COMPUTING POLICY

This policy is informed by the Christian values that are the basis for all of CDAT's work and any actions taken under this policy will reflect this.

'Blessed are those who act justly, who always do what is right'

Psalm 106:3

St Matthew's C of E Primary School

Aims

- Meet the requirements of the National Curriculum programmes of study for computing.
- Provide a relevant, challenging and enjoyable curriculum for computing for all pupils.
- Use ICT and computing as a tool to enhance learning throughout the curriculum.
- To respond to new developments in technology.
- To equip pupils with the confidence and capability to use ICT and computing throughout their later life. To develop the understanding of how to use ICT and computing safely and responsibly.

Provision

By careful planning we aim, from Nursery onwards, to teach the children to be confident and safe users of Technology. This is achieved through weekly lessons in Computing that are based around three strands of computing; computer science, digital literacy and information technology. Within these three strands pupils are taught how to use the Internet in a safe manner underpinned through lessons and objectives set out by the framework: Education for a Connected World.

Early Years

In the Foundation Stage, children follow the Early Years Foundation Stage Curriculum. The Early Years curriculum focuses on three prime areas of learning and an additional four specific areas of learning. The main area within the EYFS framework related to computing is the Understanding the World Technology strand, although each area of the framework enables practitioners to effectively prepare children for studying the computing curriculum. The Development Matters document states of best practice in early years as being creative, active exploratory, playful and encourages critical thinking.

This should be achieved through teaching Computing in a range of contexts, including outdoor play. The EYFS learning environments should feature Computing scenarios based on experience in the real world, such as role play. Children can gain confidence, control and language skills through opportunities to explore using non-computer-based technology.

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 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.

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.

Teaching & learning

A wide range of styles are employed to ensure all children are sufficiently challenged and retain knowledge during their computing lessons and journey through the computing curriculum. Children may be required to work individually, in pairs or in small groups according to the nature or activity of the task. Different levels of support and input can be provided for children and at times when appropriate different outcomes expected.

Inclusion subject leadership support statement

When designing the curriculum, we think about all pupils and how to enable access for all. Computing lessons provide children with safe places to learn about and experience technology. In relation to SEND: at St. Matthew's we have children with need in all four areas identified as: cognition and learning, social, emotional and mental health needs (SEMH), communication and interaction needs and sensory and/or Physical needs. To support all our children to SHINE we ensure that lessons are planned and include all children through a range of approaches including: questioning, use of specially adapted equipment, increased scaffolding, mixed ability grouping and increased adult support including 1:1 where applicable.
We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents and those learning English as an additional language, and we take all reasonable steps to achieve this.

Assessment

The children's work in computing is assessed using teacher judgement by reviewing the progression of work over a curriculum unit. These assessments are made against end of unit, year and key stage objectives set out in the progression of skills for the computing curriculum. Ongoing assessment for learning strategies are used during lessons to ensure each child is attaining lesson objectives and retaining knowledge of previously taught material.

Monitoring and review of the subject

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 pupils' work;
- skills demonstrations – recorded video clips by class teachers and demonstrations for subject leader;
- subject observations;
- pupil discussions;
- audit of subjects;
- scrutiny of planning;
- general curriculum discussions;
- teacher discussions with support and professional development provided where applicable.