LONGTON LANE PRIMARY SCHOOL

'Believe and Achieve'

COMPUTING POLICY

Amendments made since last review Summer 2022 – change of preferred SoW for computing to Teach Computing. Purchase of CenturyTech to support KS2 homework. Change of assessment to Arbor from O'Track. Autumn 2023 – Policy amended to include 3i statements – Intent, Implementation and Impact	
Policy agreed / reviewed 28/11/2023	Next review due Autumn term 2026
Signed on behalf of the Governing Body	Signed by headteacher

Intent

Computing is an invisible footprint across all aspects of a child's life. A high-quality computing curriculum equips children to use computational thinking and creativity to understand and change the world. Computing has links with mathematics, science and design and technology with insights into both natural and artificial systems.

Computer Science is the core of computing where children are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. From here pupils are equipped to use information technology to create programs, systems and a range of content.

Computing also ensures that our children are digitally literate; able to use, express themselves and develop ideas through ICT as participants in the digital world and in the future workplace.

Aims

- To develop children's understanding of technology and how it is constantly evolving.
- To enable a safe computing environment through appropriate computing behaviours.
- To allow children to explore a range of digital devices.
- To enable children to become confident coders on a range of devices.
- To create opportunities for collaborative and independent learning.
- To develop ICT as a cross-curricular tool for learning and progression.
- To promote learning through the development of thinking skills and problem solving.
- To enable children to understand and appreciate their place in the modern world.

Curriculum Implementation

At Longton Lane Primary School, computing is taught using a blocked curriculum approach. This ensures children are able to develop depth in their knowledge and skills over the duration of each of their computing topics. Teachers use the 'Teach Computing Curriculum' scheme of work, published by NCCE (National Centre for Computing Education), as a starting point for the planning of their computing lessons, which are often richly linked to engaging contexts in other subjects and topics. We have laptops, iPads, mini tablets and interactive whiteboards 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 scaffolded and all National Curriculum requirements are covered. 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

Internet safety is taken extremely seriously and is embedded within the Scheme of Work. We have an E-Safety Policy that provides guidance for teachers and children about how to use the internet safely. Every year group participates in lessons on e-safety through both computing and PHSE, children understand how to stay safe when using technology and Internet safety days are held annually to address current issues.

Broad Guidelines

- Foundation Stage also use units from 'Barefoot Computing' as Teach Computing does not provide EYFS planning.

-The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards consistent, compatible computer systems by investing in resources that will effectively deliver the objectives of the National Curriculum and support the use of IT, computer science and digital literacy across the school.
-Teachers are required to inform the SBM and report faults to the St. Helens school IT support desk as soon as they are noticed. A service level agreement with St. Helens school IT support desk is currently in place.
-Every classroom from FS2 to Y6 has a computer connected to the school network and an interactive whiteboard with sound, DVD and video facilities.
-Teachers have individual laptops and iPads which can be used at home for work and communication purposes.
-There are two laptop trolleys / two iPad trolleys – 1 each in KS1 building and KS2 building.
-Where appropriate IT can be used to support SEN children on a one-to-one basis where children receive additional support.
-IT is used to support homework in KS2 with the purchase of Century Tech and has been used to deliver intervention programs through Third Space Learning.

-Assessment standards achieved are recorded against the planned outcomes in a newly installed software called Arbor which include -
•Children can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation;
•Children can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems;
•Children can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems;
•Children are responsible, competent, confident and creative users of information and communication technology.

-Health and safety
The school is fully aware of the health and safety issues involved in children's use of IT and computing.
All fixed electrical appliances in school are tested by a Local Authority approved contractor every five years and an external contractor tests all portable electrical equipment in school every twelve months.
Staff MUST NOT bring their own electrical equipment in to school.
-For any equipment brought in to school by, for example, visitors running workshops, activities, etc. it must be PAT tested and it is the responsibility of the member of staff organising the workshop / SBM to check.
-All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the SBM who will arrange for repair or disposal.
In addition:

- Children should not put plugs into sockets or switch the sockets on.
- Trailing leads should be made safe behind the equipment
- Liquids must not be taken near the computers
- Magnets must be kept away from all equipment
- E-safety guidelines will be set out in the e-safety policy & Acceptable Use Policy

<u>Curriculum Impact</u>

Our Computing curriculum is high quality, well thought out and is planned to demonstrate progression. If children are keeping up with the curriculum, they are deemed to be making good or better progress. In addition, we measure the impact of our curriculum through the following methods:

- A reflection on standards achieved against the planned outcomes – Arbor and work scrutiny;
- Pupil discussions about their learning;
- Teacher feedback booklets to record misconceptions or exceptional learning for each lesson.

Pupils will leave Longton Lane with the following knowledge and skills:

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