ICT / Computing POLICY
April 2021

INTRODUCTION

Purpose
The purpose of this policy is to describe our practice in Computing and Information / Communications Technology (ICT) and the principles upon which this is based.

Aims

Computing and ICT at Lyon Park Primary School promotes and develops the skills relevant to the challenges of a rapidly changing world.

Our Computing/ICT curriculum's agenda is twofold; it aims to:
1) help our pupils become confident, independent and safe users of communication technologies,
2) develop children's understanding of programming, computer technologies and networks to enable them to make their first steps towards becoming contributors and active participants in the industry of technologies and communication.

INTENT
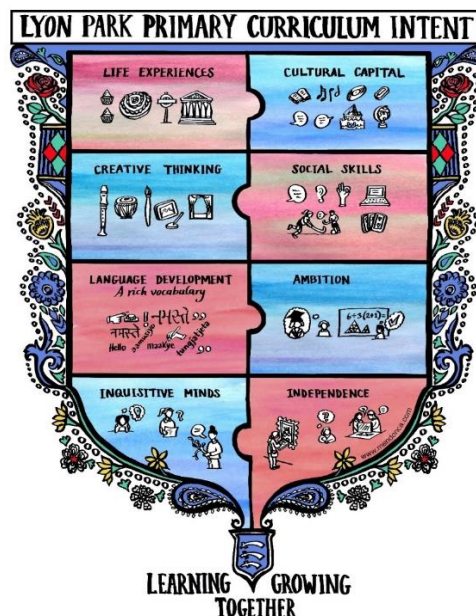
The intent of the Computing curriculum is that children are taught to become safe, competent and independent users of communication technologies, internet services and programming. Our curriculum is tailored for the needs of our children and community whilst upholding high standards for progression and achievement. To that end, we use a combination of industry-leading tools and education programmes to ensure that children are challenged at all times and that learning outcomes find pertinence and relevance in a fast-changing world. The different strands of our Computing curriculum are

taught across the year groups at the same time, to enable comprehensive peer support, both for teachers and learners. Independence and creativity are two key aspects of our intent: children are given numerous opportunities to create original content and use their expertise to select the tools appropriate for their purpose and audience. The following table shows our school's Computing intent for children.

Life Experiences	Cultural Capital
To use Computing and ICT skills to support and enhance learning across all areas of the curriculum.	To understand and apply the fundamental principles for computer science, including abstraction, logic, algorithms and data representation.
Creative Thinking	**Social Skills**
To use programming and ICT skills to create original content, showing awareness and consideration for their purpose and audience.	To become digitally literate – able to express themselves and develop ideas through information and communication technology.
Language Development; a rich vocabulary	**Ambition**
To develop, secure and confidently utilise specific subject vocabulary to communicate effectively when discussing, presenting and providing feedback on ICT/Computing projects.	To develop skills and understanding of communication technologies to take an active part in a fast-changing world.
Inquisitive Minds	**Independence**
To develop a positive attitude when problem-solving, to show independence when investigating solutions and to cultivate a critical sense when assessing online and offline content.	To be digitally literate and use communication technologies effectively, safely and responsibly.

IMPLEMENTATION

Roles and responsibilities

Governors:

Governors and senior management ensure that they achieve value for money by implementing the principles of best value in evaluating, planning, procuring and using technology.

Governors may include Computing in their learning walks around the school.

Senior Leadership Team:

Senior Leaders monitor the curriculum coverage and teaching and learning through learning walks and quality assurance check the subject leader's monitoring work, use of resources and curriculum planning.

Subject leaders in other curriculum areas are responsible for recognising the links between computing and English, Mathematics, Science and foundation subjects; and planning to use these to support learning across the school.

Subject Leader:

The subject leader is responsible for monitoring curriculum coverage and the impact of learning and teaching; and assists colleagues in its implementation.

The subject leader regularly monitors the quality of curriculum delivery through pupil discussions, work scrutiny, planning review and collaboration with teachers.

The subject leader provides an annual report to governors on the impact of the Computing curriculum and how resources are being effectively deployed.

The subject leader coordinate professional development regarding ICT/Computing for staff.

The subject leader draws an action plan in line with the SDP, detailing a course of action to further improve teaching and learning.

Teachers:
The class teacher is responsible for delivering an effective Computing curriculum and integrating this into their planning for other subject areas where this is appropriate.
The class teacher is responsible for assessing children's progress and attainment and for providing support accordingly.
Units of work will be evaluated by the class teacher for effectiveness and appropriateness at the end of each unit.
The class teacher will seek support when the ICT/Computing curriculum is at risk of not being fully covered. Any areas of concern should then be discussed with the Subject Leader to ensure that solutions can be put in place at the earliest opportunity.

Support Staff:
The school receives technical support from our school IT technician, who is responsible for the maintenance of computers, printers, the school network and keeping software up to date. The subject leader liaises with the technician to ensure that the systems are running efficiently.

Pupils have the responsibility to:
- build new skills and learn to apply them creatively,
- consider problems as challenges and learn to investigate / trial solutions independently,
- keep a record of their work on the shared drive in their class folder.

Parents/Carers have the responsibility to:
- ensure children are safe when using internet services,
- discuss with children which internet services are used and the purpose served by such internet services,
- establish a clear set of rules and protocols to be followed to ensure children are using internet services safely,
- understand and keep up to date with internet safety matters.

Aspects

Equal opportunities:
The school maintains its policy of equal opportunities as appropriate for Computing.
Computers and related technology are made available to all pupils regardless of gender, race or abilities.
The class teacher differentiates work by task, resource or support, to ensure the individual needs of more able and SEN pupils are met.
The school is aware that not all pupils have the same access to computers at home and this is considered by staff in the planning and delivery of the curriculum.

EYFS:
Children will be taught how to use simple equipment in meaningful contexts. They will explore how technology aids everyday life. Computer programs and games are used to enhance learning in other subjects.

Inclusion:
At Lyon Park Primary we believe that all learners are of equal value and that all pupils have the potential to achieve highly and learn effectively irrespective of ethnicity, gender, disadvantage, religion and belief, race or disability. This confidence in the learning capacity of all our pupils is reflected in curriculum design and delivery.

Pupils with Special Educational Needs & Disability (SEND):
Pupils with Special Educational Needs and Disabilities(SEND) will have access to a broad and balanced curriculum through quality first teaching. Teachers will differentiate learning according to the children's needs to ensure access to the curriculum. Children identified as having SEND may in addition have additional provisions such as personalised learning, 1:1 support and a variety of resources to meet their needs. This policy should also be read in line with the school's SEND policy and School information report.

EAL learners:
Pupils identified as new to the English language will be given every opportunity to acquire English so that they can access learning fully. Pupils' home languages will be used to aid learning where possible and relevant alongside appropriate resources selected by staff to enable pupils to engage in a rich curriculum.

Health and safety:
Key principles of online safety are taught and promoted throughout the ICT/Computing curriculum.
Equipment is maintained to meet agreed safety standards.
From Foundation Stage, pupils are taught to respect and care for technology equipment.

Safeguarding:
Online safeguarding is organised around three pivotal concepts: Content, Contact and Conduct.
Online safety is taught through the Technology In Our Lives strand (TIOL), in PSHE / SRE. Skills and understanding are developed to ensure that children are safe and responsible users of internet services.
Displays in classes and around the school show a clear breakdown of actions for children to follow when confronted with online bullying or anything that makes them uncomfortable.
If a matter of safeguarding arises, it will be dealt with according to the safeguarding procedures of the school. Please refer to the Safeguarding Policy.

Planning:
Teachers are responsible to plan / follow a sequence of lessons using the ICT/Computing project overview ICT planning should be available to the ICT leader via the server.
Planning for Computing is implemented using two core documents: the National Curriculum Programme of Study for Computing and the Statutory Framework for Early Years Foundation Stage
Long term and medium term planning has been developed using the Somerset eLIM planning, Espresso Coding and Lyon Park's ICT Progression of Skills Document and demonstrates coverage and progression of the attainment expectations at the end of Key Stage 1 and Key Stage 2 as identified in the Computing POS.
The computer science aspects of Computing are taught discretely through the Programming and Technology in our Lives threads of Somerset's computing model.
Key skills in information technology are developed through Multimedia and Handling Data threads and are integrated into learning in other curriculum areas (see progression of skills and exemplification documents.)

Teaching:
At the beginning of a unit, teachers present a project and show an example of what the outcome could be. Skills are then modelled for learners who will in turn practise those skills, apply and implement them in a project of their own or which they have planned with a working group.
Teachers will provide opportunities to reflect on the development of a project by leading discussions around examples of children's work, to provide feedback on what works well and what can be improved. That stage provides many opportunities to reinforce the unit's vocabulary, skills such as 'de-bugging' and problem-solving protocols.

Organisation:
There is a whole school approach in the way the teaching of Computing strands is organised across the year.
In the Autumn term, the focus is on ICT skills. Pupils learn how to record, process and present data. They also learn to use PowerPoint to create animations, presentations and displays, which is an opportunity to involve ICT with other areas of the curriculum.
In the spring term, the school focusses on coding. Learners develop new skills progressively throughout the key stages and apply their knowledge to design their own creative projects.
In the Summer term, pupils focus on media creation and Digital Literacy (our TIOL strand). This provides further cross-curricular opportunities which includes writing, performing arts, PSHE and SRE.
Online Safety is taught regularly throughout the year, with key principles revisited at least once half-termly.

Homework / Wider learning:
Online tools such as Purplemash, Discovery Education and Discovery Education Coding are accessible by pupils in and out of school.

Access to the cloud (through Microsoft Teams) allows children to continue to work on their ICT/coding projects at home and in school.

Microsoft Teams is used for home learning in all subjects. Homework in set though 'Assignments' or placed in a weekly homework folder. The homework must be set in class and teachers must model how to access and complete the work on Microsoft Teams – this is an opportunity to reinforce ICT skills and folder organisation skills. Teachers must ensure that their use of Microsoft Teams shows full compliance with the safeguarding Policy, the Remote Learning policy and the Acceptable Use Agreement for Staff, Governors and Volunteers.

Resources:

Our curriculum was designed using a range of resources and schemes of work: the Somerset eLIM planning (TIOL and ICT), Purplemash (KS1 Coding and KS1 ICT), Discovery Education (Coding) and Common Sense (TIOL).

Online tools such as Purplemash, Discovery Education and Discovery Education Coding are accessible by pupils in and out of school.

The subject leader keeps up to date with new technologies and reviews the school's provision, as well as maintaining the existing resources in partnership with the school's technology support provider.

Hardware and software faults are reported to the IT technician by the teachers or teaching assistants.

IMPACT

Assessment:

Progress is assessed on an on-going basis using the 'I can' statements (see Computing Pression Map) for each unit. This ensures teachers are aware of progress in computer science, information technology and digital literacy.

Formative assessment is used by the class teacher and teaching assistant during whole class or group teaching. Children's achievement and level of confidence is taken into consideration to inform future planning.

Monitoring and evaluation:

The Computing Leader will observe lessons, monitor planning and take work samples from across all year groups to ensure that requirements are being met and produce a lead learners progress report at the end of the term.