LAVANT C.E. PRIMARY SCHOOL

Computing POLICY

Reviewed March 2020
Review March 2023

Intent

At Lavant CE Primary School, we aim to prepare children for a rapidly changing world using technology. Our computing curriculum is designed to enable our pupils to use computational thinking and creativity to further understand our world. We provide a wealth of learning opportunities and teach transferrable skills explicitly within discrete computing lessons and cross–circularly through Learning Journeys. We aim to ensure that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

The national curriculum for computing has four main 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.

At our school, we meet the requirements of the national curriculum programmes of study for computing by:

- providing a relevant, challenging and enjoyable computing curriculum for all pupils
- using ICT and computing as a tool to enhance learning throughout the curriculum
- responding to new developments in technology
- equipping pupils with the confidence and capability to use ICT and computing throughout their later life
- recognising the potential, and deepen the awareness of the application and necessity of ICT in everyday life
- ensuring our pupils understand how to use ICT and computing safely and responsibly.

Implementation

We have devised a computing scheme of work that provides a clear progression of knowledge and skills for the strands of digital literacy, information technology and computer science, in line with the National Curriculum.

Early Years Foundation Stage

In Early Years Foundation Stage, children are taught to use equipment and software confidently and purposefully, to communicate and handle information and to support their problem-solving, recording and expressive skills. We believe it is important in Early Years to give children a broad, play-based experience of technology in a range of contexts, including outdoor play.

It is not just about computers. EYFS learning environments should feature ICT scenarios based on experience in the real world, such as in role-play. Children gain confidence, control and language skills through opportunities programme a toy, compose music, or paint on the computer. Recording devices are used to capture storytelling and can support children to develop their communication skills.

Key Stage 1

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 the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

Key Stage 2

In Key Stage 2, our children extend their use of computing that they use for communication, investigation and programming and work to understand how to communicate safely. Our planned curriculum for digital literacy that includes online safety is broad in covering a range of issues including understanding current issues such as 'fake news' and 'body image'.

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 words 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.

Impact:

- Our children are confident using a wide range of hardware and software, and are diligent learners who value online safety and respect when communicating with one another.
- There have been no reported online safety incidents in the past 18 months as a result of strong and consistent online safety procedures.

In computing lessons at Lavant Primary, you see:

• Proficient users of technology who are able to work both independently and collaboratively.
• Computing hardware and software being utilised to enhance the learning outcomes of our children, across the curriculum.
• Clear progression in technical skills.
• A learning buzz as children engage in programming, instruct floor robots, prepare online safety presentations
• *Confident and supportive Digital Leaders who are able to assist children and staff in delivering high quality Computing sessions.*

Resources and access

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards a consistent, compatible computing system by investing in resources that will effectively deliver the strands of the national curriculum and support the use of ICT and computing across the school.
Staff are required to inform the technician / subject leader of any faults as soon as they are noticed and record these in the folder situated in the staffroom. JSPC provides a named technician who is available in school every Thursday morning to deal with technical issues.

ICT and computing network infrastructure and equipment has been sited so that:

- every classroom has a computer connected to the school network, an interactive screen, and an IPad
- EYFS and KS1 have a bank of desktop PCs in their classrooms
- Further desktops are available in communal working areas / corridors
- there is a laptop trolley containing a class set of laptops / notebooks
- Pupils have access to a range of learning platforms, including, Phonics play, Numbots, Times tables Rockstars, Busy things which provide a huge library of maths and phonics activities
- we currently subscribe to Join it – an online handwriting tool for all key stages
- Pupils have access to a digital camera, flip-cam, datalogger, stereo/listening centres

Differentiation and SEN

We believe that all children have the right to access ICT in support of their learning. In order to ensure that children with special educational needs

achieve to the best of their ability, outcomes are adapted and the delivery of the computing curriculum is differentiated for these pupils.
Where appropriate, ICT is used to support SEN children on a one to one basis. Where children receive additional support, in particular some software systems are used to support language, spelling or reading development.

Wider Community Links
Lavant C.E. School supports the use of technology throughout the wider community and with the use of the school website, we share children's work, latest information, developments and newsletters, Governor and Parent Association information with parents and carers.

Safeguarding / Health & Safety

The safety of all children is paramount at Lavant C.E. Primary School. The use of the internet is a fundamental element of the curriculum and the teaching of e-safety is therefore an important aspect of ICT teaching and learning in all year groups (see Safe use of Internet policy). Where the school website is used to display children's work, every effort is made to safeguard their privacy. The school office holds a record of children who may have a photograph of themselves displayed on the website and class teachers are routinely updated on this.

Children are routinely made aware of the following guidelines:

- Children should not unplug or plug in electrical equipment.
- Computer workstations and working areas should be kept free of obstruction and be arranged so as to avoid unnecessary stretching.
- All equipment is regularly checked by our ICT technician and / or County.
- Children should be made aware of the rules for using the Internet and E-mails (see Acceptable Use Policy) and of safe usage of the Internet.
- Children are only allowed filtered access to the Internet –under close adult supervision.
- Children may not use the computers unless supervised.
- Children should be made aware of the need for correct posture and the dangers inherent in spending too long looking at a computer screen.
- Water bottles should not be placed near computers.
- the IT technicians will be responsible for regularly updating anti-virus software

Evaluation and Review

This ICT policy has been reviewed, agreed and implemented by the staff and Governors of Lavant C.E. Primary School.