

# St Luke's CE (Aided) Primary School

Computing Policy

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**Date Reviewed: 13.10.2023** 

Date Adopted: 24th January 2024

Review Date: July 2025

Minute number: 7

Signature of Chair of Governors Meeting:

MDanie

## **Rationale**

It is a primary aim of our school that every member of the school community feels valued and respected, is given the opportunities to thrive and flourish and that each person is treated fairly and well which is demonstrated through our school vision.

#### **Our Vision**

Through our Christian values we will **aspire** to be more like Jesus; **believe** all as having equal worth and dignity in God's eyes and help all our children to **achieve** their God-given potential knowing that,

'we can do all things through Christ who strengthens us'

Philippians 4:13.

The school's Computing policy, driven by our vision, motto and core values is a key factor in the success of our school Mission which states:

Our mission will be driven by our vision, motto and values so that together, we can do all things through Christ who strengthens us.' We will:

- Foster a secure, happy, and nurturing Christian environment where all can aspire, believe and achieve.
- Offer a well-disciplined school in which high expectations encourages *friendship* and *forgiveness*.
- Establish effective links between home and school that enables parents and teachers to work together for the benefit of their child so that they can *achieve* their God-given potential.

## **Spirituality In the Computing Curriculum**

At St Luke's our curriculum reflects our Theologically Rooted Vision. In every area we provide opportunities to ensure that the curriculum and extra-curricular opportunities meet the spiritual needs of all learners. In Computing, opportunities for spiritual development may be seen through activities which allow pupils to **encounter** ideas, **reflect** on their experience and have opportunities to **respond** to what they have learned such as:

• Explore how computer technology impacts on societies around the world.

- Consider Big Questions of computer technology past, present, and future.
- Explore how computer technology impacts on our own lives, beliefs and understanding.

Spirituality in Computing will be monitored through lesson observation, book trawl, pupil voice and learner action.

At St Luke's CE Aided Primary, we believe that computing is a crucial subject that prepares children for the digital world in which we live. Our aim is to equip our children with the skills and knowledge necessary to use technology safely, creatively, and effectively. This policy outlines our approach to computing education and sets out our expectations for teaching and learning in this subject.

## Aims, Objectives and Expectations

Our overarching aim is for children to become confident and competent users of technology. Specifically, we aim to:

- o Develop children's computational thinking skills and problem-solving abilities.
- o Foster creativity and encourage children to express themselves using technology.
- Ensure that children understand the safe and responsible use of technology, including online safety.
- o Provide opportunities for children to explore a range of technologies, including hardware and software.
- o Integrate computing with other subjects and the wider curriculum.
- o Prepare children for future study and careers in technology.

## We aim through our Computing Teaching to enable children to:

## By the end of Key stage 1:

- 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.

## By the end of Key stage 2:

- 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; and the opportunities they offer for communication and collaboration

- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- 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
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

#### Curriculum

To ensure that the national curriculum is covered in a broad and balanced manner, skills in computing have been broken down into the following strands to be taught and developed across each year.

Multimedia, Sound and Motion	Handling Data	Technology in our lives	Coding and Programming	Online Safety
Children are taught how to use a range of publishing, presentation and media tools (including audio, video, animation and 3D design) and develop skills to create high quality outcomes.	Children explore ways to that we can use technology to express information in tables, sort and organise information for others to be able to understand and learn how to check the accuracy of data and compare data for a specific purpose.	Children begin to make links to how they use technology outside of the classroom. They consider the benefits of using technology in their lives, making links to learning about online safety.  Practical skills are developed in using the internet effectively, including how to question the validity, reliability and bias of certain sites.	Children are taught to understand their influence on technology by developing their programming skills.  They begin to write programs, explain algorithms and identify errors in their work.  Children will be taught how to break down problems and create algorithms to solve them. They are able to explain the outcome of an algorithm with confidence and accuracy.	Children begin to consider their activity on the internet and learn about ways to keep themselves safe and why it is important to do so.  They are taught to compare appropriate and inappropriate activity on the internet and decide what to when presented with danger online.  Children also become more aware of their digital footprint by reflecting on their experience on the internet.

## Learning and Teaching:

Computing is taught discretely every week across all year groups with a focus on developing key skills. Staff encourage students to apply these skills in other subject areas to present ideas and explore new concepts. Medium term planning is done collaboratively by the subject lead and class teacher, making use of teach computing resources when appropriate or adapting/creating their own resources to meet the needs of students or enable more cross-curricular links. Resources are linked directly to the computing strands (Multimedia, Sound and Motion, handling Data, Technology in our Lives, Coding and Programming and Online Safety) and are included in the medium-term plan. Weekly plans are then completed or adapted from teach computing by class teachers.

#### Inclusion

Teaching follows the guidelines of the whole school policies for equal opportunities, SEND, EAL, and G&T. Planning ensures that all abilities and learning styles are catered for, and TA support is outlined to support a target group or individual children as required, and pre-teaching of key vocabulary is used as an Intervention strategy for identified children. Teaching is generally in mixed ability groups, enabling peer support and independence within the groups. Support and extension materials are provided as appropriate.

# Monitoring

At St Luke's there is a yearly monitoring plan for all subject areas ensuring that there aren't any clashes. Monitoring in computing takes the form of work sampling, learning walks, pupil interviews and lesson observations, which occur annually. Feedback from this monitoring, informs further developments within the subject.

## **Assessment**

Assessment in computing is carried out using the Computing Learner Profile, which helps teachers to evaluate the delivery and understanding of lessons. In addition, teachers also use summative assessments at the end of certain strands of work to assess skills and outcomes. This approach allows teachers to identify areas of strength and areas that may require additional support, thus enabling them to revisit these areas to ensure that all pupils are making progress.

## **Marking and Feedback**

In computing, due to its computer-based nature, marking and feedback are provided differently compared to other subjects. From as early as Year 1, pupils are taught how to share their work on MS Teams. Staff can respond directly online, and pupils are taught to self and peer assess using a combination of reactions and comments. This approach not only supports pupils in developing their digital literacy skills but also fosters positive digital citizenship.

#### **Resources**

St. Luke's ensures that all year groups have access to a wide range of computing devices, including laptops and iPads. These devices are maintained by a dedicated technician who provides weekly support to ensure their optimal functioning. Additionally, staff receive regular CPD to ensure they can take care of devices and report any issues. The school regularly reviews its budget to ensure that the computing resources meet the needs of the curriculum, and orders new hardware and software as needed. Any old or outdated technology is disposed of responsibly.

## **Online Safety**

Online safety is a crucial aspect of computing education. We take this very seriously at St Luke's CE Aided Primary and ensure that children are taught to use technology safely and responsibly. We have an online safety policy in place that outlines our approach to this area.

## Online Safety Policy Link

# **Appendices**

Computing plans, learner profiles, progression maps and all other computing resources can be found on the school's learning platform.