



## COMPUTING POLICY

### Introduction

This document is a statement of aims, principles and strategies for the teaching of Computing at St. George's Central Church of England Primary School and Nursery. It is the decision of the governors and staff to use the Clive Davies Challenge Curriculum to provide a rich, broad and creative approach to learning. Due to the mixed class arrangement, computing topics are planned on a 2-year cycle, with each class covering different curriculum areas throughout each term. This approach provides a context for learning, whilst also covering all objectives of the National Curriculum. Where possible, other lessons, particularly English and Topic lessons, link closely with these topics. The implementation of this policy is the responsibility of the Computing leader, governors and all staff.

### Our Mission Statement

St George's Central seeks to provide quality education rooted in the Christian faith, serving the spiritual, moral, and educational needs of the community of which it is part.

### Our School Motto

Never settle for less than your best.

### What is Computing?

A high quality computing curriculum aims 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 technology. We recognise that computing is an important tool in both the society we live in and in the process of teaching and learning. Pupils use different tools to find, explore, analyse, exchange and present information responsibly and creatively. They learn how to employ computing to enable rapid access to ideas and experiences from a wide range of sources.

Our vision is for all staff and learners in our school to become confident users of computing so that they can develop the skills, knowledge and understanding which enables them to use the appropriate resources effectively as powerful tools for teaching and learning, for example beebots, iPad, tablets etc.

### Aims

- To enable children to become autonomous, independent users of computing, gaining confidence and enjoyment from their activities.
- To develop a whole school approach to computing ensuring continuity and progression in all strands of the computing National Curriculum.
- To use computing as a tool to support teaching, learning and management across all areas of the curriculum.
- To provide children with opportunities to develop their computing capabilities in all areas specified by the curriculum.
- To ensure computing 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 computing in developing and maintaining links between other schools, the local community including parents and other agencies.

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## Curriculum Content and Skills

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 and are responsible, competent, confident and creative users of information and communication technology.

Purple Mash is to be used to form the medium term plans and short term plans for computing including: learning objectives, activities (differentiated), vocabulary and assessment. Adaptations are made to ensure the plan is progressive in developing pupil capability. Other curriculum areas are taught using other programs at the teacher's discretion such as Word, Powerpoint, Scratch etc.

Each class is allocated a time in the computing suite to follow this scheme of work. Each class can also access the iPad trolley to complete various activities from the computing curriculum.

## Skills and Processes in Computing

The main skills and processes that we endeavour to teach within computing at St. George's Central are listed below. These are adapted from the *National Curriculum* and are broken down into three key areas.

- Computer Science
- Information Technology
- Digital Literacy

### Skills and Process for Computing in Key Stage One

- 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.

### Skills and Process for Computing in Key Stage Two

- 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.

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### **Foundation Stage Provision**

Computing is taught in the Foundation Stage as an element of Understanding the World.

### **Cross Curricular Links**

Where possible, other lessons, particularly Topic and English, link closely with computing. At St George's Central we allow children many opportunities to use computing to complete different areas of the national curriculum.

### **Resources**

At St George's Central we access the computing curriculum through the use of the computing suite which has 30 computers. We also have iPads.

### **Assessment, Recording and Reporting**

Teachers will regularly assess children's learning, using this information to guide and inform planning to meet children's individual learning needs. The subject leader will monitor the subject in a variety of ways throughout the year. This may include scrutiny of planning, pupils' books, displays and pupil interviews.

Pupils will be assessed in different curriculum areas and teachers will give pupils a grade based on their understanding of the areas (Developing, Meeting, and Exceeding)

### **E- Safety**

See separate policy

### **The Role of the Computing Leader**

- To write a computing policy in consultation with other members of staff and governors.
- To write an annual action plan showing key areas of development for computing.
- To advise teachers on the computing curriculum.
- To ensure the adequate and appropriate provision of resources, and that teachers are aware of how to use the resources available.
- To arrange the purchase of computing resources within an agreed budget.
- To keep up to date with recent educational thinking about the teaching of computing and to attend courses and relevant training.
- To advise the Headteacher of strengths and areas for development in the computing curriculum and resources within the school.
- To monitor the computing curriculum within school and to have a clear understanding of standards.
- To address any issues relating to pupil progress in consultation with the Headteacher and members of staff.
- To keep a portfolio of evidence.

### **The Role of the Governing Body**

**The Governing Body is responsible for ensuring that:**

- There is a current policy statement and curriculum for the teaching of computing.
- Computing is included in the basic curriculum.
- Sufficient time and resources are devoted to computing to enable the school to meet its legal obligations and to deliver a quality computing curriculum.

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## The Role of the Headteacher

### **It is the Headteacher's duty to ensure that:**

- A Computing education is provided in accordance with the Governors' Agreed Syllabus for all registered children at the school.
- Appropriate staffing and resources are made available to meet the aims and objectives of Computing within the school.

### Conclusion

At St. George's Central we believe that it is our professional duty to share this policy with all new members of staff, parents and carers on request. The policy will be reviewed in the light of experiences, new developments or requirements. The leader will discuss any aspect of this policy on request.

**Developed by: Mr Simmons**

*Mrs S Yates*

Chair of Curriculum Committee

Date: July 2018



Headteacher

Date: July 2018

*Mr C Simmons*

Computing Lead

Date: July 2018

**Policy approved: July 2018**

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