



Linton CE Infant School

Policy for:

Computing curriculum

Agreed by: Curriculum & data committee

Date: November 2020

Review Date: November 2022

Linton CE Infants where happiness and achievement go hand in hand

Linton CE Infant School: where happiness and achievement go hand in hand

The staff and governors at Linton C.E. Infant school provide an environment where children and all school members can be happy, healthy and safe and achieve their full social and intellectual potential.

We do this by:

- creating a caring, Christian environment,
- creating happy, stimulating and exciting opportunities for learning,
- developing positive relationships based on respect of self and others,
- supporting a creative approach to personal development and growth.

We work in partnership with parents and our community to fully equip children for their future

Introduction

This policy outlines the teaching, organisation and management of the Computing taught and learned at Linton C of E Infant School. It reflects the school's values and ethos. The policy has been drawn up after staff consultation and has the full agreement of the governing body. The Implementation of the policy is the responsibility of all the teaching staff.

Rationale

The use of information and communication technology is an integral part of the national curriculum and is a key skill for everyday life. Computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. We recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively. The purpose of this policy is to state how the school intends to make this provision.

We believe that Computing

- Gives pupils immediate access to a rich source of materials.
- Can present information in new ways which help pupils understand, access and use it more readily.
- Can motivate and enthuse pupils.
- Can help pupils focus and concentrate.
- Offers potential for effective group working.
- Has the flexibility to meet the individual needs and abilities of each pupil.

Aims

- Provide a relevant, challenging and enjoyable curriculum for Computing for all pupils.
- Meet the requirements of the national curriculum programmes of study for computing.
- Use computing as a tool to enhance learning throughout the curriculum.
- To respond to new developments in technology.
- To equip pupils with the confidence and capability to use computing throughout their later life.
- To enhance learning in other areas of the curriculum using computing.
- To develop the understanding of how to use computing safely and responsibly.

The national curriculum for computing aims to ensure that all pupils

- Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication.
- 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.

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Objectives of the curriculum

Early years

In the Reception year activities are planned to give the children opportunities to explore different technology in play-based activities in a range of contexts, including outdoor play. Computing is not just about computers. Our Reception classrooms feature computing scenarios based on experience in the real world, such as in role play. Recording devices can support children to develop their communication skills. This is particularly useful with children who have English as an additional language. Children are able to use iPads and chrome books to access software to support their developing understanding of programming and digital literacy.

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 and compute the behaviour of simple programs.
- 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.

Teaching and Organisation

In order to achieve the objectives of the computing curriculum, the subject is taught through a creative curriculum and integrated with other subjects. The subject will sometimes need to be taught in a discrete session when introducing new skills or concepts.

A variety of approaches will be used to ensure continuity and progression and lessons will include whole class, group, paired or individual work.

Medium term planning will map out opportunities to teach the computing curriculum to ensure the objectives are covered within topics and skills are developed.

Within the class there will be a wide range of abilities, from those who are more able to those who have special educational needs. The class teacher will provide differentiated activities for the children through task, outcome and resources and the support given to meet the needs of the individual.

Planning

Planning is carried out on 3 levels

- Long term planning or topics covered. Termly challenges set.
- Medium term planning
- Short term planning

Planning is the responsibility of individual teachers and should be used to

- Set clear objectives
- Ensure work is matched to pupil's abilities and interests
- Ensure progression, continuity and subject coverage throughout the school.

Assessment and Recording

Assessment will be used to inform teaching in a continuous cycle of planning, teaching and assessment. Short term assessments will be an informal part of every lesson to check pupil understanding and give information, which will help teachers to adjust day to day lesson plans.

Medium term assessment will take place after each term after the topic has been completed. Children will be assessed as working above expectations, on track or working below expectations.

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Recording is used to note individual's progress and to provide guidance for future planning and teaching.

Special needs and Equal Opportunities

The contribution of each child is valued regardless of gender, disability, ethnicity or background and all the children have opportunities to participate in a broad range of learning.

Computing can cater for the variety of learning styles which a class of children may possess.

Using computing technologies can:

- increase access to the curriculum
- raise levels of motivation and self esteem
- improve the accuracy and presentation of work
- address individual needs

We aim to maximise the use and benefits of computing technologies as one of many resources to enable all pupils to achieve their full potential.

Teachers will provide instruction and guidance on technical processes to take account of individual needs.

In line with the school's equal opportunities policy, all children will have an entitlement to all aspects of the computing curriculum.

The contribution of each child is valued regardless of gender, disability, ethnicity or background and all the children have opportunities to participate in a broad range of learning.

Resources

The resources available include:

- Class desktop computers
- ipads (set 10 in year 1 and in year 2)
- photocopier/scanner/printer
- Class teacher ipad
- Asus Chrome books (set 15)
- Bee-bots (x6)
- Easi-speak microphones
- Story phones
- Talking clipboards
- Visualisers
- Interactive whiteboards
- Mini phones
- Purple mash 2 simple software.

The resources are maintained and kept in good order. Teachers are asked to book out the equipment in advance where possible to ensure that they are charged and available when needed. The school have a contract for technical support from a technician once a month.

Review Procedures

The school's computing policy will be reviewed after two years or when

- A new subject leader is appointed
- There has been a significant change in staff or pupil intake
- There have been changes in National Curriculum requirements
- new information has been made available affecting an aspect of this policy: health and safety, for example

Last Reviewed: November 2020