

**Computing Policy**

**Miss H Watkiss**

**December 2022**

Approved by Chair\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Review Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**1 Intent and Implantation**

**1.1 Intentions of the curriculum**

In the Computing Curriculum, we want to embrace the wider ethos of the Lodge Farm Curriculum

Statement of Intent. We aim to be in harmony with SHINE ACADEMIES principles of **‘a wide range of opportunities to develop and grow as an individual, who shapes their own future**’. Our Computing curriculum focuses on a progression of skills in digital literacy, computer science, information technology and online safety to ensure that children become competent in safely using, as well as understanding, technology. These strands are revisited repeatedly through a range of themes during children’s time in school to ensure the learning is embedded and skills are successfully developed. Our intention is that Computing also supports children’s creativity and cross curricular learning to engage children and enrich their experiences in school. We aim to support Lodge Farms Statement of Intent by **‘providing the best for every child and that every child will find something to excel at’**. We aim to encourage children to explore their personal **aspirations** and digital potential through developing a variety of skill and knowledge.

Further to this we will:

* We aim to equip the all of the children with the skills, knowledge and self-belief to flourish and seize the opportunities the world offers (**Knowledge of the World**).
* We aim to help them to have an open mind and develop their creativity, critical thinking and independent problem solving skills through real world awareness and understanding.
* From Reception to Year 6 our pupils will build up a secure understanding of the key knowledge and concepts. They will be encouraged to build and excel their knowledge and understanding of computer science and develop a sense of excitement and curiosity to develop their critical thinking (**Communications**).
* We think it is specifically important to expose our children to Computer Technology in other elements of their curriculum, and where possible provide cross-curricular links to promote develop and engage children in other subjects.
* We provide a high-quality computing education that equips pupils to become digitally literate so that they are able to express themselves and develop their ideas through information and computer technology, allow them to continually practice and improve the skills they learn so that they become creative users of computing technology suitable for the future workplace (**Aspiration**).

**What children should know by the time they leave?**

Coding creative

Online responsible

Digitally literate

National Curriculum for KS1:

* 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
* use technology purposefully to create, organise, store, manipulate and retrieve digital content
* 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 technologies.

National Curriculum for KS2:

* 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; and the opportunities they offer for communication and collaboration
* use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
* 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
* use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

**1.2 Implantation of the curriculum**

Our whole curriculum is shaped by our school vision which aims to enable all children, regardless of background, ability, additional needs, to flourish and find something to excel at. We teach the National Curriculum, supported by a clear skills and knowledge progression.

We will:

* Ensure skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children.
* Provide children with a wide range of good quality resources providing cross curricular opportunities for children to apply their Computing knowledge.
* We teach progression of computing vocabulary to support children in understanding.
* Include online safety in all Computing lessons as well as being taught as a unit each year.
* Maintain a high level of subject specific knowledge through regular training and professional development.
* Use assessment for learning to tailor lessons around our pupils ensuring we take in to account the next steps in their learning journey.
* Ensure high quality teaching so that pupils develop the key skills and knowledge through every area of computing and digital literacy.
* Provide children with regular opportunities to develop strategies for questioning and thinking and problem solving.

2 Teaching and Learning

2.1 As the aims of Computing are to equip pupils with the skills necessary to use technology to become independent learners, the teaching style that we adopt is as active and practical as possible. While at times we do give pupils direct instruction on how to use hardware or software, the main emphasis of our teaching in Computing is for individuals or groups of pupils to use computers and other electronic devices to help them in whatever they are studying. For example, pupils may research a history topic by using a piece of software, investigate a particular issue on the Internet, or create evaluative or descriptive work on subject areas they have covered in class. Pupils who are learning science could use the computer, or other electronic device, to model a problem or to analyse data. We encourage the pupils to explore ways in which the use of Computing can improve their results, for example, how a piece of writing can be edited or how the presentation of a piece of work can be improved by moving text about etc.

We recognise that all classes have pupils with widely differing Computing abilities. This is especially true when some pupils have access to Computing equipment at home, while others do not. We provide suitable learning opportunities for all pupils by matching the challenge of the task to the ability and experience of the pupil. We achieve this in a variety of ways, by:

* setting common tasks which are open-ended and can have a variety of responses;
* setting tasks of increasing difficulty (not all pupils complete all tasks);
* grouping pupils by ability in the room and setting different tasks for each ability group;
* pairing mixed ability pupils;
* providing resources of different complexity that are matched to the ability of the pupil;
* using classroom assistants to support the work of individual pupils or groups of pupils.

3 Computing Curriculum Planning

3.1 The Trust uses the national curriculum for Computing as the basis for its curriculum planning. Where possible lessons are linked to topics covered in that half term. To support staff in this process the Purple Mash scheme is used as a planning guide. E-safety aspect are embedded with the Purple Mash scheme and the beginning of each half term is an E-safety specific lesson.

3.2 We carry out the curriculum planning in Computing in three phases (long-term, medium-term and short-term). The long-term plan maps the Computing topics that the pupils study in each term during each key stage. Our long-term Computing plan shows how teaching units / Computing skills are distributed across the year groups, and how these fit together to ensure progression within the curriculum plan.

3.3 Our medium-term plans, give details of each unit of work for each term. They identify the key learning objectives for each unit of work and stipulate the curriculum time that we devote to it. The Computing co-ordinator is responsible for keeping and reviewing these plans.

3.4 The class teacher keeps the individual plans and s/he and the Computing co-ordinator discusses them on an informal basis as required. Wherever possible, Computing will be used on a cross curricular basis through other subject lessons.

3.5 The topics studied in Computing are planned to build upon prior learning. We offer opportunities for pupils of all abilities to develop their skills and knowledge in each unit. We also build planned progression into the units of work, so that the pupils are increasingly challenged as they move through the school.

4 Foundation Stage

**4.1** During the Foundation Stage, which includes nursery and reception, pupils are given opportunities to develop an interest in Computing. The Computing aspects of pupils’ work are related to the Early Learning Goals and the foundation stage profile which underpin curriculum planning for 3 - 5 year olds. The pupils are given opportunities to use a range of Computing equipment including simple computer programs, programmable devices, iPads, cameras, CD/MP3 players, Bebots, laptops and voice recorders. They are also encouraged to identify Computing in the local environment.

**What do our drivers look like in Computing?**

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| Aspiration | Pupils at Lodge Farm Primary School are encouraged to explore their personal aspirations and digital potential through developing a variety of skill and knowledge. We give or pupil’s information and knowledge about careers within the subject’s areas they are learning about. For example in Year Two they are taught how to digitally create music. Ensuing pupils have the key skills needed to use technology in their future careers.  We develop a wide range of skills to ensure that when Pupils use technology in their adult lives, they can adapt to constant chances and developments in this. We strive for our children to develop the skills and knowledge they need to be competent digital learners, while also searching for those children who excel in the subject. |
| Healthy Lifestyle | During Computing Pupils are taught how to monitor time online to ensure they are not spending too much tie being inactive.  Pupils at Lodge Farm are encouraged to report online bullying and monitoring their emotions when using online technology. Our online ‘Alert Us’ button is used as a safeguarding tool to allow pupils to express concerns and worries.  Pupils are taught the age restrictions on games / app to aid healthy lifestyles. As well as technology being used to research about healthy lifestyles and exercise. |
| Communication | Pupils communicate with each other and adults during lessons to discuss and evaluate their work. Pupils are also taught about communication online and hot to stay safe when doing this. Pupils are taught to use forms of communication including how to send an email. There are a range of activities within the curriculum to aid development of communication, e.g. storytelling, recoding videos, music making and presenting.  Children are encouraged to work collaboratively on projects giving designating roles and responsibilities.  Pupils communicate with the teacher formally at the end of each unit through ‘self-assessment’, ticking off objectives they feel they have met during that unit. |
| Knowledge of the World | Pupils at Lodge Farm are given opportunities to research places, events and people using the technology available. They are given opportunities to learn about programming and coding, as well as exploring safe online through cross curriculum links.  Children are encouraged to use technology to research current events within the worlds and within other lessons.  It is important that our children are educated in how to stay safe online and the negative impact technology can have as technology is seen throughout our community and |

5 Cross-curricular Computing

5.1 Computing contributes to teaching and learning in all curriculum areas. For example, interactive whiteboards are used as a teaching tool, graphics link in closely with work in art, and work using databases supports data handling in mathematics. The use of the school library and the Internet prove very useful for research in humanities subjects and enhancing global citizenship. Computer software help to enhance music lessons. Furthermore, iPads can be used for a broad variety of research and content creation applications to allow pupils to express, evaluate and access ides. Computing enables pupils to present their information and conclusions in the most appropriate way, with the facility to draft and re-draft as necessary. Computing is also used to record evidence of the pupils’ learning using video recording equipment.

6 Special Educational Needs and Disabilities (SEND) and English as an Additional Language

Although these two groups of pupils have many of the support and intervention strategies in common, they are two distinctly separate groups of pupils. EAL pupils must not be seen as SEN pupils because they have limited English language at the early stages of their language development. The majority of EAL pupils will be of average or higher ability, with the purpose of EAL support being to give these pupils access to the curriculum at an appropriate level by supporting their language needs. However, as in all ethnic groups, there will be EAL pupils that also have a special educational need. Devices are also used within school to support communication for EAL parents and children.

6.1 At Lodge Farm Primary Schoolwe teach Computing to all pupils, whatever their ability or level of language development. Computing forms part of our Trust curriculum to provide a broad and balanced education for all pupils. We provide learning opportunities that are matched to the needs of pupils in respect of both learning difficulties and language development. In some instances, the use of Computing has a considerable impact on the quality of work that pupils produce; it increases their confidence and motivation. When planning work in Computing, we take into account the targets in the pupils’ EHCPs or individual support plans.

7 Assessment and Recording

7.1 Teachers assess pupils’ work in Computing by making judgements as they observe them during lessons. On completion of a piece of work, the teacher assesses it and comments as necessary in whatever for they deem appropriate.

At the end of a unit of work they make a summary judgement about the work of each pupil in relation to National Curriculum attainment through observation and assessment. We use this as the basis for assessing the progress of the pupils and to pass information on to the next teacher at the end of the year. Evidence of learning is saved onto purple mash, with assessment sheets kept in a folder.

8 Resources

8.1 At Lodge Farm Primary School, all teaching staff have a laptop and pupils have access to our bank of laptops, with all computers fully networked. The school has monitored & filtered Internet access for all computers. We also have a bank of ipads to be used across the school.

8.2 Access to the Internet is available through the school network. See E-safety policy / Acceptable Usage Policy.

8.3 Access to a range of programming toys and devices.

**8.4** All online activity is monitored, using S4S services, who inform the school of any incidents. A weekly log is sent to the co-ordinator who additionally monitors this and raises any concerns with the Head Teacher.

**8.5 General Data Protection Regulation (GDPR)** All third party vendors (Microsoft, S4S, Librarian software etc.) comply with legal G.D.P.R. protocols. All pupil data linked to computing, such as accounts, are processed in accordance with school’s wider policy on G.D.P.R.

9 Monitoring and Review

The monitoring of the standards of the pupils’ work, and of the quality of teaching and planning in Computing, is the responsibility of the Computing co-ordinator. The Computing co-ordinator is also responsible for supporting colleagues in the teaching of Computing, for keeping staff informed about current developments in the subject, and for providing a strategic lead and direction for the subject in the school. This will include, on an as-required basis, the provision of appropriate INSET. The Computing co-ordinator has specifically allocated release time for visiting classes to monitor the teaching of Computing, visiting other schools / training facilities, and for working alongside the school technician to bring about improvements in the school’s Computing provision.

**9.1 Internet safety Guidelines** Lodge Farm Primary School adapt an exemplar scheme of work (Purple Mash) that incorporates e-safety lessons throughout the school.Additionally teachers add to this with special events (Internet Safety Day), assemblies and cross-curricular lessons. Class Teacher also begin each half term with a specific online safety lesson. Detailed information can be found within the E-Safety Policy.

**9.2 Acceptable Usage Policy (AUP)** The following outline to all members of our community the standards that we expect and the behaviours that must be adhered to. All pupils are introduced to the AUP through age appropriate teaching as modelled by the class teacher.

**9.3 Roles and Responsibilities - Pupils**

Pupils should follow the guidelines laid out in the ICT Acceptable Use Policy for Pupils. They should ensure that they use the computers and equipment appropriately at all times. It is expected that children will follow the school’s Behaviour Policy when working online. They are also expected to adhere to the school’s Anti-Bullying Policy. If the children fail to do so, then the procedures outlined in these policies will be applied.

**9.4 Roles and Responsibilities - Parents**

Parents should stay vigilant to the websites and content that their children are accessing and try to talk to their child about e-safety and the use of the internet. If they have any questions or concerns then they should speak to their child’s teacher, the Computing co-ordinator or the Headteacher.

**9.5 Roles and Responsibilities - Governors and visitors**

School governors should abide by the guidelines set out for staff and ensure that any use of computers and equipment within school is carried out in accordance with this. If either a visitor or governor wishes to have a temporary account to logon to the school network, they should speak to the Computing co-ordinator.

**10 Sustainability and Environmental Impact**

Hardware is disposed of safely and securely in accordance with current regulations.

**10.1 Backups**

The data stored on the school’s network is backed up by S4S technicians. Data is stored across the Academy Trusts’ systems. Staff need to notify the Computing Co-ordinator immediately if they realise something has been accidently deleted so that copies of files can be recovered.

**10.2 Technical Support** A detailed description of any equipment failure or error should be recorded by staff in the S4S online ticketing service <https://shineacademiestrust.on.spiceworks.com/portal/tickets> . Hardware and software technical support is provided remotely and on-site by S4S when required.

**11 Prevent Duty** Schools are expected to ensure children are safe from terrorist and extremist material when accessing the internet in school. This is achieved at Lodge Farm Primary School by establishing appropriate levels of filtering in partnership with S4S. Full filtering is currently in place which, amongst others, blocks access to social media sites and You Tube. Teachers have access to a reduced level of filtering.

**11.1 Internet and E-mail**

The internet may be accessed by staff and by children throughout their hours in school and users are responsible for ensuring that they have logged off so that other users cannot access previously accessed sites. Staff need to be vigilant as to the sites children are accessing and children should not be using the internet unattended. The teaching of email, internet use and other aspects of e-safety will be covered within the computing curriculum planning, but staff should encourage regular dialogue that explores the benefits and potential dangers of using the internet. If users, especially children, see an inappropriate website or image, they should minimise the page immediately and report the site to their class teacher who will report this to the Computing coordinator. S4S and SLT will be contacted to attempt to get this site blocked.

Staff are provided with a school Office 365 email address and need to follow the guidelines in the Staff AUP when using this.

**11.2 Social Media**

As a school we recognise that social media and networking are playing an increasing role within every-day life and that many staff are users of tools such as Facebook, Twitter and blogs for both personal and professional use. We will ensure that staff and children are kept fully aware of risks and issues that may arise and ways in which to minimise these risks. Staff should apply the guidance given in the Staff AUP and Social Media policies with regard to social networking.

**11.3 Copyright**

Copyright of materials should be respected. Staff should check permission rights before downloading material, particularly images from the internet, and/or copying from printed materials. Children will be taught that it is not acceptable to take images directly from the internet without permission for use and to start referencing the sites they have used.

**11.4 Responding to unacceptable use by pupils**

Pupils should be aware that all e-safety issues will be dealt with quickly and effectively. When dealing with unacceptable use, staff should follow the Behaviour and Anti-bullying policies as necessary.

**11.5 Responding to unacceptable use by staff**

Failure to comply with the guidelines and expectations in the Staff AUP could lead to sanctions and possible disciplinary action in accordance with the school’s policies and the law.

**11.6 Acceptable Use Policy - Governors and Visitors**

Visitors may be provided with accounts to our network and/or online systems on a case-by-case basis, depending on the purpose of the account requested. Users will be expected to follow the guidelines as set out for staff and understand that accounts may be removed at any time.

Appendixes

**Cyberbullying**

Cyberbullying can be defined as the use of Information and Communications Technology (ICT) deliberately to upset someone else and may involve email, virtual learning environments, chat rooms, social networking sites, mobile and landline telephones, digital camera images and game and virtual world sites.

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| Through Computing lessons, assemblies and PSHE, children will be taught the **SMART** rules: **SAFE** | Keep safe by being careful not to give out personal information online. |
| **MEETING** | Never agree to meet anyone that you chat to on the internet; they may not be who you think they are. You can’t be sure who you’re talking to on the Internet. |
| **ACCEPTING** | Do not accept unusual e-mails. They may be trying to tempt you into opening them.  They could contain viruses that can damage your computer. If this happens to you, tell an adult. |
| **RELIABLE** | Information on the internet may not be true – anyone can upload material to the internet.  Always double check any information on a more reliable website. |
| **TELL** | If anything makes you feel worried tell your parents, teachers or an adult that you trust. They can help you to report it to the right place Or call a helpline like ChildLine on 0800 1111 in confidence. |