

Computing



# **Rudston Primary School**

## **Computing Policy** **Date: October 2020**

**Subject Lead: Mr. J M Griffiths**

**This policy and all school policies are produced in accordance to guidance set out in our school legislation and guidance policy.**

**Approved By Governors:**  
**Review**

### **Our Mission Statement:**

To develop a love of learning,  
enabling all children to reach their full  
potential.

\* Respect \* Resilience \*  
\* Responsibility \* Enjoyment \*  
\* Challenge \*

### **Safeguarding Statement:**

“Rudston Primary School is  
committed to safeguarding and  
promoting the welfare of children and  
young people and expects all staff  
and volunteers to share this  
commitment.”

# **Computing Policy**

**2020**

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## **Computing Policy**

### **Introduction**

This document deals with the teaching of Computing in relation to the National Curriculum 2014 Programmes of Study. It has been written after consultation with colleagues throughout the school.

### **1. Curriculum Statement**

#### **1.1. Intent**

Our aim at Rudston is to provide a high-quality computing education, which equips children to use computational thinking and creativity to understand their ever-changing world. The curriculum will teach children key knowledge about how computers and computer systems work, and how they are designed and programmed.

In their time at Rudston, children will have gained key knowledge and skills in the three main areas of the computing curriculum: computer science (programming and understanding how digital systems work), information technology (using computer systems to store, retrieve and send information) and digital literacy (evaluating digital content and using technology safely and respectfully).

Computing skills are a major factor in enabling children to be confident, creative and independent learners. Our intention is that pupils have every opportunity available to enjoy the subject area and to be challenged in this key, fast-growing area of life. Our ambition is for them to leave us with advanced personal skills, in order to be able to safely use technology and use it as an educational vehicle to apply to their entire education and future life.

#### **1.2. Implementation**

At Rudston, we have a computing suite and a class set of iPads to ensure that all year groups have the opportunity to use a range of devices and programs for many purposes across the wider curriculum, as well as in discrete computing lessons. Employing cross-curricular links motivates pupils and supports them to make connections and remember the steps they have been taught.

The implementation of the curriculum also ensures a balanced coverage of computer science, information technology and digital literacy. The children will have experiences of all three strands in each year group, but the subject knowledge imparted becomes increasingly specific and in depth, with more complex skills being taught, thus ensuring that learning is built upon. For example, children in Key Stage 1 learn what algorithms are, which leads them to the design stage of programming in Key Stage 2, where they design, write and debug programs, explaining the thinking behind their algorithms.

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From Year 1 upwards, it is our intent to have one designated Computing session taught per week utilising either the suite or the bank of iPads available.

### **1.3. Impact**

The implementation of this curriculum ensures that when children leave Rudston, they are competent and safe users of ICT with an understanding of how technology works. They will have developed skills to express themselves and be creative in using digital media and be equipped to apply their skills in Computing to different challenges going forward.

## **2. Curriculum Planning**

### **Programmes of Study of National Curriculum**

#### ***EYFS :***

Listening and attention: children listen attentively in a range of situations.

Physical Development: Moving and handling: children show good control and co-ordination in large and small movements. They move confidently in a range of ways, safely negotiating space. They handle equipment and tools effectively.

Technology: children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.

Expressive arts and design: Exploring and using media, children make music and experiment with ways of changing it.

#### **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**

Pupils should be taught to:

- 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

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- 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.

### **3. Differentiation and Equal Opportunities**

In line with our school's SEND & Inclusion Policy, all pupils irrespective of race, gender and disability, should be allowed to achieve the level of success and self-esteem they deserve. Equal opportunity will be reflected in tasks, outcomes and grouping situations, allowing each child to progress at his / her own level. Teacher and peer support will enable all children to reach their potential.

### **4. Assessment**

Assessment is used to inform future planning and to provide information about pupils throughout their time in school. Assessment is used by teachers to assess the on-going process and not just the finished products or outcomes.

An annual report to parents/carers details attitudes towards computing, progress and achievements made in this area. In assessing pupil's progress in computing teachers assess a pupil's ability, at the appropriate level, in varying aspects, listed in our assessment package (OTrack).

### **5. Cross Curricular Links**

As previously stated, Computing is integral in delivering high quality first teaching to pupils across the school. Furthermore, the opportunities to use aspects of computing (e.g. Safe Internet usage) across the entire curriculum are vast and are frequently utilised for the benefit of the pupils in school.

Examples of such cross-curricular usage include...

- Using multimedia to enhance learning
- Creating digital evidence of work / learning undertaken (presentations, picture collages, movies, etc.)
- Researching information online

### **6. Co-ordination**

Responsibility for the implementation of the Computing curriculum will be that of the designated lead curriculum teacher. They will:

- Design and deliver the curriculum
- Liaise with the computing hardware co-ordinator to oversee the curriculum needs of staff / children in this key area
- Review the assessments of children on a termly basis within OTrack
- Conduct pupil voice sessions and feedback to teachers.

Monitoring standards of teaching and learning within Computing is the primary responsibility of the Computing Leader. Wherever possible, great examples of pupils' work will be digitally stored (school's network or Google Classroom).

Monitoring will be achieved through:

- Learning walks.
- Observations.
- Pupil voice.
- Teacher voice.
- Reflective teacher feedback.
- Learning environment monitoring.

### **7. Policy Review**

This policy was written by J Griffiths, in October 2020, and was reviewed by the governors on xxx. The policy will be reviewed by October 2021.

### **Covid 19**

Due to the ongoing pandemic, changes will have to be made to this policy and the way in which this subject is delivered. In order to keep all staff and children safe, teaching will be restricted within year group bubbles. Certain key principles and protocols need to be maintained to avoid spreading any infection amongst the school. For example, iPads will need to be thoroughly cleaned after each usage by a year group bubble. Currently, we are striving to have specific weeks where year group bubbles can utilise the Computing Suite, with a two day (weekend) period of isolation in between bubble usage.

These principles and protocols are to be dynamic in the rapidly altering world that we are beginning to become accustomed with. Changes to this aspect of the policy will frequently be made, with the best intentions of delivering this important subject AND keeping the welfare of all school community members paramount.