

## **Subject Statement**

**“I am the vine; you are the branches.”**

**John 15:5**

Just as the branches need the vine to grow and bear good fruits, so we need each other. Within the District family, each person is valued and loved, reaching out throughout our school, homes, families and the wider community for a stronger future.

This subject statement reflects our Christian vision. We value the efforts of all pupils, supporting them in developing their skills and knowledge through positive reinforcement and constructive feedback. We inspire high standards and encourage ownership and independence to build long-term positive learning behaviours that will take our pupils beyond primary school and into the wider world.

### **Our Vision for Computing:**

When teaching computing at The District CE, our aim is to equip the children with the skills required to use computers effectively as tools to enable them to maximise their potential. To do so, we aim to deploy teaching strategies that promote resilience, independence, critical thinking, communication skills and problem solving. We hope that our pupils become confident users of IT and responsible digital citizens who are ready to meet the challenges of their digital future.

### **Implementation**

At The District CE Primary School, our aim is to provide a computing curriculum which is rich in conceptual knowledge and in practical application. To this end, we introduce new concepts to the children in the form of “unplugged” sessions before giving them the opportunity to apply what they have learnt on digital devices. Teachers use the resources from the “Teach Computing” curriculum to support their planning. “Teach Computing” is a scheme of learning created by the National Centre for Computing Education, and funded by the DfE. The resources are continuously reviewed by teachers and updated according to changes in software and digital trends.

### **Early Years Foundation Stage (EYFS)**

In the Early Years Foundation Stage, computing is not taught as a discrete subject. The pupils are introduced to using a range of electronic toys and talk about the range of technology that is used in their homes and in school. They begin to use technology for different purposes, for example by using digital drawing tools and recording videos and audio.

### **Key Stage 1**

During Key Stage One, Computing is taught weekly as a discrete subject. The pupils’ learning is split into three sections at this point: digital literacy, information technology and computer science.

- Digital Literacy – Pupils are taught to think critically about their use of technology and how it impacts on their wellbeing. They learn to use the internet safely and to keep their private information safe. Pupils also consider how to be respectful and safe in their interactions with others online.
- Information Technology – Pupils are familiarised with the main parts of computers and how to use them. They also learn to identify various uses of IT both in school and in the wider world.
- Computer Science – Pupils learn the fundamental computer science concepts of sequence and iteration and apply them to create “unplugged” and digital algorithms using programmable toys and simple computer coding programs such as scratch junior. They are taught to identify “bugs” in their algorithms and to solve them logically.

### **Lower Key Stage 2**

Throughout Key Stage 2, content split into three parts: digital literacy, computing formation technology and computer science.

- Digital literacy – Pupils revisit the concepts introduced in key stage 1 in more detail. They are introduced to the concept of cyberbullying and how/why it must be challenged. They also consider the more practical aspects of online safety such as how to use passwords safely and how to think critically about things they read online. The pupils are also introduced to the concept of plagiarism and copywrite and understand when to give others credit for their work and intellectual property.
- Information Technology – Pupils continue to use computers to store and present data in different ways. They also learn to use the internet for collaboration using blogs and wikis and learn about the physical parts of computers and what they do.
- Computer Science – Pupils are introduced to the concept of “selection” as they create more complex algorithms during both unplugged and computer programming activities. The concept of debugging is re-visited and pupils use decomposition and abstraction when planning their work.

### **Upper Key Stage 2**

- Digital Literacy – Pupils use what they have learned in previous years to interrogate relevant situations that they may be faced with, such as receiving spam emails, being asked to share information about themselves and when this might be acceptable. They are taught to appreciate how their actions and interactions online leave a “digital footprint,” and how this can affect their online identity.
- Information Technology – Pupils use IT to produce more complex digital content and to explore the capabilities of modern technology such as smartphones and 3D printers.
- Computer Science – Pupils apply what they have learned in previous years to design, programme, debug and evaluate their own animations and games.

### **Inclusion**

As a school, we ensure that all pupils can engage with computing learning irrespective of their race, cultural background, gender, religion, creed, level of intellectual ability or physical and emotional circumstances.

As far as is appropriate, pupils with special educational needs should follow the same computing education programme as all other students. Careful consideration is given concerning the types of adaptation required, so that all children can participate in learning to the best of their ability.

It is not the school’s policy to withdraw pupils with special educational needs from computing education to catch up on other National Curriculum subjects: these aspects of personal and social development are as important to all pupils as their academic achievement.

### **Recording and assessment**

As mentioned above, computing lessons can take many forms and activities vary, dependent on the learning intentions from lesson to lesson. Tasks may require pupils to write, draw, act, take photos or videos, or work on computers in response to the teaching, or they may simply be asked to talk or play a game related to the topic.

Throughout a unit of work and in response to daily incidents and issues, teachers use formative assessment to tailor planning to suit the needs of their class.

In the EYFS, class teachers assess children’s development and progress in computing by making informal judgements as they observe children.

In Key Stage 1 and 2, class teachers gather evidence of what individual pupils know, understand and can do in computing by observing them at work, listening to and discussing with them, and evaluating and responding to any work they produce. At the end of each half term, an assessment of learning outcomes is recorded on InSight, identifying which children need further reinforcement or extension and what this should consist of.

## **Monitoring**

The computing lead monitors and reviews the implementation and development of the computing curriculum in consultation with the Headteacher, staff members and governors. Monitoring is done through a range of methods including:

- Regular planning and work scrutinies
- Learning walks
- Teacher observations
- Teacher, pupil and parent consultations