The Federation of North and South
Cowton Community Primary School and
Melsonby Methodist Primary School

Computing Policy

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Date of Policy Adoption by Governing Body		**Signed**	
Method of Communication DB and hard copy policy folder			

Introduction:

The use of Computing is an integral part of the National Curriculum and is a key skill for everyday life. Computers, IPads, programmable robots, digital and video cameras are but a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At the federation of North and South Community Primary School and Melsonby Methodist Primary School, 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 become Computing proficient.

Aims:

・ Provide a relevant, challenging and enjoyable Computing curriculum 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 computational skills.

・ To develop an 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 digital devices and the Internet.

Rationale:

The school believes that Computing:

・Gives pupils immediate access to a rich source of materials.

・Can present information in new ways that 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.

Objectives Early years:

It is important in the Foundation Stage to give children a broad, play-based experience of Computing in a range of contexts, including outdoor play. Computing is not just about computers. Early years learning environments should feature Computing scenarios based on experience in the real world, such as in role-play. Children gain confidence, control and language skills through opportunities to explore using non-computer based resources such as metal detectors, controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills.

- **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 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.

- **Key stage 2 Pupils should be taught to:**

- 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.

Computing at New City Primary School

The federation of North and South Community Primary School and Melsonby Methodist Primary School believes that Computing is an integral part of the Teaching and Learning across the entire curriculum. We are a well-resourced school with laptops, IPads, recording devices, programmable toys and interactive whiteboards available to support the delivery of high quality Computing lessons. The laptops have the software required to deliver the computing curriculum through the planned Programmes of Study. All computers are networked and linked to the Internet. The school has an 'Acceptable use of the Internet' Policy, which Parents/Guardians are asked to agree to, before their child uses the Internet.

Entitlement

The pupil's entitlement to Computing is based upon the Programmes of Study for Computing as defined in the 2016 National Curriculum. The schemes of work used to deliver these programmes of study are:

- Online Safety – DB, Rising Stars
- Computer Programming – Rising Stars / Flowol
- Presentational skills – Rising Stars

From Years 1-6 children will study the following:

-Online Safety

-Computer Programming

-Presentation skills

In EYFS children will have access to a wide range of technology to support their journey to reaching the Early Learning Goals. Equipment will include laptops, programmable toys and recording devices.

Implementation

Pupils will have the opportunity to develop their Computing capability in the core and foundation subjects. For details of specific applications, see the 2016 National Curriculum for all other curriculum areas. Opportunities provided by the class teacher will enable the children to work both individually and in small groups. For all Computing lessons, the teacher will ensure that interactive strategies are used; teacher modelling is used; introductions are included and plenary sessions are incorporated to meet the learning objectives as per the Teaching Timeline in the Teaching and Learning policy.

In our schools, pupils will have experience with networked PCs, printers, Bee-Bots, data logging equipment, sensing equipment, calculators, digital media, Interactive Whiteboards, laptops and voting systems. They will also have experience with the Internet and a variety of software that allows teachers to provide for progression of skills, concepts and applications.

As an inclusive school, Computing is made accessible to children with Special Educational Needs, by providing them with suitable software and tasks, and with extra support in the use of software packages and peripherals available.

In Computing lessons, pupils with specific learning needs also have access to, where appropriate:
・ Visual prompts to engage and increase attention.
・ Real objects to explore and manipulate.
・ Symbols for key vocabulary.
・ Opportunities for repetition, to consolidate and reassure.
・ Opportunities to use special interests where appropriate.
・ Support where necessary to develop new skills

Assessment

The pupil's work in Computing is assessed continuously throughout the topics that are taught. Records are kept in the form of teacher evaluations, saved work in the pupil accounts and recorded data on the Foundation Pupil Tracker. Each class across Year groups 1-6 also have evidence folders containing pupils' work and evaluations from lessons. A range of abilities are usually targeted and every pupil in the school will be accessed throughout the academic year.

<u>Internet Access and Online-safety</u>

All pupils must have returned a signed consent form for them to use the internet. (Forms are available from the admin offices. These are completed during the admission interview.)

Although Internet access within school is protected by the Local Authority Firewall and Filtering systems as well as the school's own security system. The risks of Internet use are still present. We believe it is vital to teach Online-safety as part of the Computing curriculum. The class teachers embed this into each unit.