Moor Nook Community Primary School



Computing Policy

May 2020

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

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Purpose

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.

Aims

- 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.

Rationale

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 to suit the needs of the children.
- 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
ΙΤ	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	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

technologies	
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In the Foundation Stage, the Information Communication Technology requirements stated in the Knowledge and Understanding of the World element of the Early Learning Goals Foundation Curriculum, are covered in continuous and blocked units to give children a broad, play-based experience of computing in a range of contexts, including outdoor play. Children gain confidence, control and language skills through opportunities to 'paint' on the whiteboard or program a toy. They will also be given the opportunity to experiment with mechanical toys, building knowledge in the first stages of algorithms. Recording devices can support children to develop their communication skills. This is particular useful with children who have English as an additional language.

Subject Organisation

The Computing Curriculum will be delivered using the new Programmes of Study for Computing from National Curriculum 2014. The Development Matters and Early Learning Goals are followed to ensure continuity and progression from the Foundation Stage through to the National Curriculum. 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, extracurricular 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 out

<u>Assessment</u>

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. Children's work is saved to the server for reference throughout the year.

Acceptable Use

New technology, computers and the internet have opened up a wide range of opportunities for children and staff. At Moor Nook we understand that it is important to regulate this use and will do that by ensuring:

- children, staff and volunteers will be responsible users and stay safe while using the internet and other communications technologies for educational, personal and recreational use.
- school systems and users are protected from accidental or deliberate misuse that could put the security of the systems and users at risk.
- staff are protected from potential risk in their use of technology in their everyday work.

Online Safety

At Moor Nook we aim to provide children with the confidence to use technology in a safe and happy environment. To do this we will:

- To ensure that learners access to inappropriate sites and locations is restricted.
- To ensure that the use of the internet is for proper purposes related to the teaching, learning and curriculum of this school.
- To protect children from harm and upset that could be caused through giving them access to inappropriate sites, materials, images and contacts.
- To make learners aware that there are inappropriate sites that are harmful and so must be avoided in school and at home.
- To encourage learners to report immediately any inappropriate, sites, materials or contacts that they find on the internet either at school or at home.
- To ensure that pupils do not suffer from abuse by other pupils, including abuse by sexting
- To ensure that the school complies with section 127 of the communications Act 2003 and the recommendations of the Byron Report 2008.

Social Media

The use of social media and gaming has increased dramatically in recent years. At Moor Nook we want children and staff to use it responsibly. As a school we aim:

- To ensure that the content published and shared on social media by pupils, members of staff, others contracted to work in the school, volunteers, members of the governing body and the wider school community meets high professional standards and is not harmful or damaging to any other member of the school community.
- To ensure that material and comment published on social media sites does not damage the reputation of the school and does not breach the profession standard expected of staff and others associated with this school.
- To ensure that pupils, members of staff, those contracted to work in the school, volunteers, members of the governing body and the wider school community do not publish things on social media sites that a third party can access and use to damage the reputation of the school or the professional reputation of the publisher.
- To ensure that a proper professional distance is kept between those who work in the school and pupils attending the school including pupils under the age of 18 who have attended the school.
- To ensure that all members of staff, others contracted to work in the school, volunteers, members of the governing body and the wider school community understand that things published on the internet could be subjected to subsequent legal action for defamation and libel under the 2013 Defamation Act.
- To stamp out any 'cyber bullying' of pupils or staff on social networking sites or from any other internet and gaming sites.

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 written down in the "issues" book.
- 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: May 2020

Approved by:

Signed (Chair of Governors)

Date for review – November 2022