# THE FEDERATION OF NETTLESTONE & NEWCHURCH PRIMARY SCHOOLS





## **COMPUTING POLICY**

Date Agreed: July 2016

Review Date: July 2018

Signed:

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DMF BA

Chairman Board of Governors

The Federation of Nettlestone & Newchurch Primary Schools

| Revision No. | Date Issued | Prepared By | Approved | Comments   |  |
|--------------|-------------|-------------|----------|------------|--|
| 1            | July 2016   | AC/AT       | A & S    | New Policy |  |
| 2            |             |             |          |            |  |

All the governors and staff of The Federation of Nettlestone & Newchurch Primary Schools are committed to sharing a common objective to help keep the children and staff of the school community safe. We ensure that consistent effective safeguarding procedures are in place in order to support families, children and staff of the school.

### Nettlestone and Newchurch Primary Schools Computing Policy Statement. May 2016.

#### Our Vision

We see Computing as an integral part of teaching and learning and see it playing a significant role in the education of all children in our school. Computing underpins today's modern lifestyle it is essential that all pupils gain the confidence and ability that they need in this subject, to prepare them for the challenge of a rapidly developing and changing technological world. The use of Computing will also enhance and extend children's learning across the whole curriculum whilst contributing to motivation and the development of social skills. To provide appropriate, fully integrated and supported Computing resources in order that the highest level of education can be offered to all pupils together with the efficient support of administrative and financial functions. When possible, we aim to utilize the most up to date Computing resources and recognize the need to remain aware of the potential uses of any emerging technologies. In addition, we hope to utilise existing resources both within the school and the wider community.

#### At Nettlestrone and Newchurch Primary School our aims for Computing are that:

- Children have a positive experience of Computing, appreciate its relevance in our society and that they see it as an essential tool for learning, communication, finding information and for controlling and understanding their environment;
- Computing be presented as a creative and fascinating process in which children are encouraged to use their own initiative, imagination, reasoning and investigative skills;
- All children become thoughtful users of Computing and develop their Computing capability to the best of their ability.
- Children learn to use Computing to support their learning, both individually and collaboratively.

#### Resources.

The Federation is committed to providing a high standard of equipment to be used by staff and children and supports this by appropriate levels of funding in the annual budget.

#### Equal Opportunities.

All pupils regardless of race, gender or ability should have the opportunity to develop IT capability. We ensure that all our pupils:

- 1. have equal access to IT resources
- 2. have equal opportunities to develop IT capability
- 3. use software which is appropriate to their ability.

#### Computing Across the curriculum.

The Computing resources, particularly the interactive whiteboards, tablets and digital cameras allow teachers to use Computing to support lessons across the curriculum. Coordinators work in partnership to ensure that appropriate software is available throughout the Federation.

Computing In line with the development of the National Curriculum (2014)

The Federation will include dedicated 'Computing' lessons across the school. The children will be exposed to a greater range of technical vocabulary and given the opportunity write their own programs/algorithms. They will also have a greater understanding of computer networks including the internet.

#### E-Safety

E-safety plays a much more prominent role (See e-safety policy for further details) in line with the changing nature of the world our children are growing up in.

#### Training and Professional Development

The Computing coordinator will discuss with colleagues their INSET needs, and either provide the relevant training or suggest courses for them to attend.

#### **Health and Safety**

It is the responsibility of staff to ensure that classroom Computing equipment is stored safely and securely. Food and drink should not be consumed near Computing equipment. All children are encouraged to be thoughtful users of Computing and under supervision will help with setting and putting laptop computers and tablets away. Staff should ensure that the children are seated at the computers comfortably and be aware of the dangers of continuous use (e.g. eye/wrist strain etc).

#### Use of the Internet.

The Internet is a potential source of offensive or upsetting material and staff should always supervise children when they are accessing information via the Internet, particularly when searching for images. The service provider does filter information but staff are ultimately responsible for information accessed by pupils. When possible, staff should search for files and save them locally for children to access through the school network. Children in KS2 all sign an agreement to say they will be sensible users of the Internet.

#### Blogging.

Children will be able to contribute towards a variety of blogs during their time at Nettlestone and Newchurch Primary and all staff are aware of the importance of reinforcing the basic rules of Internet safety with their classes. Note: Please see the Internet Safety Policy for additional information.

This Policy should be read in conjunction with the following policies:

- E:safety policy
- Acceptable Use policy
- Social Networking policy

This policy will be reviewed every 2 years or as necessary in line with National or local requirements.

#### Appendix.

<u>Computing programmes of study:</u>
<u>key stages 1 and 2 National curriculum in England</u>
<u>Purpose of study</u>

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. 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. Aims.

The national curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- 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.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

#### Computing - key stages 1 and 2

#### 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

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