Rudston Primary School

Computing Policy
Date: October 2022

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

2022

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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 large number of Chromebooks 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.

From Year 1 upwards, it is our intent to have one designated Computing session taught per week utilising either the Chromebooks 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

- 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.

From September 2022, school has purchased the online platform **Purple Mash**. Amongst other key areas, delivery of the Computing curriculum is completely covered by the platform; pre assessment, curriculum content, activities, assessment tools and tracking is all undertaken within the online portal. Each child within the school has an individual login, granting them access to all the above. Staff can interact with the pupils, setting them key (differentiated where appropriate) tasks and assessing them through the portal.

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 (Purple Mash).

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
● Viewing online material within our school portal (Purple Mash) that enhances curriculum delivery.

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 staff member(s) delivering Computing curriculum, to ensure effectiveness and suitability of the material
● Work to oversee the curriculum needs of staff / children in the key area relating to hardware
● Review the assessments of children
● 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:
o Learning walks.
o Observations.
o Pupil voice.
o Teacher voice.
o Reflective teacher feedback.

7. Policy Review

This policy was written by J Griffiths, in October 2022, and was reviewed by the governors. The policy will be reviewed by October 2024.