

# **Computing Policy**

**Reviewed May 2023** 

Next review September 2024

### **Our Mission Statement**

## 'Believe, Belong, Be the Best that you can Be' "Whatever you do in word or deed, do everything in the name of the

Lord." Colossians 3:17

#### 1. Aims

#### Pupils at Warton St. Paul's Primary Academy will leave Year 6:

- having had opportunities and experiences to develop their Computing skills across a range of equipment and programs
- having had the opportunity to use ICT to support and extend their learning across the curriculum
- having had access to software and hardware with a progression in the development of Computing skills throughout their school career
- being able to use ICT responsibly and with care
- with an understanding of the applications and consequences of ICT both on an individual level and in society
- having had a curriculum enhanced by ICT
- being able to write and debug algorithms

#### 2. Statutory Requirements

#### National Curriculum Purpose of Study

'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.'

#### **National Curriculum Aims of Study**

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.

#### 3. Subject Content

#### EYFS

Within the revised EYFS statutory framework, **the Technology strand within Understanding the World has been removed**. However, there are opportunities within each area of the framework to enable practitioners to effectively prepare children for studying the computing curriculum.

#### Key Stage One

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 Two

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.

#### 4. Curriculum Planning

All children throughout their school career have the opportunity to develop their Computing capabilities in the areas of;

#### Information Technology including

- Text and Images
- Images, Video and Animation
- Sound
- Data Handling
- Digital Research Searching

#### Digital Literacy including

- Online Safety
- Electronic Communication

Computer Science including

- Programming
- Simulations and Spreadsheet

#### Modelling

• Understanding Computer Networks

We use Purple Mash to support planning, delivery and the progression of ICT skills.

#### 5. Recording and Assessment

Assessment is made through observation of children undertaking tasks and their results, through teaching, discussion and questioning.

Completed tasks are saved to the school drive on Purple Mash and written evidence of learning can be included in Topic Books.

Computing is reported at the end of the academic year in a child's annual report.

#### 6. E Safety

We take the safety of all members of Warton St. Paul's seriously and ask pupils, staff and visitors to agree to and sign our *'Acceptable Use of the Internet'* document before access to the internet is given. Discussions regarding the acceptable use of school technology and E-Safety are held with all members of the school community as part of their induction.

At least two lessons of E-safety are taught to each class, each term, following our E-safety curriculum. Further lessons may also be taught at the discretion of the class teacher, as appropriate to the needs of each class.

#### 7. Home Learning

When school is closed and children are expected to continue their learning at home there will be opportunities for them to access learning using our online platform. During this time children will be reminded of the importance of E-Safety and this will be shared with parents/carers.

Children will be encouraged to join learning using Zoom or Google Classroom. Teachers will monitor who is joining the sessions and permission to access will only be given to children who can be identified by their name or email address.

Parents will be expected to supervise and monitor their children's internet access during home learning.

Any child who is unable to access home learning because they do not have access to a device or internet connection, school will provide an alternative or loan resources.

#### 8. Health and Safety

All electrical wiring is situated behind the children's tables.

All electrical equipment is PAT tested annually.

#### 9. Security

All computers and Chromebooks are password protected. All teachers have password protected areas on the network and these passwords are not shared with the children. All teachers and support staff have a Chromebook and Google account that is to be used for work. All children have a school email address and a Google Drive account that is personal to them. The teachers have access to the children's passwords and children are encouraged not to share their passwords with others.

The Chromebooks are stored in locked trolleys. There are two in KS1 and two in KS2. Children need permission before accessing these.

The computers in the office and Headteacher's room are password protected. The passwords are known only to the secretary and head teacher.

#### 10. Resources

The school is well resourced, with interactive white boards in each classroom and desktop computers for all the teachers. We have enough Chromebooks for most children and they have access to Google Classroom and other Google resources through their accounts.

We also have access to other hardware and software such as; Beebots, iPads and educational apps.

#### 11. Special Educational Needs (SEN)

In line with the SEN policy, no child shall be discriminated against because of ability in the teaching and use of ICT. Children with SEN often benefit from the use of the computer to support aspects of their learning and this is encouraged.

#### 12. Equal Opportunities

All children have equal access and opportunity to use and operate ICT equipment. We also seek to ensure that all software in school does not contain any bias with regard to ethnic, gender or social context. If children are required to use ICT as part of their homework or home learning, provision is made in school for them to complete this if they do not have the necessary provision at home.

This policy will be reviewed according to the emerging needs of our school.

Signed Governo	Date rs)	 (Chair of
Signed	Dat	 (Headteacher)