



Springdale Primary School

Computing Policy

Subject leader: Mrs Thomas

Headteacher : Mrs Janice Hopkins

Approved date: 2021

Review date: 2022



Due to the fast pace of technology innovation and constantly emerging trends, this policy will be reviewed at the start of every academic year.

Our Learning Ethos

At Springdale, we understand the immense value technology plays not only in supporting the Computing and whole school curriculum but overall in the day-to-day life of our school. We believe that technology can provide: enhanced collaborative learning opportunities; better engagement of pupils; easier access to rich content; support conceptual understanding of new concepts and can support the needs of all our pupils. Computing skills are a major factor in enabling children to be confident, creative and independent learners. To provide children with every opportunity available to allow them to achieve this, we offer a curriculum that integrates ICT across all subject areas, ensuring that pupils become digitally literate and digitally resilient. Technology is ever evolving and we aim to develop pupils who can use and express themselves, develop their ideas through, information and communication technology at a suitable level for the future workplace and as active participants in a digital world.

This policy should be read in conjunction with the following school policies:

- Acceptable Use Policy
- Safeguarding Policy
- Assessment Policy
- Marking Policy
- SEND Policy
- Equality Policy
- Inclusion Policy
- Health and Safety Policy

Our Aims

- Provide an exciting, relevant and challenging Computing curriculum for all pupils.
- Children are responsible, competent, confident and creative users of information and communication technology.
- Know how to keep themselves safe whilst using technology and on the internet and be able to minimise risk to themselves and others.
- Become responsible, respectful and competent users of data, information and communication technology.
- Become digitally literate and are active participants in a digital world.
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Provide technology solutions for forging better home and school links.
- Enthuse and equip children with the capability to use technology throughout their lives.
- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Instil critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with
- Utilise computational thinking beyond the Computing curriculum.
- Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient in the tasks associated with running an effective school.
- Give children access to a variety of high quality hardware, software and unplugged resources.
- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others.

Inclusion

At Springdale Primary, we aim to enable all children to achieve to their full potential. All children have equal access to the curriculum as expressed in our Equal Opportunities Policy. We will ensure that Computing is accessible to pupils by:

- Setting suitable learning objectives and differentiated success criteria.
- Responding to the variety of learning styles
- Overcoming potential barriers of individuals and groups

This is monitored by analysing pupil performance throughout the school to ensure that there is no disparity between different groups of learners. With this in mind, we will ensure additional access to technology is provided throughout the school day and in some cases beyond the school day.

Curriculum

To ensure high standards of teaching and learning in computing, we implement a curriculum that is progressive throughout the whole school. At Springdale Primary, the implementation of the computing curriculum is in line with 2014 Primary National Curriculum requirements for KS1 and KS2 and the Foundation Stage Curriculum in England. This provides a broad framework and outlines the knowledge and skills taught in each key stage.

We recognise that computing is a specialist subject and not all teachers are computing specialists. We follow the Purple Mash scheme of work from Year 1-6, ensuring consistency and progression throughout the school. The Purple Mash scheme of work enables clear coverage of the computing curriculum whilst also providing support and CPD for less confident teachers to deliver lessons. All teachers at Springdale Primary School are Purple Mash trained. Our Computing curriculum is broken down into three strands that make up the computing curriculum. These are Computer Science, Information Technology and Digital Literacy. Computer Science underlines the knowledge and skills relating to programming, coding, algorithms and computational thinking. Information Technology underlines the knowledge and skills relating to communication, multimedia and data representation and handling. Digital Literacy underlines the knowledge and skills relating to online safety and technology uses all of which are covered at Springdale. Through our Purple Mash subscription our teachers can deliver thematic, cross curricular lessons that also follow children's interests and provide flexibility

Computing lessons are broken down into weekly units, usually with two units taught per half-term. Repetition of a unit does not mean pupils are repeating an activity, it simply means pupils are building on established skills whilst also embedding previous concepts. Units are practical and engaging and allow computing lessons to be hands on.

Early Years

- We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. We believe the following:
- Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in roleplay.
- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.
- Outdoor exploration is an important aspect, supported by ICT toys.
- Recording devices can support children to develop their communication skills.

Key Stage 1 Outcomes

- 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 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 worldwideweb; and the opportunities they offer for communication and collaboration.
- 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.

Key Stage 2 Outcomes

- 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.
- 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.

Timetabling

In Key Stage 1 and 2, children have discrete 1 hour Computing lessons each week and then children apply skills learnt in other curriculum areas. E.g Use of Crumble software in D&T projects (linked to Electricity and circuits in Science), presenting results for Science investigations and using Microsoft Word and PowerPoint in other subjects.

Resources

Computing teaching at Springdale is practical and engaging and a variety of teaching approaches and activities are provided based on teacher judgement and pupil ability.

- A range of resources is available which successfully supports delivering the Computing curriculum and enables all learners to reach their full potential.

- Pupils may use laptops or iPads independently, in pairs, alongside a TA or in a classroom with the teacher. Teachers and pupils are also aware of the importance of health and safety and pupils are always supervised when using technology and accessing the internet.
- The Computing Leader keeps up to date with the latest technology resources and will make informed decisions about possible procurement of them through their own research.
- Suggestions for getting the very best out of the resources are made available to teaching and support staff by the Computing Leader.
- Resources are suitably maintained and replenished when needed, which is overseen by the Computing Leader.
- The Computing Action Plan details foreseen future resource procurement which is shared with senior leaders.

Assessment and record keeping

Pupil attainment is assessed using the 2Simple Computing Assessment Tool for Years 1 to 6. The tool enables staff to accurately identify attainment of pupils through the detailed exemplification it has for each key learning intention. Work from a range of classes and abilities is shared using the Noticeboard feature in Purple Mash. Teachers keep accurate records of pupil attainment by entering data using the 2Simple Computing Assessment Tool. Tracking of attainment by using the 2Simple Computing Assessment Tool is used to inform future planning. Children are encouraged to self, peer and group assess work in a positive way using online collaborative tools such as 2Blog in Purple Mash. Formative assessment is undertaken each session/interaction in Computing and pupils are very much encouraged to be involved in that process. Through using the progression of skills documents and displays from 2Simple, both teachers and pupils can evaluate progress. Features such as preview and correct in Purple Mash are used to further support feedback and assessment. Summative assessment is undertaken in line with the assessment cycle (See Assessment Policy). Using electronic work samples from children's portfolios on Purple Mash, teachers enter judgements about the samples into the 2Simple Computing Assessment Tool.

Technology Outside of School

Pupils at Springdale are fully encouraged to engage with ICT and technology outside of school. Each teacher and pupil at Springdale Primary has their own unique Purple Mash login and password. Computing work can be stored and saved using pupil log in details and homework or '2do's' can also be set for pupils to access and complete tasks at home that link with their current class learning. Each class has a display board that also displays a range of computing/ICT related work. Parents at Springdale Primary are also encouraged to support the implementation of ICT and computing where possible by encouraging use of ICT and computing skills at home during homework tasks and support pupils beyond the classroom by registering with the 'Parent Portal'.

Review

This policy will be reviewed every 2 years by Computing lead, SLT and governors

The Governors may however review the policy earlier than this if Government introduce new regulations or if the Governing Body receive recommendations about how the policy may be improved