Computing Policy

Wintringham Primary Academy

2021

Rationale

Computing is changing the lives of everyone. Through teaching Computing we equip children to participate in a rapidly-changing world where work and leisure activities are increasingly transformed by technology. Computing skills are a major factor in enabling children to be confident, creative and independent learners. 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. We enable our pupils to find, explore, analyse, exchange and present information. We also focus on developing the skills necessary for our pupils to be able to use information in a discriminating and effective way.

Aims and Objectives

- 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 embrace and 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.
- To help pupils develop and consolidate their knowledge, skills and understanding in Computing.

Computing is concerned with how computers and computer systems work, and how they are designed and programmed. Pupils studying computing will gain an understanding of computational systems of all kinds, whether or not they include computers. Computational thinking provides insights into many areas of the curriculum, and influences work at the cutting edge of a wide range of disciplines.

The Acceptable Use Policies (KS1 and KS2) should also be read in conjunction with this policy.

The Nature of Computing

The new National Curriculum presents the subject as one through which pupils can understand the world. There is a focus on computational thinking and creativity, as well as opportunities for creative work in programming and digital media.

The introduction makes clear the three aspects of the computing curriculum:
Computer Science (CS), **Information Technology (IT)** and **Digital Literacy (DL)**.

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.

Teaching and Learning

The teaching of computing will begin as soon as a child enters school and their skills will be developed from simple unplugged activities and use of simple programs in the Foundation Stage towards debugging complex programs and combining software at the end of Year 6.
At times, children may focus on one skill at a time, which will then relate to a specific purpose.

The role of the teacher should include:

- ensuring that all elements of the scheme of work are taught
- reporting any problems encountered to the Co-ordinator and the technicians in a timely fashion
- ensuring that equipment is used in accordance with guidance and put away after use
- keeping up to date with subject knowledge and asking for help if needed

The role of the coordinator should include:

- monitoring delivery of the scheme of work to ensure breadth, balance and progression
- carrying out appropriate personal development and training
- carrying out audits to help identify and respond to teacher's training needs appropriately
- sharing skills and information where possible and ensure on-going professional development

- liaising with the technician to solve technical problems and to be advised on future improvements.

Planning

EYFS teachers plan for Computing using the EYFS Framework, and the National Curriculum. Computing is included in Continuous Provision and sometimes through focussed activities. This includes the use of simple age appropriate programs and programmable toys.

In the planning of computing in Y1 to Y4, Computing is taught mainly in the ICE Zone and is often linked to the topic of the term, in cross-curricular learning. It is sometimes taught in the ICE Zone as a stand-alone activity, covering Computing Objectives. Computing is also taught whole class by the class teacher to ensure that new skills or programs are not missed by any child, this then progresses into deeper learning in the ICE Zone. Learning Objectives are created for the duration of the topic or for the Skill that is being taught.

In Year 5 and 6 planning is taught in separate lessons once a week. They plan to teach a block of study each half term. There are some elements of cross-curricular learning through English and Science.

For SEND children plans are put into place that include the use of various technology to support learning and progress. These include the use of specialised software, talking tins and iPads.

Monitoring and Evaluating

This will include:

- Observations of Computing lessons
- Planning scrutinies
- Pupil conferencing
- Analysis of data (including the focus on specific groups)
- Staff meetings to ensure consistency of approach, standards and expectations

Relevant staff CPD and training are put into place as a result of any monitoring.

Cross curricular Links

Opportunities for cross curricular computing take place in the Ice Zones for children in Year 1 to 4. Children have many opportunities to develop their computing skills in a wide variety of contexts when in the Ice Zone. In Year 5 and 6, children are provided with the opportunity to use computing skills in a range of foundation subjects (including Science, History and Geography).

Pupil Assessment

Assessment of pupil progress is on-going by the class teacher and is part of formative assessment. These judgements are moderated with a partner or teams at staff meetings.

Formative and summative assessments are carried out at the end of Key Stage 1 and 2. In Foundation Stage, ongoing observations take place which inform the completion of individual profiles.

Assessments are updated on Arbor at given assessment points.

Equal Opportunities

We aim to ensure that all pupils have equal access to the teaching of computing at a level appropriate to their age and needs.

Roles and responsibilities

This policy was reviewed by

Its implementation is seen as the responsibility of the staff and will be supported and monitored by the English Leads on behalf of the Headteacher and Governors.

Agreed by Trust:

To be reviewed: