Longmoor Primary School

Computer Curriculum Policy 2025

Adopted by Governors

Chair of Governors **Signature:** *J. Wright*	**Date: 09.07.25**
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Computing Curriculum Policy.

Introduction

The use of information and communication technology is an integral part of the national curriculum 2014 and is a key skill for everyday life. computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Longmoor Primary School we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively. The purpose of this policy is to state how the school intends to make this provision.

Vision and Aims

We believe in a computing curriculum that is easy to follow and will equip children with the skills and knowledge they need to use technology safely and creatively. Computing isn't a subject just about memorising facts and vocabulary words, it's about solving complex problems, being able to collaborate with others and learn from mistakes. We want children to become independent and to have fun with technology while developing 21st-century skill.

Computing prepares pupils to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technology. Pupils use ICT tools to find, explore, analyse, exchange and present information responsibly, creatively and with discrimination.

It is essential that all members: Governors, Head Teacher, Senior Leadership Team and all teaching and support staff, model and promote the effective use of ICT and Computing in every pupil's daily school life in preparation for the wider world.

Longmoor is committed to developing increased access to ICT through the use of computers in classrooms, tablets (Ipads), laptops and the STEM room in order to raise standards of achievements through all curriculum areas in line with national targets.

Our aims are:

- To encourage children to develop positive attitudes to computing and to understand its importance and relevance to today's world.
- To enable children to acquire a broad range of computing capabilities and to be confident about using a range of hardware and software.
- To enable children to develop computing as a tool for learning and investigation in all subject areas.
- To use computing to encourage children to work co-operatively, taking

responsibility collectively.
- To use computing to develop independent ways of working which encourage children to take responsibility for their own actions.
- To set computing tasks which require flexibility of mind and open mindedness in problem solving.
- To provide a balanced range of progressively more difficult tasks which will develop children's understanding in Communicating and handling information, Controlling, Modelling and Monitoring.
- To demonstrate the correct use of a variety of ICT equipment.
- To ensure a balance computing activities are carried out in a range of contexts.
- To provide opportunities for children to explore the use of technology.
- To set aside time for discussion of children's experience of using computing, both in and out of the classroom.

We believe there are non-negotiable digital skills that children must possess:
- 'All children must have a basic understanding of coding and how the web works.'
- 'All children must able to evaluate online information and be social media savvy.'
- 'All children must understand online safety rules and know how to report and block.'
- 'All children must be proficient with word processing and able to use cloud storage.'
- 'All children must be able to create visually engaging content/presentations in order to present learning to others.'
- 'All children must have experience of online collaboration and using communication tools.'
- 'All children must be taught the concept of personal archiving and possess their own digital portfolio of work.

Computing in the Curriculum
The National Curriculum 2014 for Computing aims to ensure that all pupils:
- Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication.
- 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.

How we plan Computing
Teachers use the Knowsley CLC primary computing scheme of work to ensure full coverage of the National Curriculum Programmes of Study are taught. The

curriculum map and scheme of work sets out the knowledge, skills and understanding to be taught, along with planned units of work. This will ensure a progression of skills that meets the interests of all learners, with a range of exciting creative activities and open-ended challenges based on the essential requirements of the computing program of study. We also ensure children can build on their understanding, as each new concept and skill is taught with opportunities for children to revisit skills and knowledge as they progress through school.

Foundation Stage

It is important in the foundation stage to give children a broad, play-based experience of computing in a range of contexts, including outdoor play. Computing is not just about computers. Early years learning environments should feature computing scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to 'paint' on the whiteboard or drive a remote-controlled toy. Outdoor exploration is an important aspect, supported by computing toys such as metal detectors, controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills. This is particular useful with children who have English as an additional language.

By the end of 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 a sequence of instructions.
- Write and test simple programs.
- Use logical reasoning to predict and computing the behaviour of simple programs.
- Organise, store, manipulate and retrieve data in a range of digital formats.
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

By the end of key stage 2 pupils should be taught to:

- Design and write 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; generate appropriate inputs and predicted outputs to test programs.
- Use logical reasoning to explain how a simple algorithm works 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.

• Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.
• Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Continuity and Progression
When planning work involving the use of Computing, teachers are aware of the following points:
• Identifying opportunities for the development of computing skills.
• Ensuring progression in computing capability through different strands of the scheme of work.
• Planning activities where computing is used as a tool to help achieve a curriculum objective for another subject.
• Planning activities involving whole class teaching, where computing is used by the teacher to enhance the depth and pace of pupil's learning.
• Ensuring there are opportunities for pupils to work individually or collaboratively, in pairs or small groups.
• How activities can be modified to give access to pupils with special needs or pupils who need extension activities.
• Ensuring the necessary time or support is available to enable the pupils to carry out the activity.

The Computing subject leader's monitoring will ensure that the long-term planning ensures full coverage and progression in the programmes of study, the delivery of the Computing scheme of work. Subject leaders will ensure the cross-curricular requirements of other subjects are being met. The Computing subject leader will consult with each teacher to ensure that the medium-term planning for the programme of study can be delivered, through the provision of the necessary software and training if this is required.

Teaching Methods
Each of our activities are organised into a series of hour long computing lessons. We encourage teachers to help the children create their own digital learning journals that record their understanding and tell the story of the content they create with technology. These journals and the content the children create can be collated in a pupil portfolio and shared with parents, carers and even social media via tools like Seesaw. Lastly, in order to deliver a high-quality computing curriculum, the children need high-quality resources. Each activity will have links to practical resources, teacher handbook presentations and template computing journals for pupils.

Recording, Assessment and Reporting

Teachers assess children's knowledge, understanding and skills in Computing by making observations, through conversations with the children during lessons, the children's computing journal and the quality of the digital content they create. Built into the activities are several points were the teacher has the opportunity to assess and take stock of the children's progress, then provide feedback. Teacher feedback can be face-to-face or using digital 'marking' strategies such as adding text comments in digital work or adding audio of your comments. These assessment points are also designed for the children to reflect and express feedback on their own learning or engage in discussion about new concepts. Children are encouraged to be critical of their own work and highlight their own next steps.

- **Formative assessments** are carried out during and following short focused tasks and activities. They provide pupils and teaching staff the opportunity to reflect on their learning in the context of the agreed success criteria. This feeds into planning for the next lesson or activity. Each activity contains a slide with discussion points for children to reflect on their learning and understanding of the activity.
- **Summative assessment** should review pupils' capability and provide a best fit level. Use of independent open-ended tasks, provide opportunities for pupils to demonstrate capability in relation to the term's work. There should be an opportunity for pupil review and identification of next steps. Summative assessment should be recorded for all pupils – showing whether the pupils have met, exceeded or not achieved the learning objectives at the end of every term.

We assess the children's work in computing by making informal judgements as we observe the children during lessons. Once the children complete a unit of work, we make a summary judgement of the work for each pupil as to whether they have yet to obtain, obtained or exceeded the expectations of the unit. We record the results in assessment tables and we use these to plan future work, to provide the basis for assessing the progress of the child and to pass information on to the next teacher at the end of the year. Computing work is saved in the children's own portfolio using seesaw. Other work may be printed and filed within the subject from which the task was set.

Inclusion

All children should have equal access to computing in order to develop their personal computing capability. We ensure that computing activities are fully inclusive for all children regardless of gender, disability, ethnicity, social class or educational need by;

- Careful planning of groups to ensure that hands-on experience is equitable.
- Checking software and documentation to ensure that gender and ethnicity are reflected in a balanced way without stereotyping.

• Providing advice to teachers on the computing support that can be offered to individual children with particular educational needs, including high ability pupils. Teachers will liaise with the SENCO on the use of computing to improve their involvement in the curriculum.
• Using external specialist support to assess a child's specific needs and providing specialist equipment or software.
• Being aware that some children do not have digital devices at home and ensuring that all children have equal access to equipment.
• Ensuring good roles models amongst staff of computing usage.
• Ensuring there is a balance in the activities provided to encourage collaborative work as well as competitive activities to suit different learning styles.

Roles and Responsibilities

The Head teacher, Governors and SLT will be responsible for ensuring that:
• The school has an up to date computing development plan which is used to plan the development of computing in school over a period of years.
• The Computing Action Plan is incorporated into the School Development plan to ensure the necessary resources are available for its implementation.
• Ensuring the provision of technical and teaching support for computing.
• Ensuring opportunities for staff to receive necessary training.
• Monitoring the delivery of computing at Longmoor.

The Computing subject leader will be responsible for:
• The monitoring of long term and medium term planning.
• Supporting the delivery of the scheme of work.
• Managing the budget for computing and the provision of resources and consumables.
• Ensuring that resources are maintained and repaired as needed.
• Preparation and implementation of the Computing Action Plan (with support from SLT)
• Identifying the training needs of staff and delivery of some training or support in school.
• Planning and supporting technicians, support staff and other helpers.

The class teacher will be responsible for:
• To plan and deliver differentiated lessons that take into account individual children's computing abilities.
• To record or cross-reference the use of computing in non-computing subject planning
• To model to the children and give them direct instruction on how to use software and/or hardware safely.

- To ensure children receive equal opportunities to develop their computing capabilities.
- To assess and record children's abilities and capabilities according to the assessment criteria set out in the scheme of work and against National Curriculum 2014 programmes of study.
- To identify the computing progress and effort of each child within termly assessment tables and their annual written school report.
- To ensure all digital equipment is secured appropriately.

The support staff will be responsible for:
- Obtaining planning from teachers/being briefed on the lesson.
- Supporting the pupils as they work on digital devices, discussing the activities with them.
- Reporting back to teachers on pupil's progress and where the activity did not meet the needs of pupils.
- Recording the progress of any pupils as required.
- Ensuring they have time to know the program they are to use with children.
- Minor troubleshooting of computers necessary to keep systems running during lessons.

The technician will be responsible for:
- To maintain an inventory of all software installed and related licenses.
- To install all software according to the licenses purchased on machines
- To maintain an inventory of all ICT and Computing hardware within the school premises.
- To provide technical assistance for any hardware, software or server issues
- To ensure backups of data are performed regularly.

The pupils will be responsible for:
- To use computing resources, software and hardware, in the appropriate manner.
- To ensure that they are safe at all times when accessing the internet. (See the online safety and acceptable use policies)

Resources

Purchases are planned to ensure that the computer equipment and software remains up to date, with a gradual policy of replacement and renewal of older equipment. Obsolete equipment is written off from the school inventory with the permission of the governors and is disposed of in line with Derbyshire County Council's environmental disposal policy. The Computing subject leader reviews new equipment and software as it comes on the market in order to remain up to date with developments and to offer advice on the purchase of new resources. Subject leaders are included in planning the purchase of software and equipment for their

subject. The list of software and hardware is regularly reviewed. Computers are organised so that there are two computers in each classroom, which support the cross-curricular use of computing. Each classroom has an interactive screen which supports the Smartboard interactive whiteboard. Longmoor also has an established STEM room with additional computers. School also has a set of 15 networked wireless laptops and five sets of tablets (iPads), which can be used to support classroom teaching and learning. The iPads are separated into year groups so that EYFS, Infants, years 3/4 and years 5/6 have a set of 15 iPads each. All hardware is equipped with a set of core software to meet the requirements of the scheme of work and additional software is available to meet the specific requirements of other subjects and for special educational needs. Software not installed on machines is available from the ICT technician. Up to date virus protection is installed on all machines. The installation of any software not purchased by the school is not allowed and all software installed on machines has the correct licence. The ICT subject leader holds an up to date list of all the software licences and on which computers the software is installed. All staff are informed of the licensing laws for software and the risks from virus infection. The school will undertake to replace computer equipment in order to maintain the current ratio of computers:pupils. Due to the cost of replacing equipment it is vital that all ICT equipment is adequately insured. Equipment will continue to be repaired as long as it is economically viable to do so. AIT maintain the school's hardware.

Additional resources available include an individual iPad per teacher, sound recorders ('Talking Tins', 'Talking Speech Bubbles', 'EasiSpeak' microphones, Digiblue cameras, listening stations, control devices (e.g. Beebots, Probots and Roamers), 2 dataloggers (ECOlog) and 2 digital microscopes. There is also a portable projector that can be used in the hall for meetings and assemblies etc. The school's technical provider is AIT who visit the school as and when support is needed via an online ticketing system all teachers have access to.

Staff Development

We recognise the need for, and will endeavour to provide ongoing staff training to encourage professional development and ensure a well-balanced delivery in the classroom. Annual Staff development is incorporated into the Computing Co-ordinator's Action Plan, taking into account the needs of the school and staff. Regular staff training sessions are led by the Computing co-ordinator as well as from outside agencies.

Health and Safety

The school has a health and safety policy, which is available in a separate policy. The particular issues associated with the use of Computing equipment are;

- All workstations offer a safe environment for pupils and staff to work.

• All electrical equipment is regularly checked.
• Wires must not be allowed to trail on the floor or worktops chairs and tables are at an appropriate height for the children.
• Lighting is suitable and monitors are not facing bright direct lighting from a window.
• The classrooms and STEM room are adequately ventilated.
• Children and staff do not eat or drink near the computers,
• Children are aware of the dangers of using electrical equipment and are taught the rules for safe use of the computers, such as how to switch them on and off correctly.
• Children do not work at the computer for long periods of time without a break.
• Children and staff should not look directly into the light from projectors. If necessary, they should be switched to the 'blank screen' mode.
• Online safety guidelines are set out in the Online Safety policy and Acceptable Use policy.

Internet and e-mail policies
The school has an Online Safety policy and Acceptable Use policy which has been presented to the Governors and accepted and which direct the use of the Internet. All members of staff in school are aware of these policies. Opportunities are made for parents to receive online safety advice via in-school training or through information leaflets/letters sent home.

Security of the systems
The risks associated with having a large number of digital devices in school have been assessed and advice has been sought from the police on the best form of security. The following steps have been taken to ensure the security of the systems;
• All computers have security marking.
• The school is alarmed.
• All digital devices have a secure, lockable containing unit.
In addition staff will not leave data or confidential information on systems to which pupils have access. Regular backups will be kept of important files and data and these will be kept secure.

Virus Protection
All staff are made aware of the issues surrounding the spread of virus infection and the following steps taken:
• All administration and curriculum machines in school are installed with virus protection software which is regularly updated.
• AIT are responsible for installing programs from the Internet and cds to ensure they are safe and from reputable sources.
• Software will not be installed onto digital devices unless its origin is known and

the correct licence is available.

- All staff and students will be made aware of the risks of virus infection from work carried on USB memory sticks. These can only be used where they can be guaranteed free from virus infection and files should be deleted once stored on the schools server.
- All staff and students will be made aware of the risks from virus infection from attachments to email and these will be virus checked before they are opened.
- If virus infection is suspected action will be taken at once to ensure protection of the system.
- The school's technical provider, AIT, ensure data is backed up regularly.

Date implemented: Summer Term 2022
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