ST SWITHUN'S
Church of England VC Primary School

John Donne Church of England Primary School

Computing Policy

Issue 2

Author / Amended by	Date agreed
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Our Vision at St Swithun's

'Building foundations for the future'

Matthew 7:24-27

Our Vision at John Donne

'Let your light shine'

Matthew 5:16

Introduction

We believe that computing 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, which creates firm foundations for their future, 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.' (The National Curriculum in England Framework Document (DfE) 2014)

Our well-balanced curriculum promotes the spiritual, moral, cultural, mental and physical development of pupils and prepares them for the opportunities, responsibilities and experiences of later life. We will develop pupils' spoken language, reading and writing in all subjects and will develop pupils' mathematical fluency.

Curriculum Intent

The intent of our computing curriculum is to deliver a curriculum which is accessible to all and that will ensure that every child can reach their full potential within computing and the wider curriculum.

Our computing curriculum will:

- Develop pupil's learning which will result in the acquisition of skills and knowledge which they can use in the world around them and across the curriculum.
- Prepare all pupils to live safely in an increasingly digital British society.
- Enable pupils to use information technology for a range of purposes, developing creativity, efficiency and a confident navigation of the digital world.

Curriculum Implementation and Impact

Intent	Implementation	Impact
Develop pupil's learning which will result in the acquisition of skills and knowledge which they can use in the world around them and across the curriculum	**A clear and effective scheme of work that provides coverage in line with the national curriculum.** The school uses the 'twinkl planit' scheme of work. Teaching and learning will facilitate progression across the school within the strands of digital literacy, information technology and computer science. (see curriculum mapping document) Pupils will use a range of software and hardware across the curriculum. Pupils will have the opportunity to: ▪ 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. ▪ evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems. ▪ Be responsible, competent, confident and creative users of information and communication technology **Access to resources which will develop skills and knowledge** Children will have access to hardware (computers, tablets) and software that they need to develop their skills.	Children will be confident users of technology, able to use it to meet clearly defined outcomes. Key Stage 1 ▪ Have an understanding of algorithms ▪ Be able to debug software ▪ Predict the programmes that they are familiar with using ▪ Know how to store and re find work ▪ Be aware of how ICT is useful outside of school ▪ Be aware of safety online Key Stage 2 ▪ Design, write and debug programmes ▪ Be able to complete repetitive work ▪ Explain how some simple algorithms work. They should also be able to detect and correct any errors ▪ Have an understanding of computer networking ▪ Safely and effectively use search engines ▪ Be able to use a range of devices
Prepare all pupils to live safely in an increasingly digital British society.	**A clear and effective scheme of work that provides coverage in line with the national curriculum.** Teaching and learning will enable progression across all key stages. Pupils will explore issues such as digital communication, online safety, cyber bullying, security and social media Weekly e-safety information to parents. Annual e-safety information sessions for parents	Pupils will be able to apply the school's Christian Values and British Values of democracy, tolerance, mutual respect, rule of law and liberty when using digital systems.

In Computing, we recognise the importance of the methods and practice of teaching (the pedagogy) we choose to use in enabling pupils to know more, understand more and remember more.

In Computing, the following approaches will be used, and be evident in pupil discussion, observations and work in books, in order to ensure that the Computing learning opportunities are as effective as possible and that pupils progress throughout the year and across year groups during their Computing experiences in school:

Teaching Sequence	Look at and recap previous knowledge/skills that are relevant to the new learning.
	Provide realistic and relevant information.
	Specify key vocabulary to be used and its meaning.
	Opportunities for the children to work interactively and independently with the teacher acting as facilitator.
	Individual reflection on learning.

Role of the subject leader

The Subject Leader will:

- lead the development of this policy throughout the school;
- work closely with the all members of staff
- be accountable for standards in this subject area;
- monitor standards by;
  - ☐ auditing the subject area
  - ☐ review of the scheme of work
  - ☐ monitoring teachers planning
  - ☐ lesson observations
  - ☐ scrutinising children's work
  - ☐ discussions with pupils
- ensure continuity and progression throughout the school;
- devise a subject improvement plan;
- provide guidance and support to all staff;
- provide training for all staff on induction and when the need arises regarding;
- attend appropriate and relevant INSET;
- keep up to date with new developments;
- undertake risk assessments when required;
- review and monitor;

Annually undertake a subject evaluation that is based on the following questions:

- How do we design and provide a curriculum that is broad and balanced for all pupils? (Curriculum Intent)
- How do we deliver our curriculum through teaching, assessment and feedback? (Curriculum Implementation)
- How do we assess pupil achievement with our own school data? (Curriculum Impact)

Role of class teachers

Teachers will:

- comply with all aspects of this policy;
- work closely with the subject leader to develop this policy;
- devise medium and short term planning;
- develop mathematical fluency, numeracy and mathematical understanding in all subjects;
- develop pupils' spoken language, reading, writing and vocabulary in all subjects;
- plan and deliver good to outstanding lessons;
- plan differentiated lessons which are interactive, engaging, of a good pace and have a three part structure;
- have high expectations for all children and will provide work that will extend them;
- assess, record and report on the development, progress and attainment of pupils;
- achieve high standards;
- celebrate the success of pupils in lessons

Computer non-negotiables

- Pupils will be taught during an allocated one hour time slot each week
- The e-safety agreement is shared with parents/carers annually
- There will be a lesson on e-safety at the beginning of each half term
- In lessons where pupils will be using the internet, teachers must recap the school rules for e-safety.

Computing across the curriculum

In order to prepare pupils for using technology within school and the wider community, we encourage all pupils to use digital systems to support their learning across the curriculum and to aid their wider learning. This allows pupils to apply their computing knowledge and apply their skills to new contexts.

Monitoring and Review

Monitoring of standards of children's work and the quality of teaching is the responsibility of the subject coordinator supported by the Headteacher and the SLT.

Standards will be monitored by:

- ☐ looking at pupil's work
- ☐ subject observations
- ☐ pupil discussions
- ☐ audit of subjects
- ☐ scrutiny of planning
- ☐ general curriculum discussions