

## ST BARTHOLOMEW'S C OF E PRIMARY SCHOOL COMPUTING POLICY

### Our Christian Vision

Believe Achieve Respect Together Succeed

B - We believe we will flourish in God's family.

A - We know that everyone in St Bart's can achieve.

R - We respect everyone in our family.

T - Together we support and help each other.

S - As part of God's family we support everybody to succeed.

### Safeguarding

St Bartholomew's C of E Primary School is committed to safeguarding and promoting the welfare of its pupils. We believe all staff and visitors have an important and unique role to play in the protection of children.

### The Nature of Computing

Computing is an integral part of the national curriculum and is a key skill for everyday life. At St Bartholomews CofE Primary School, we understand that computing is now a vital part of children's lives and that we need to prepare our pupils for an unknown technological future. Computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with literacy, 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 upon this knowledge and understanding, pupils are then 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.

### Aims and Purposes

The aims and objectives of computing at our school mirror those set-out in the national curriculum for computing and are intended 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.

The computing curriculum puts a clearer emphasis on three areas of learning:

- **Computer science** - how computers work and how to write algorithms and solve problems to eventually create a computer program;
- **Information technology** - how data is represented and managed on computers;
- **Digital literacy** - how to understand digital information and interact with it safely and appropriately.

The aim of the curriculum is to build an understanding of how computers work and how they can be used in pupils' lives - both in their future employment and in enabling them to become responsible 21st century global citizens.



## **Planning**

At St Bartholomew's CofE Primary school we follow the rising stars computing scheme from year 1 to 6, which maps out when national curriculum key objectives are to be taught. We have adapted this to suit the needs of our school by including more computer science throughout school and focused computer skills and computer science lessons in KS1.

## **Early Years**

It is important in the foundation stage to give children a broad, play-based experience of computing in a range of contexts, including outdoor play. Computing is not just about the use of 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 write or paint on the whiteboard or programme a toy. Electronic devices can support children to develop their communication skills.

## **Key Stage 1**

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 a sequence of instructions
- write and test simple programs
- use logical reasoning to predict and computing the behaviour of simple programs
- organise, store, manipulate and retrieve data in a range of digital formats
- communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

## **Key Stage 2**

By the end of key stage 2, pupils should be taught to:

- design and write 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; generate appropriate inputs and predicted outputs to test programs
- use logical reasoning to explain how a simple algorithm works 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
- describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely
- select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

## **Resources**

The school has a computing and iPad trolleys which are used to deliver both specific computing skills and apply computing across the curriculum. All classrooms are fitted with an interactive whiteboard which is used by both teachers and pupils. Some computing resources are stored centrally while others have been distributed to classrooms to ensure regular use.

## **Accessibility**

At St Bartholomew's C of E Primary School, we endeavour to achieve the inclusion of all children, including vulnerable learners, whilst meeting children's individual needs. Teachers provide highly effective wave 1 teaching with adaptive learning opportunities for all the children within the school and provide materials appropriate to children's interests and abilities. This ensures that all children have full access to the school curriculum. Adapted work and individual learning opportunities are provided for all children who require it and the school is committed to ensuring that all pupils can access digital learning tools effectively, regardless



of individual needs. A range of built-in accessibility features and approved applications are available on school devices to support inclusion.

The school website is designed to be accessible to all users and includes a range of built-in accessibility features. These are available through an on-site accessibility menu, which provides tools to support users with visual impairments and dyslexia. Features include options to adjust text size, contrast, and readability, helping users to navigate content more easily. The website can also be translated into multiple languages, ensuring that information is accessible to pupils, parents, and carers from diverse linguistic backgrounds.

- Windows Operating System Accessibility

All Windows devices used within the school provide the following accessibility features:

**Text Size** – Allows users to increase or decrease text for improved readability.

**Zoom (Magnifier)** – Enables screen magnification to support visually impaired users.

**Mouse Pointer Size** – Adjusts the size and visibility of the cursor.

**Text Cursor** – Customisable cursor to improve visibility when typing.

**Narrator** – Built-in screen reader that reads aloud on-screen content.

**Voice Access (Dictation Typing)** – Allows users to control the device and input text using speech.

**On-Screen Keyboard** – Provides a virtual keyboard for users who cannot use a physical keyboard.

**Colour Filters** – Adjusts screen colours to support users with colour vision deficiencies.

- iPad Operating System Accessibility

School iPads are equipped with the following accessibility features:

**VoiceOver** – A gesture-based screen reader that provides spoken descriptions of on-screen content.

**Zoom** – Built-in screen magnification tool.

**Display & Text Size** – Customisable text size, contrast, and display settings.

**Spoken Content (Speak Selection)** – Reads aloud selected text to support reading and comprehension.

**Voice Control (Dictation Typing)** – Enables device control and text input through speech.

**Google Translate** – Provides translation and text-to-speech support for multilingual learners.

**Microsoft Translator** – Offers real-time translation and speech capabilities to aid communication and understanding.

## **E-Safety**

The school is committed to the effective teaching of e-safety so that children are able to keep themselves safe at all times. All members of staff are aware of the e-safety policy.

Parent/carers, pupils and any other person dealing with children and ICT should be aware of and have signed the school's acceptable use policy (AUP).

Specific aspects of e-safety are taught in a progressive way throughout the school and highlighted in all aspects of the curriculum so that pupils build up awareness and resilience.

Project Evolve is also used half termly to teach aspects of online safety and digital literacy to ensure pupils understanding of key aspect in this area. Incidents or breaches of e-safety are logged and reported to the head teacher.

## **Assessment**

Assessment of children's computing work is ongoing and involves teacher assessment through the use of Sonar and sticky knowledge content from Rising Stars. Pupil's vocabulary knowledge is built on through the use of sticky vocab being used in use it or lose it slides. Children's work is saved to the server for reference throughout the year and displayed on the website.

## **Subject Leadership/ Leaders**

Computing subject leaders drive subject priorities forward and take a lead in:

- Ensuring progression, continuity and high expectations are maintained across year groups and key stages.
- Monitoring, assessment and record keeping
- Providing support and training



### **Monitoring and Assessment**

In line with the school Management Overview, quality of teaching and learning is monitored through:

- Lesson observations and drop ins
- Work scrutiny
- Pupil voice
- Data analysis

**Review Date: September 2027**