# St Laurence Church Infant School

# Computing Policy



Approved by: Curriculum, Safeguarding, Pupil

Welfare and Admissions Committee

Last revised on: November 2021

Next review due by: November 2024

#### Intent

## Why do we teach Computing?

We now live in a digital age where a use of technology is not a choice but is essential for almost every aspect of independent adult life. We want our children to be confident to navigate this technology, to understand its benefits, make informed decisions and to be able to keep themselves safe in online environments. We aim to develop confident, independent learners who are able to plan, design, create, program and evaluate information through the use of ICT.

Computing at St Laurence Church Infant School should not just be seen as a subject for its own sake, but also as an essential tool to enrich cross curricular learning. By teaching children to be digitally literate we are giving them tools to enhance their scientific, creative and humanitarian learning and to communicate and interconnect with the whole world.

#### Aims

#### Early Years Foundation Stage

The Early Years Foundation Stage is underpinned by the Characteristics of Effective Learning. They are:

### Playing and Exploring/Engagement

- > Finding out and exploring
- Playing with what they know
- > Being willing to 'have a go'

### Active Learning/Motivation

- Being involved and concentrating
- Keeping trying
- Enjoying and achieving what they set out to do

#### Creating and Thinking Critically

- > Having their own ideas
- Making links
- Choosing ways to do things

These characteristics will feed into the aims of computing in the Foundation Stage.

#### Key Stage 1

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

#### **Implementation**

## How we teach Computing

In the EYFS, an exploratory approach allows children to experiment with the use of technology including use of iPads, e-readers and programmable toys so that when they reach Key Stage One they are already familiar with the technology used across school and have formed a foundation of skills needed. Children will have continual access to Computing facilities throughout the Foundation Stage. Equipment includes the interactive whiteboards, programmable toys, Ipod's and cameras. The equipment is used to teach discrete Computing skills and to support and enhance learning in all areas of the EYFS. Teachers ensure that access to classroom-based Computing equipment is fair and available to all children.

In KS1 children follow a skills based approach through discrete computing lessons following a scheme of work, and also through exposure and use of technology in a cross curricular way. Children are taught the skills to use technology or an application before they utilise this in other aspects of their learning. Children work individually or in mixed ability groups showing how to use their skills in a variety of ways. Children have access to computing peripherals within the classroom in all areas of the National Curriculum to further develop computing skills and enhance learning. Each class in Key Stage One will have timetabled sessions each week for the teaching of dedicated computing skills. This may be used as whole class teaching or in smaller groups as the teacher feels appropriate.

Some aspects of the computing curriculum, especially those relating to e-safety are so important that they are reinforced through PHSE and through an annual whole school internet safety day.

#### In the Early Years pupils are taught to:

- recognise that a range of technology is used within home and school.
- > select and use technology for a particular purpose.

#### In Key Stage One pupils are taught to:

- > understand what algorithms are, how they are used and how programs use precise 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 and know where to go for help and support when they have concerns about content.

## How we plan Computing

Following the national curriculum objectives and a scheme of work, children are taught the different skills they need to complete tasks. Where possible these are then linked to a different curriculum area to encourage children to use computing in all their learning. Medium term planning ensures that all objectives are met and highlights how cross curricular links can be made. Using the scheme, weekly planning ensures that children skills progress.

#### How we ensure that all children are able to access the Computing curriculum

All children St Laurence Church Infant School are able to access the computing curriculum, regardless of ability. Teachers carefully ensure that all lessons are planned, offering a range of activities, allowing access for all children.

#### The use of Computing for the provision of SEND pupils

Children are able to use the ipad's and computers to help access all areas of their learning. Using the BGFL platform, children are able to type their work, record their voices to listen back to, create graphs and charts and take photographs to help them complete their tasks more independently in an alternative way.

During the teaching of Computing teachers will adjust tasks to enable those children with SEND to access and achieve the objective in the most independent way possible. This might be by breaking the task down into smaller sections and giving breaks between each section, providing a task board or picture clues for each part of the task. Children may also be given additional time to complete tasks to ensure the skills they are learning become embedded.

#### Online Learning

All children are currently provided with their own email address and access to BGFL 365. We will use this platform and Microsoft Teams when Remote Learning is necessary. Details of this and how we are using our computing platform as part of our Blended Learning can be found in the Blended Learning Policy.

#### How do we assess Computing?

Teachers assess children against the National curriculum objectives, offering feedback where appropriate. Children's progression in skills is assessed in an ongoing manner and is used to inform further planning.

### How is Computing monitored?

The Computing Subject lead will have continuous discussions with staff about the delivery of the curriculum and the accessibility of resources. Teachers will be provided with suggestions on how to provide opportunities for computing skills across the curriculum by the subject lead.

Evidence of children's work and progression of skills will also be monitored by the subject lead. This will be done by examining the red books and looking at the BGFL saved tasks particularly those on Jit as this will give a clear idea about how successfully children are accessing the Computing Curriculum and achieving the key skills needed.

The subject lead will also continuously discuss with the Computer technician about issues or adaptations to the system to enable staff and children to use its full potential.

#### Computing Impact

The impact of the Computing curriculum is measured by ongoing assessment against lesson objectives so that children have developed their computing skills and broadened their understanding of online safety.

PUPIL VOICE: Through discussion and feedback, children talk enthusiastically about their computing lessons and speak about how they love learning on the computer. Children across the school articulate well about the potential risks of being online, and can talk about ways to keep safe.

EVIDENCE IN KNOWLEDGE: Pupils know how and why technology is used in the outside world. They know about different ways that computers can be used.

EVIDENCE IN SKILLS: Pupils use acquired vocabulary in computing, including coding, lessons. They have the skills to use technology increasingly independently, for example accessing age-appropriate software and games in EYFS and using a range of computer software independently in KS1 and KS2.

BREDTH AND DEPTH: Teachers plan a range of opportunities to use technology, in computing lessons and to enrich learning in other areas of the curriculum.

### Policies that Link to the Computing Policy

- Blended Learning Policy
- Curriculum Policy

- English Policy
- EYFS Policy
- Maths Policy
- SEND Policy

## The Role of the Governors

The Governors will continually monitor this policy and its implementation by discussions with the Computing Lead and other members of teaching staff.

#### Review

This policy will be reviewed in three years or before reflecting changes to the curriculum.

Subject Co-Ordinator - Sarah-Louise Hegarty