

Computing Policy

Spring 2018

Summary

The aim of this policy is to outline the procedures for teaching Computing at Fieldhead Carr Primary School.

Author's Role	Computing Lead
Date	Spring 2018
Internal Review Date	Spring 2019
Official Review date	As changes



1. Introduction

The 2014 national curriculum introduces a new subject, computing, which replaces ICT. This represents continuity and change, challenge and opportunity. It gives schools the chance to review and enhance current approaches in order to provide an even more exciting and rigorous curriculum that addresses the challenges and opportunities offered by the technologically rich world in which we live.

The Acceptable Use Policy and the E Safety Policies should also be read in conjunction with this policy.

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. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. 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.

1. Entitlement

The new National Curriculum states that pupils should be taught to:

	Key Stage 1	Key Stage 2
Computer	Understand what algorithms	Design, write and debug programs
Science	are; how they are implemented	that accomplish specific goals,
	as programs on digital devices;	including controlling or simulating
	and that programs execute by	physical systems; solve problems by
	following precise and	decomposing them into smaller parts
	unambiguous	Use sequence, selection, and
	instructions	repetition in programs; work with
	Create and debug simple	variables and various forms of input
	programs	and output
	Use logical reasoning to predict	Use logical reasoning to explain how
	the behaviour of simple	some simple algorithms work and to
	programs	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
		Appreciate how [search] results are
		selected and ranked



Information Technology	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Use search technologies effectively 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
Digital	Recognise common uses of	Understand the opportunities
Literacy	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	[networks] offer for communication and collaboration Be discerning in evaluating digital content Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

In the Foundation Stage, the Computing requirements are stated in the Knowledge and Understanding of the World: Technology

Early Learning Goal; Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.

Children have opportunity to use the computers, Fizz books, Ipad, Beebots, cd player, mp3 players, remote control toys, walkie-talkies, metal detectors and digital cameras. Role play areas include props such as tills, microwaves, kettles which children see as everyday life technology.

2. Access to the curriculum

The strength of Computing is that it can provide equality of access to the curriculum for all children to allow them to function at their optimum level, either as an aid to communication or a means of controlling their environment, as well as an integrated aid to learning. The provision of resources should also take into account the needs, abilities and interests of individual children, especially:

- Children who have a special skill or talent;
- Children who speak a language other than English;
- Children who experience difficulties with learning;
- Children from ethnic backgrounds;
- Children with physical and sensory difficulties; and
- Offering equality of opportunity for both girls and boys



Fieldhead Carr has opted to use a published scheme of work for Years 1-6 called Rising Stars

The school is very fortunate to have a Sensory Room containing equipment to stimulate through sight and sound.

Whenever home learning activities are set by class teachers that require access to the internet and Computing, provision will be made for pupils who do not have access to computing facilities at home to use the school's Computing facilities as an after school homework club. (Learning Log Club)

3. Implementation

At Fieldhead Carr, computing will be taught both as a discrete subject and in a cross-curricular way when the opportunity presents itself. There should be a clear distinction between teaching <u>about</u> Computing and teaching <u>with</u> Computing.

Computing is dependent on having in place a secure, reliable and available infrastructure across the school that is fit for purpose in line with the Computing vision and aims. The Infrastructure at Fieldhead Carr Primary School includes:

- Broadband, secure, content-filtered connection with ICT4Leeds
- Whole school Ethernet networks (curriculum and administration separate);
- Curriculum digital content cache server;
- Whole school wireless network;
- Whole school email server;
- Projector, screen and sound system in hall;
- IWB screen and speaker system in each classroom and Computer Suite;
- 36 Fizzbooks (netbooks) held in a secure unit. Organised through timetabled use;
- 30 ipads held in a secure unit. Organised through timetabled use;
- Each class has an ipad;
- Maintenance and technical support contracts to achieve reliability and availability.

Non-computer technologies includes;

- Digital cameras;
- Microphones;
- Controllable floor robots;
- CD players;
- Digital microscopes;
- Data logging equipment;
- Whole school subscriptions to Sumdog maths and Purple Mash cross curriculum creative tools.

4. Values and Attitudes

Our children should:

 work with others, listening to their ideas and expertise and treating these with respect eg. cooperating and collaborating when using a computer as part of a group to ensure that all contribute;



- acknowledge the ownership of ideas and recognise the value of information held on IT systems eg. recognising how much work has gone into producing a computer file, and how easily careless access can destroy it;
- be aware of the security of their own and other people's information in electronic form eg recognise that they should ask before reading or copying from other's work;
- recognise the importance of printed output eg. keeping examples of work safe so that source files may be easily identified when work is developed at a later date;
- be creative and persistent eg. when assembling a computer file from a large amount of source material;
- consider the origin and quality of information and its fitness for purpose;
- evaluate critically their own and others' use of IT and computing;
- recognise the strengths and limitations of IT and its users eg. recognising that a word processor is an effective and efficient tool to help writing, but, on occasion, handwritten text is more appropriate;
- develop knowledge and understanding of important ideas, processes and skills and relate these to everyday experiences;
- learn about ways of thinking and finding out about and communicating ideas;
- access CEOP and ThinkUKnow resources and guidelines for internet safety.

5. Digital Leaders

These are a group of children who have expressed an interest in IT and computing and apply for this role. Their role is shape the way the curriculum develops through pupil voice. They will support the Computing Leader through;

- Attending regular meetings
- Trial software
- Train staff and children to use new software and hardware.
- Supervise lunchtime clubs
- Lead afterschool clubs (supervision from an adult)

6. Website blog and Twitter

All classes have access to the whole school blog, this is managed by class teachers, blog posts may be made by children under the supervision of an adult.



Twitter is used to showcase achievement in classrooms and events during the school day. All teachers have access to the shared account.

7. Assessment

Assessment of children's work in Computing is on-going. Achievement is reported to parents at the end of each academic year.

 $Children's \ work \ is \ saved \ to \ the \ server for \ reference \ throughout \ the \ year \ in \ their \ own \ personal \ space.$

8. Security and E-Safety

- Use of IT equipment will be strictly in line with the school's 'Acceptable Use Policy'
- Laptops once connected to the internet regularly update anti-virus software. This is also provided to all staff for own machines for free.
- All computing and non-computer equipment will be security marked and noted in the school inventory. Staff sign to indicate they have received the equipment and agree to take reasonable care.
- All pupils and parents will be aware of the School Rules for Responsible Use and the Internet and will understand the consequence of any misuse.
- Pupil Acceptable Use Policy is shared and signed by all children and parents.
- The agreed rules for Safe and Responsible Use and the Internet will be displayed in the Computer suite and classroom areas.
- The website contains links to e-safety guide for children and adults

9. Review

The Headteacher and staff will review this policy in accordance with the development priorities stated in the School's Development Plan. Any suggested amendments will be presented to the governing body for discussion.