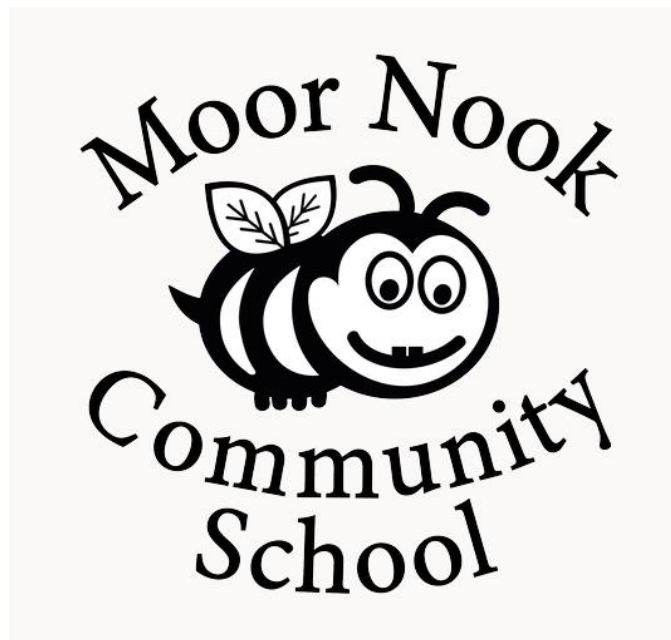# Moor Nook Community Primary School

Computing Policy
November 2022

Moor Nook Primary School aims to provide quality teaching and learning outcomes for all its pupils.

<u>Moor Nook Community Primary School</u>

<u>Purpose</u>

This policy reflects the school values and philosophy in relation to the teaching and learning of Computing. It sets out a framework within which teaching and non-teaching staff can operate and gives guidance on planning, teaching and assessment.

<u>Introduction</u>

Computing is concerned with how computers and computer systems work, and how they are designed and programmed. Pupils studying Computing will gain an understanding of computational systems of all kinds, whether or not they include computers. Computational thinking provides insights into many areas of the curriculum, and influences work at the cutting edge of a wide range of disciplines.

<u>Aims</u>

- Provide a relevant, challenging and enjoyable curriculum for computing and ICT for all pupils, including those with SEND.
- Meet the requirements of the national curriculum programmes of study for computing and ICT.
- Use computing and ICT 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 computing and ICT throughout their later life.
- To enhance learning in other areas of the curriculum using computing and ICT.
- To develop the understanding of how to use computing and ICT safely and responsibly.
- To ensure all elements of GDPR are followed.

<u>Rationale</u>

The National Curriculum presents Computing as one 'lens' through which pupils can understand the world through relevant, challenging and enjoyable activities. There is a focus on computational thinking and creativity, as well as opportunities for creative work in programming and digital media. The introduction makes clear the three aspects of the computing curriculum: Computer Science (CS), Information Technology (IT) and Digital Literacy (DL).

The core of Computing is Computer Science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge

to use through programming. By building on this knowledge and understanding, pupils become confident and are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate and able to use and express themselves and develop their ideas through information and communication technology, ready for the future workplace in later life and as active participants in a digital world.

At Moor Nook we believe that Computing:
- Gives pupils immediate access to a rich source of materials.
- Can present information in new ways which help pupils understand, access and use it more readily.
- Can motivate and enthuse pupils.
- Can help pupils focus and concentrate.
- Offers potential for effective group working.
- Has the flexibility to meet the individual needs and abilities of each pupil.
- Is planned with a clear sequence of knowledge and skills.
- Gives children the opportunity to experiment and learn without the fear of failure.

Statutory Requirements

The National Curriculum states that pupils should be taught to:

	KS1	KS2
CS	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	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 Appreciate how [search] results are selected and ranked
IT	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Use search technologies effectively 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
DR	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	Understand the opportunities [networks] offer for communication and collaboration Be discerning in evaluating digital content Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Subject Organisation

The Computing Curriculum will be delivered using the new Programmes of Study for Computing from National Curriculum 2014. Computing will be taught both as a discrete subject and to enhance learning in other areas of the curriculum in a cross-curricular way, when the opportunity presents itself.

Planning

This has been developed to meet the specific needs of children in our school. Working in collaboration with MGL a set of medium and short term planning has been set out to ensure that there is clear sequence and progression throughout the school. There is a focus on basic skills highlighting what children need to be able to do, in each year group. The detailed planning allows teachers to be able to use specific programs and guides them through each stage of the learning process. It also allows them the freedom to add topics, linked to the interest of themselves and the children in their class, without losing the progression throughout school. Expectations of children in each year group have been devised and will be used to aid progress and assessment.

Timetabled sessions in the computer suite and ipads distributed around the school, will be used to help pupils access the Computing curriculum, along with a range of other resources such as programmable toys, data loggers, visualisers and digital and video cameras.

The Computing subject leader will monitor, maintain, develop and update the resources required to deliver the Computing element of the National Curriculum. Any resources not used on a daily basis, robots etc, will be located in the large store cupboard located in the computer suite.

SEND

When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors – classroom organisation, teaching materials, teaching style, and differentiation – so that we can take some additional or different action to enable the child to learn more effectively. Assessments made by teachers using the National Curriculum statements allow us to consider each child's attainment and progress in relation to the expected year group. This helps to ensure that our teaching is matched to the child's needs.

Pupil Premium

Every teacher is aware of the children who receive Pupil Premium funding in their class. We recognise that not all pupils who receive free school meals will be socially disadvantaged. Through all subjects, we seek to ensure that teaching and learning opportunities meet the needs of all of the pupils and appropriate provision is made for pupils who belong to vulnerable groups. This includes ensuring that the needs of Pupil Premium children are adequately catered for and provision is put in place where needed.

More Able/Talented

Children who are more able are identified and teachers provide work to challenge their thinking. Opportunities for wider development are provided wherever possible, for example, extra-curricular clubs and links with local high schools.

Equal opportunities

It is the responsibility of all teachers to ensure that all pupils, irrespective of gender, ability, including able and gifted children, ethnicity and social circumstance, have access to the curriculum and make the greatest progress possible. The use of differentiation by outcome.

Assessment

Work will be assessed in line with the Assessment Policy. Assessment documents have been set up and are used by teachers at the end of each unit of work. This identifies those children who are working at, above or below the year group expectations. These are provided by the teacher to the Subject Leader who uses them to help aid monitoring of standards. Achievement is reported to parents at the end of each academic year.

Computer Technician

We employ an ICT technician responsible for maintenance, repair and professional advice. The technician is allocated to us for half a day a week. The technician will be responsible for:

- supporting the Computing Subject Leader with hardware issues.
- checking and keeping up to date with computer related problems.
- liasing with the computing coordinator and staff on general maintenance issues.
- installing new software onto the server and computers.
- sourcing parts required for hardware issues
- installing and updating of the school virus software provided by LEA.
- backing up data from the schools server.
- keeping a database of school hardware up to date.
- overseeing with the computing coordinator the disposal of decommissioned hardware.

Health and Safety

We will operate all ICT equipment in compliance with Health and Safety requirements and GDPR. Children and staff will also be made aware of the correct use of the equipment. The files and network system are backed up regularly and the virus checker is updated regularly. All aspects of GDPR are monitored to ensure our equipment and staff are compliant.

Review

The Headteacher and staff will review this policy in accordance with the development priorities stated in the School's Development Plan. Any suggested amendments will be presented to the governing body for discussion.

Date for review – November 2024