IT and Computing Curriculum Policy
Parrett and Axe CEVA Primary School

1. Introduction

1.1 Philosophy

At Parrett and Axe Primary School we believe that the pupils should have access to IT and be taught IT skills, knowledge and understanding that will prepare them for the future. It is essential that the IT skills taught equip the students for jobs that may not currently exist in today's world. At Parrett and Axe Primary School we promote the use of IT to deliver the following learning skills:

- IT as a life skill
- IT to encourage independent learning
- IT to encourage creativity
- IT to equip pupils with the knowledge on how technology impacts on their lives in society

1.2 Computing in Schools

"Computers are now part of everyday life. For most of us, technology is essential to our lives, at home and at work. 'Computational thinking' is a skill that children must be taught if they are to be ready for the workplace and able to participate effectively in this digital world. The new National Curriculum for computing has been developed to equip young people in England with the foundational skills, knowledge and understanding of computing they will need for the rest of their lives. Through the new programme of study for computing, they will learn how computers and computer systems work, they will design and build programmes and develop their ideas using technology and create a range of content." (NAACE, 2013, Forward)

2. Aims

The Computing National Curriculum 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. Curriculum

The DFE NC Computing Programme statutory guideline outlines the following:

3.1 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 a simple program
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve content
- use technology safely and respectfully, keeping personal information private; know where to go for help and support when they have concerns about content or contact on the internet or other online technologies

3.2 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
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

4. Access and Entitlement

All students have access to a broad and balanced curriculum that:

- is rich and varied, challenging and inspiring
- offers learning experiences of the highest standard possible, irrespective of gender, ethnic background, age or disability
- takes account of unequal starting points
- the IT equipment will allow all children to have access to the curriculum regardless of their gender, ethnic background, age or disability

5. Balance

All children will have access to Computing Programming lessons and the use of IT in other subjects that deliver:

- breadth of knowledge relevant to the interests and needs of the children
- depth of understanding
- progression in skills to be taught and knowledge to be learned
- a continuity of activities that make increasing demands on children to apply their previous knowledge and understanding of other subjects

6. Teaching and Learning

As an objective of the teaching of IT is to equip children with the technological skill to become independent learners, the teaching style that we adopt is as active and practical as possible. While at times we do give children direct instruction on how to use hardware or software, the main emphasis of our teaching in IT is for individuals or groups of children to use computers to help them progress in whatever they are studying. We recognise that all classes have children with a wide range of IT abilities. This is especially true when some children have access to IT equipment at home, while others do not. We provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the child. We achieve this in a variety of ways:

- setting tasks which are open-ended and can have a variety of responses
- setting tasks of increasing difficulty (not all children complete all tasks);
- grouping children by ability in the room, and setting different tasks for each ability group
- providing resources of different complexity that are matched to the ability of the child

7. Assessment, reporting and recording

The following assessment strategies will be utilised to be able to gain a clear understanding of the children's progress, knowledge and understanding in this subject:

7.1 Peer-assessment

During lessons the students may work together in groups or pairs. During these sessions their partner or others in their group will work collaboratively to ensure they are completing the task correctly.

7.2 Questioning

The teacher will use open and closed questions to assess the child's knowledge and understanding. For example, the use of 'Why' and 'How' questions work well, why did Google place that result at the top? How does your program work? The use of diagnostic questioning will allow the teacher to address any misunderstanding during the lesson.

7.3 Discussion with peers and group work

There are opportunities for the students to work collaboratively, to discuss their work and to extend their learning forward. This continuous review and development process will form a key part of their learning journey.

7.4 Summative assessment

The children should be able to know, apply and understand the matter, skills and processes in the Computer Programming programme of study. The children will be assessed against the statements under the foundation subject of IT on Pupil Tracker. This will be recorded electronically and tracked for each student.

7.5 Recording

The teacher will record the students' progress on a tracking spreadsheet, using statements which are relevant and appropriate to that year banding. This will identify students who are emerging, developing and secure in the expected skills for that year group.

8. Management and organisation of IT equipment

8.1 IT Audit

An IT Audit has been produced that outlines all of the IT equipment that is available for the staff at Parrett and Axe Primary School. The equipment is distributed to ensure all students have fair access to the facilities.

8.2 Equipment Review

The equipment will be reviewed on a three-year cycle. This will highlight any IT equipment that has become obsolete due to the age of the equipment or its irrelevance to meet the

requirements of the curriculum. The school has a procedure to dispose of any old equipment which involves the safe removal of old documents, software and programs.

8.3 Technical support

The school staff will raise a technical request in the fault log book. This allows the IT lead to be aware of the issues and prioritise jobs. A written response detailing the solution is then logged in the book by the technician. The log book will be kept in the staff room.

9. Monitoring of the subject

9.1 Student work

Each child also has a folder on the pupil network area so that children are able to save and develop their work at a later date. This also allows teachers to log on to the pupil area of the network and assess the work electronically.

9.2 Teacher monitoring

The IT Lead will support, train and advise on how to utilise technology across the curriculum.

9.3 Subject monitoring

Ongoing discussions with the teachers and school staff will identify any areas that need reviewing in terms of the software being used or the delivery of the content.

10. E-safety

The school ensures that all students have an awareness and understanding of e-safety. This will ensure that all technology is used safely, respectfully and responsibly. The school will offer sessions and provision to the school and the community that will include:

- Website links for parents to ensure they are aware of the issues and challenges that are relevant and related to e-safety
- Students to be regularly reminded of the e-safety steps to resolve an e-safety issue
- Students understand the e-safety school rules
- All school staff will have an awareness and understanding of the e-safety issues and challenges
- All staff and parents are asked to complete an acceptable use policy in line with e-safety

These strategies will ensure that all personal information is kept private and all staff and students can identify where to go for help and support if they have concerns about internet content.

11. Review of the Policy

This policy will be reviewed every three years.

Policy agreed by Curriculum Committee: 8.7.22

Policy to be updated: July 2025