

Sharnbrook Primary

Computing Policy

January 2022

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Date agreed at Governing sub-committee: January 2022

Chair of Governors: L Carr-Archer

Head teacher: S Kaznowski

Date for review: 2025

1. Intent

To prepare children for the rapidly changing world through the use of technology, creating digitally literate children who have the skills they need to access different forms of technology to support their learning across the curriculum. To ensure children understand the need to stay safe and to create digitally resilient children who question the validity of online content.

Computing at our school is planned to meet the statutory requirements of the National Curriculum.

2. Aims

- To meet the needs and interests of the children whilst encouraging the enjoyment of computing.
- To promote learning experiences with IT and to promote the development of computing skills in all pupils in accordance with their individual capabilities.
- To encourage the children to apply what they have learnt to new situations
- To promote learning opportunities which conform to the EYFS and National Curriculum guidelines.
- To follow programmes of work which enable continuity and progression of computing capability through a broad range of experiences.
- To encourage pupils to gain information and stimulate an inquiring mind and thirst for computing knowledge and skills.
- To develop a growing awareness of how computing is used in the world around them and of the benefits it can provide.
- To ensure the health and safety of pupils when using technology when accessing the wider world.
- To create responsible and thoughtful users of technology.

The national curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

3. Intended Outcomes

| 3 and 4 year olds | Personal, Social and Emotional Development | Remember rules without needing an adult to remind them |
|-------------------|---|---|
| | Physical Development | Match their developing physical skills to tasks and activities in the setting |
| | Understanding the World | Explore how things work. |
| Reception | Personal, Social and Emotional Development | Show resilience and perseverance in the face of a challenge. |
| | | Know and talk about the different factors that support their overall health and wellbeing: |
| | | Sensible amounts of 'screen time'. |
| | Physical Development | Develop their small motor skills so that they can use a range of tools competently, safely and confidently. |
| | Expressive Arts and Design | Explore, use and refine a variety of artistic effects to express their ideas and feelings. |

| | Personal, Social and Emotional Development | Managing Self | Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. Explain the reasons for rules, know right from wrong and try to behave accordingly |
|-----|--|----------------------------|--|
| ELG | Expressive Arts and Design | Creating with Materials | Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function |

In Key stage 1 pupils will 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

Children will experience a variety of teaching methods best suited to their abilities and interests and access the curriculum through:

~ presentations by the teacher and other pupils.

~ discussion and debate

~ question and answer technique

~ individual and group research

4. Assessment, Recording and Reporting

Lessons are planned in line with the National Curriculum. The children are assessed against these learning objectives at the end of the lesson. These assessments are used to inform the progress and level of attainment in relation to the standard expected for their year group. Assessment levels are scrutinised by both the class teacher and subject leader to monitor progress. Individual attainments are passed to the next year group and at the end of the year, the child's achievements are put in a written report to parents.

5. Pupils with Special Needs

These pupils have full access to the Programmes of Study in Computing. Where appropriate and according to the needs of the individual, there is greater access to equipment in order to support learning. Where

appropriate, extra support is given by adults or peers and occasionally with modified equipment (for example modified keyboard)

6. Role of the Subject Leader

- Through informal and formal discussion, monitoring of saved work and where possible lesson observation to monitor the standard of computing throughout the school.
- To update the staff on developments in the subject area and support staff with planning.
- Monitor continuity and progression throughout the school.

7. Health and Safety

Please refer to the Acceptable Use Policy.