



New City Primary School Computing Policy 2017-2018

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| Policy Creation and Review | |
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Introduction:

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. At New City 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 use it effectively.

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 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 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 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.

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. This is particularly useful with children who have English as an additional language.

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.

By the end of key stage 2 pupils should be taught to:

- Design and write 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; generate appropriate inputs and predicted outputs to test programs.
- Use logical reasoning to explain how a simple algorithm works 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

- Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.
- Select, use and combine a variety of software, (including internet services), on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Computing at New City Primary School

New City Primary School believes that Computing is an integral part of the learning and teaching 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 are asked to agree to, before their child uses the Internet.

Entitlement

The children'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 - Planned by teachers, supported with LGfL Resources.
- Computer Programming - Rising Stars
- 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

Children 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.

The children will work in the classroom in order to develop their computing skills. 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 and will include class demonstrations, introductions and plenary sessions to meet the learning objectives and success criteria and will follow the Teaching Timeline in the Teaching and Learning policy.

In this school, children will have experience with networked PCs, printers, Bee-Bots, Pixies, 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.
- Be fully supported where necessary and encouraged to develop new skills.

Children are actively encouraged to use Bug Club and Mathletics to support their English and Maths skills at home daily.

Assessment

The children's work in Computing is assessed continuously throughout the topics that are taught. Records are kept in the form of teacher evaluations on lesson plans which are submitted weekly. Each class across Year groups 1-6 also have evidence folders containing pupils' work and evaluations from each lesson. A range of abilities are usually targeted and every child in the school should have been closely monitored at some stage throughout the academic year. Teachers also use Pupil Tracker to monitor, update and evaluate pupils' progress.

Teacher assessments, including the end of year level achieved, are reported to parents at the end of the spring term using annual reports, and assessments are passed on to the next class teacher.

Management

The Computing Curriculum Leader is responsible for the implementation of this policy; the management and repairs of Computing resources through School Based Curriculum Support, monitoring Computing standards of achievement and progression, and working with SLT to arrange appropriate Inset for all members of staff where necessary. New City is committed to continuing the reliability of the network and Danny Phillips is currently employed by the school to support with technical matters.

The Class Teachers are responsible for the delivery of this policy and the care and security of the hardware and software.

The school is committed to the ongoing resourcing of Computing equipment and software, in relation to the School Development Plan.

The school is responsible for ensuring that copyright regulations are not infringed.

Review

The policy will be reviewed regularly with the aim of meeting any new developments and initiatives both nationally and locally.

Background Documentation

This policy was drafted by the Curriculum Leader for Computing; implemented by the Curriculum Leader for Computing; presented to the whole staff for discussion; redrafted and agreed. It is reviewed on a regular basis.

Internet Access and Online-safety

All pupils must have returned a signed consent form for them to use the internet. (Letters are available from the office or EMA coordinator in various languages. These are completed during the admission interview.)

Although Internet Access within school is protected by the borough Firewall and Filtering systems, the risks of internet use are still present. We believe it is vital to teach Online-safety as part of the Computing curriculum. This is embedded into each unit by the class teachers through personalised planning adapted from the *'Switched On' Rising Stars Units of Work*.

Mathletics, Bug Club and the MLE

In recent years there has been a boom in the education opportunities that are available online. We have bought into the following to give children safe access to online educational opportunities outside of school. These are:

- London MLE
- Mathletics
- Bug Club
- LGfL MyUSO

All pupils have passwords that can be used to access these sites. Children have been shown how to use them and how to keep their passwords safe from others. The Computing Co-ordinator's role includes restricting the children to access areas of the MLE that are aimed for them and this helps the children stay safe online. Staff are encouraged to use the MLE as a cross curricular tool to support.

Copyright

New City Primary School has a responsibility to teach and uphold the laws and guidance on copyright. Images on the internet are not freely available and we have a responsibility to teach children how to check and use information and images appropriately. These are the currently recommended sites:

Microsoft Office clipart now includes photos and moving images. These are allowed to be used if not for profit.

Computing Curriculum Co-ordinator

June 2017

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