Meadow Lane Infants School Policy

Computing Policy

Last reviewed	July 2015
Review Cycle	3 Years

ICT Policy – Meadow Lane Infant School

1. Introduction

During Key Stage 1 pupils explore Computing and learn to use it confidently and with purpose to achieve specific outcomes. They start to use ICT to develop their ideas and record their creative work. They become familiar with hardware and software. Computing also ensures 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.

2. Vision

Computing extends our knowledge of different subjects, the world around us, and greatly improves our ability to make decisions about how we can communicate most effectively. At Meadow Lane our vision is that the children and staff will be equipped with the skills, knowledge and understanding to contribute successfully in an ever changing and advancing technological world. The learners in our environment will be confident and independent in their use of ICT to solve problems across the curriculum. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.

3. Aims
- To meet the requirement of the current Computing curriculum for KS1 and Early Years.
- To ensure that children, parents, staff, governors and the wide community have relevant and meaningful experiences using ICT.
- To ensure that children have a growing awareness of how ICT is used in the world around them and of the benefits that it provides.
- To ensure that ICT is used to support problem solving and learning across the curriculum.
- To enjoy using ICT and tackle all applications with confidence and a sense of achievement and purpose.
- To develop ICT skills, including their knowledge of programming and how computers work.
- To enhance the children's ability to apply their ICT capability to support their learning in all curriculum areas.
- To provide children with a range of applications of ICT enabling them to see the potential limitations of technology.
- To use ICT to support different learning styles, different forms of presentation and improve motivation for learning.
- To create an environment where all are staff confident in using ICT, through continuing training and professional development, with skills training taking place in staff meetings throughout the year.
- To develop an Computing skills checklist for all children in the school to ensure access to the Computing curriculum and a clear progression of skills.
- To promote safe and sensible use of all ICT equipment and the internet (see the Acceptable Use Policy Nov 2013)

4. <u>Teaching and curriculum</u>

Pupils should be taught to:

- 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.

The above statement is taken from the September 2013 Computing National Curriculum.

4.1) How will we teach all the elements?

- 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

The above statements relate to the Programming element of the curriculum. The children will input algorithms into practical programmable toys (the Beebots) and will also use algorithms to control objects and characters in computer programs. They will use 2Simple – 2Go, and 2Simple – 2 Modelling Toolkit to create and debug simple programs and to predict the behaviour of the characters on Laptops. The IPADs also have many applications to create, debug and predict programs, like Beebot, Daisy the Dinosaur, and Scratch Junior. These applications have clear progression built into them so children can work through the steps. For those children who are able to program these applications confidently they can progress onto Kodu and Scratch on the Laptops which are really aimed for KS2 children as well as Scratch Junior on the IPADs.

- 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.

The above statements relate to the ICT skills elements of the Computing curriculum. The children have clear steps that they are expected to progress through. They will learn how to log-on, shutdown, search the internet, use the favourites menu, save, print, record sound, create music, cut and paste, take photos, editing and retrieving of a document, and internet

safety. The children will also find out about how ICT has transformed the world we live in and how it is useful in many areas commercially and socially. The children will also be taught in specific assemblies and lessons (during ICT and PSHE) about the importance of staying safe on-line through the CEOP and Kidsmart website.

5. ICT opportunities for Pupils, Staff and Parents

- Every classroom has 2 stand-alone computers.
- The library has 2 stand-alone computers.
- There is 2 trolleys of 8 laptops that classes use on a timetabled rota.
- Every teacher will be given a laptop for work use.
- Every teacher and teaching assistant will be given a Fronter password to enable them to see what the children are accessing and be able to save and retrieve planning, policies and documentation.
- There is 2 IPAD trollies each with 15 IPADS in them that is on a timetabled rota.

6. Strategies for the use of ICT

A timetable is in place to ensure equality of access for each class to the laptops and IPADS. This is reviewed and revised regularly. ICT is incredibly important and therefore should have high status and a budget sufficient to allow for updating and renewing of equipment.

Central resources in Information and Communications Technology are the responsibility of the Computing co-ordinator. They include:
- Digital Cameras
- Flip-Cams
- Beebots
- USB Microphones
- Talking Tins
- Headphones
- Recording devices
- Batteries and chargers for the above equipment

If there are problems with any equipment, software or hardware the staff will mention it to the Computing co-ordinator and they will try to resolve the problem or it will be inserted into the ICT book that is available in the school office to be solved by the ICT technician.

7. Monitoring and Assessment

For the last 2 years we have been monitoring the coverage of Computing, ensuring that everyone had the same opportunities to access the curriculum. We are now using the Skills ladder / checklist and using the RAG system of assessment (that is each child will be given Red if they didn't achieve the skill, Amber if they did it but not independently and Green if they completed the skill independently).

8. Equal Opportunities

All children have access to the curriculum, irrespective of gender, race, culture or special educational needs. Through differentiation in short-term planning we give every pupil the opportunity to experience success in learning. To achieve a high standard as possible we set suitable learning targets that correspond to children's diverse learning needs.

9. Health and Safety

- Age appropriate class and safety rules are displayed in the learning environment,

- Equipment is maintained to meet agreed safety standards.
- When working with resources and equipment in practical activities the children will be advised by their supervising adult on the correct procedure, as per the Acceptable Use Policy.
- There is s program installed on each laptop and class computer – 'Hector Protector' which enables the children to alert staff if anything comes up on the screen that they are not happy with (The IPADS do not have Hector and children will press the Red Home button if they are concerned about anything that they see).

10.Review

This policy will be reviewed every 3 years by the Computing co-ordinator and the leadership team and shared with all stakeholders.

Staff reviewed : October 2015

Date ratified:

Date for review: July 2018

Signed : ……………………………………………. Head teacher

……………………………………………. Chair of SDC committee