COMPUTING POLICY

Walter Infant School and Nursery

COMPUTING POLICY

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'To be the best I can be'

COMPUTING POLICY

List of Contents **Page No**

COMPUTING POLICY

1. POLICY STATEMENT AND AIMS

Our Walter Infant School and Nursery Policy is in line with the 2014 National Curriculum. This policy is a statement of the school's agreed approach to the teaching of the Computing Curriculum. It is to inform teachers, support staff, governors, parents/carers and the school community.

At Walter Infant School and Nursery our aim is for our children to be '*Junior School Ready*' by the end of Year 2, or Key Stage 1. We want our children to leave Walter Infant School and Nursery being able to use technology purposefully and safely at an age appropriate level with confidence. Best practice approaches have been adopted by the school to facilitate Quality First Teaching (QFT). This policy outlines the teaching of Computing at Walter Infant School and Nursery.

2. The Computing Curriculum

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.

The Computing Curriculum Programmes of Study can be broken down into four areas of learning: Computer Science, Information Technology, Digital Literacy, and e-safety.

- Computer Science: this is at the core of the Computing curriculum. Pupils should be taught the principles of information and computation. This is done by learning how digital systems work and how to put this knowledge to use through programming and coding.
- Information Technology: this area of the Computing curriculum builds on the knowledge and understanding of Computer Science. Pupils learn how to create programs or 'apps' (applications), systems and a range of content for different contexts and purposes.
- Digital Literacy: binds the Computer Science and Information Technology together and extends their basic IT skills. Pupils will be able to use technology and computers to develop and express their ideas. Essentially, they will be able to explore technology and make use of it; therefore, enabling the children to be '*Junior School Ready'*. They will become active and responsible participants in a digital world, by investigating and creating multimodal texts, including the Internet.

- E-safety: this area of the curriculum is taught in PSHE and Computing. The pupils are taught how to be responsible when using all forms of technology, and what to do if they ever feel worried, unsafe or unsure about something. It is at the heart of our Computing curriculum and teaching opportunities are exploited wherever possible. We have developed our own ROBOT e-safety scheme of work. We also take part in Internet Safety Day.

The table below shows how the National Curriculum Computing Programmes of Study are broken down into these three areas of learning, with e-safety integrated into all areas of Computing at Walter Infant School and Nursery wherever possible for maximum exploitation.

		Programmes of Study for KS1
e-safety	Computer Science	• 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
	Information Technology	• Use technology purposefully to create, organise, store, manipulate and retrieve digital content
	Digital Literacy	• 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

In the Foundation stage Computing is taught following the EYFS framework and the Development Matters documentation. The Early Learning Goal 15 states that "*Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes*". This is done through continuous provision planning; with play and exposure to toys and technology, for example children playing with a pretend toaster or using metal detectors to find metal objects. We also want the children in the Foundation Stage to have the skills ready to start the Computing curriculum in KS1. For this reason, the children have a weekly timetabled slot in the computer room.

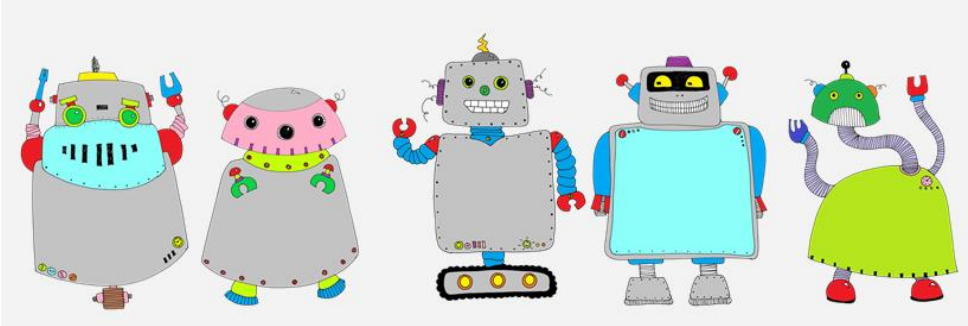
3. COMPUTING AT WALTER INFANT SCHOOL AND NURSERY

At Walter Infant School and Nursery, all of our children in Reception (F2), Year 1 and Year 2 receive a weekly Computing lesson. This may or may not be in the computer room. The lessons are objective led with a learning intention and taught following the relevant curricular.

COMPUTING POLICY

The teaching of Computing should not only be confined to the computer room; children should be exposed to and be able to access other forms of technology, such as BeeBots.

We have developed our own e-safety scheme or work, called **ROBOT**. This is bespoke to our school and has been developed inhouse by Justin Lee (Computing Lead) and Judy Wheeler (Head Teacher). We found that e-safety materials were often aimed at older children or not appropriate for our children. Although most of our children do not encounter the challenges that older children face when using technology, they are still exposed to many risks. They may also have access to games that are not age appropriate at home.



ROBOT - Ralph, Oliver, Betty, Oscar and Ted; our E-safety Wardens.

The children should also use technology and the computers beyond that of the Computing curriculum. For example, using the internet to research a topic or using Education City to solve problems in Maths.

4. ASSESSMENT AND PERSONALISED LEARNING

Assessment and marking should be completed in line with the relevant policies and best practices of the school. Personalised Learning should be used wherever possible, as it is considered best practice.

As with all subjects, assessment takes place in two different forms: formative and summative. Formative assessment is on-going and done through employing AfL strategies. Summative assessment is completed at the end of each unit and the children's progress is recorded using SIMs; where the children are tracked and assessed against the programmes of study from the National Curriculum. Our assessments should be informative, accurate, precise and kept up-to-date.

Our aim is to ensure that as many children as possible are operating at the age-related expectations or above. However, we would never overly stretch or challenge the children to the point where they could experience failure.

5. INCLUSION

All our children at Walter Infant School and Nursery are entitled to ***Quality First Teaching***. We aim to provide excellent teaching and learning

opportunities for all children so that they achieve as highly as they can in Computing according to their individual abilities. We will identify which pupils, or groups of pupils are under-achieving and take steps to improve their attainment. Children exceeding age-related expectations will be identified and suitable learning challenges provided. Differentiation should be used where appropriate and needed.

6. EQUAL OPPORTUNITIES

Opportunities to take part in Computing are open and available to all pupils. All children are allowed access to and given confidence in the different activities offered, regardless of their ability, gender religion or cultural/ethnic background. The content of lessons and the resources available ensure that all are able to participate with enjoyment and are able to achieve qualities and standards appropriate to their age, experience and abilities. Provision is made for children with Special Educational Needs so that they have access to any software or hardware with the other children.

7. Health and Safety

Health and safety issues specifically relating to Computing that will be considered include:

- no one should spend long periods working continuously on computers;
- the computers should be at an appropriate height for the children;
- care must be taken to ensure all workstations are kept tidy and clutter free;
- as the children work in groups of two, they should be encouraged to share the operation of the computer and ensure that both can see the screen;
- all grills and vents must be kept clear from obstruction, to ensure that the computers and electronic equipment does not overheat;
- the children must be shown how to transport any equipment or technology responsibly, such as using two hands when carrying BeeBots;
- electrical appliances are tested regularly by a PAT tester;
- no person should look directly into the projector beam, as this could cause eye damage. The projector should be turned off when not in use.

8. Role of the Subject Leader

The Computing Lead's role will include:

- ensuring that Computing is taught appropriately and in line with the National Curriculum or the EYFS Framework. This is done through monitoring and possible observation;
- ensuring progression in and continuity of computing skills;
- promoting the integration of computing;

- encouraging and supporting colleagues;
- coordinating the evaluation and review of the school's Computing Policy;
- keep up to date with new developments in policy, guidance, hardware and software.

TO BE READ IN CONJUCTION WITH:

- The Curriculum Policy
- The Behaviour Policy
- The National Curriculum
- The early Years Foundation Stage Curriculum
- The Teaching and Learning Policy
- The All in One E-Safety Policy
- The Health and Safety Policy