questioning.
- Positive use of technology will be promoted by all.
- All computing and ICT resources will be fully accessible to all learners.

Assessment and Recording
There is a whole school approach to assessment and recording. Pupils' skills are assessed informally during lessons. Teachers regularly assess capability through observations and looking at completed work. Key objectives to be assessed are taken from the national curriculum to assess key ICT and computing skills each term. Assessing ICT and computing work is an integral part of teaching and learning and central to good practice. It should be process orientated - reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding of the concepts of ICT and computing. As assessment is part of the learning process it is essential that pupils are closely involved. Assessment can be broken down into;
- Formative assessments are carried out during and following short focused tasks and activities. They provide pupils and teaching staff the opportunity to reflect on their learning in the context of the agreed success criteria. This feeds into planning for the next lesson or activity.

- Summative assessment should review pupils' capability and provide a best fit level. Use of independent open ended tasks, provide opportunities for pupils to demonstrate capability in relation to the term's work. There should be an opportunity for pupil review and identification of next steps. Summative assessment should be recorded for all pupils – showing whether the pupils have met, exceeded or not achieved the learning objectives. This should be passed on to the next teacher.

- Children are encouraged to set success criteria for their work.
- Open questions are used to challenge children's thinking and learning.
- Children are encouraged to evaluate their own and others' work in a positive and supportive environment, including peer assessment.

Assessment of ICT capability will be achieved by planning appropriate curriculum activities in line with the school's general policy for assessment and reporting. It is good practice to collate samples of work from the integrated tasks at the end of each unit of work. These may be used as a basis for discussion about attainment and will be collected by the ICT co-ordinator as set out in the monitoring timetable and added to our school portfolio. The portfolio may also be used as a reference document to compare year-by-year progress throughout the school.

Monitoring and evaluation

The ICT Co-ordinator is responsible for monitoring the standard of the children's work and the quality of teaching in line with the schools monitoring cycle. This may be through lesson observations, pupil discussions or looking at work. ICT Co-ordinator is also responsible for supporting colleagues in the teaching of computing, for being informed about current developments in the subject, and for providing a strategic lead and direction for the subject in the school.

Health and safety

Pupils will be made aware of:

- Hazards or risks to themselves when using ICT e.g. IWB, Internet, chatrooms
- The steps they take to control the risks e.g Rules when using Internet, rules for iPad use or IWB use, use of passwords
- The action to be taken if risks occur
- How to manage their environment to ensure the health and safety of themselves and others
- • The ICT and computing technician /coordinator will be responsible for regularly updating anti-virus software.
- • Use of ICT and computing will be in line with the school's 'acceptable use policy'. All staff must sign a copy of the schools AUP.
- • Parents will be made aware of the 'acceptable use policy' at school entry.
- • All pupils and parents will be aware of the school rules for responsible use of ICT and computing and the internet and will understand the consequence of any misuse.

Age appropriate class and safety rules are displayed in the learning environment and equipment is maintained to the meet agreed safety standards. (see e-safety policy)

Managing Resources

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent network by investing in resources that will effectively deliver the strands of the national curriculum and support the use of ICT and computing across the school. The ICT Co-ordinator works with SLT to ensure that there is financial planning for computing and ICT over three years (Computer Replacement Plan) as well as a short term plan. An ICT asset register is maintained. Resources are purchased and deployed to meet the requirements of the Curriculum.

- Every classroom has a laptop connected to the school network, an interactive whiteboard with sound and DVD facilities and an Apple TV.
- There are 4 laptop trolleys in school containing 16 laptops with internet access available to use in classrooms.
- Three cohorts (Yr 3-Yr 5) have joined the 1:1 ipad scheme.
- There are 60 iPads located in two iPad trolleys.
- The hall and computer suite have Apple TV
- Every class teacher has an iPad for use in class.

See the school's ICT Computer Replacement Plan and General ICT Budget Plan which shows planned expenditure.

Roles and Responsibilities
The roles and responsibilities with regard to ICT are as follows:-

The Headteacher & SLT are responsible for -

- ensuring there is a shared vision for computing and ICT within the school
- ensuring consistent implementation of Computing and ICT Policy & e-safety Policy.

ICT Co-ordinator is responsible for –

- the day-to-day implementation of the iPad scheme, Computing and ICT Policy, e-Safety Policy and aspects of the Computing and ICT development plan (SIP) and Computer Replacement Plan as well as the implementation of a Computing and ICT scheme of work
- reviewing the ICT policy, e-Safety Policy, Scheme of Work, Home School Agreement for iPads, Staff ICT Conduct Agreement and iPad scheme
- Computing and ICT monitoring which includes classroom observations, scrutiny of work and planning and discussions with pupils
- co-ordinating the integration of Computing and ICT into the curriculum, ensuring continuity and progression throughout the 4 year groups
- co-ordinating Computing and ICT training for staff to raise awareness, build on experience and develop confidence
- working with subject co-ordinators and staff to encourage the use of ICT as a teaching & learning tool across the Curriculum
- overseeing equipment maintenance and liaising with our ICT technical team, SNS
- co-ordinating the purchase and allocation of ICT resources depending on budget priorities
- assisting in the management of the KLZ and school website.
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Teachers are responsible for –

- reporting ICT faults in 'Report a Fault' log for ICT technical team, SNS

- the assessment of pupils
- meeting the statutory requirements
- curriculum development
- implementing the e-safety policy and the health and safety policy and practice
- integrating effective use of Computing and ICT into the scheme of work.

Our Parents and Carers

St Peter's has links with the community through our regularly updated school website. Our website has information, resources and links for parents and carers. All newsletters are regularly updated onto the site. We encourage our parents and carers to be kept well-informed of ICT developments in our school. All new developments are discussed in newsletters and on the school website. Parents and carers are invited to speak to the ICT co-ordinator or view our policies if the need arises. Regular parent iPad or e-safety sessions are planned for. Parents have the opportunity to view our e-Safety Policy or withdraw their children from Internet access at school.

Staff Development

We recognise the need for, and will endeavour to provide ongoing staff training to encourage professional development and ensure a well- balanced delivery in the classroom. Annual Staff development is incorporated into Performance Management and the ICT Co-ordinator's Action Plan, taking into account the needs of the school and staff.

Review

This policy will be reviewed each year to evaluate the school's progress towards its computing and ICT targets. Progress will be discussed with the school management team and reported to the governors.
This evaluation will form the base for an action plan which will then inform the school development plan.

DS/October 2014
This policy will be subject to review in Autumn 2016