



**THIS DOCUMENT IS** a statement of the aims, principles and procedures for computing at Elms Farm Primary School.

**IT WAS DEVELOPED** in Spring 2023 through a process of consultation with staff, governors, parents and Local Authority procedures.

**IT WAS APPROVED** by the governing body in May 2023.

**REVIEW:** Spring 2024

### 1. PURPOSE

Elms Farm Primary School understands that ICT and computing are an integral part of the national curriculum and that ICT skills are important beyond the classroom.

Computers are a valuable resource in school, benefitting the way pupils learn and helping teachers maximise their role as educators. In light of this, our school is committed to ensuring that both staff and pupils have access to the necessary facilities to allow them to enhance their learning experience. We believe that it is important for pupils and employees to be confident and competent users of computers, and other technological resources, to aid development across the curriculum.

#### 2. LEGAL FRAMEWORK

- 2.1 This policy has due regard to all relevant legislation and statutory guidance including, but not limited to, the following:
  - DfE (2021) 'Keeping children safe in education 2023'
  - Data Protection Act 2018
  - General Data Protection Regulation (GDPR)
  - Equality Act 2010
  - DfE (2013) 'Computing programmes of study: key stages 1 and 2'
- 2.2 This policy operates in conjunction with the following school policies:
  - Online Safety Policy
  - Data and Cyber-security Breach Prevention and Management Plan
  - Data Protection Policy
  - Cyberbullying Policy
  - ICT Acceptable Use Agreement for Pupils
  - ICT Acceptable Use Agreement for Staff
  - Pupil Equality, Equity, Diversity and Inclusion Policy





### 3. AIMS

- 3.1 The school aims to assist pupils in achieving attainment targets set out in the national curriculum. By the end of each key stage, pupils will be expected to know, apply and understand the matters, skills and processes specified in this policy.
- 3.2 The school will meet the general aims set out by the DfE for computing programmes of study, which means 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 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.

### 4. THE COMPUTING CURRICULUM

### 4.1 EARLY YEARS FOUNDATION STAGE

Although not directly referenced in the EYFS curriculum, computing at Elms Farm begins in the Early Years Foundation Stage. This is to allow children to enter Year 1 with a strong foundation of knowledge, but also to ensure that children develop listening skills, problem-solving abilities and thoughtful questioning — as well as improving subject skills across the seven areas of learning. In the EYFS, Children have access to iPads, Bee-Bots and remote-controlled cars to begin to develop their computational thinking skills. We follow the 'Barefoot Computing' scheme of learning; lessons are collaborative and cross-curricular, with children undertaking projects including 'Super Space' and 'Boats Ahoy'.

### 4.2 KEY STAGE 1

In KS1, pupils will 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 problems.
- 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 schools.
- 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.

#### 4.3 KEY STAGE 2

In KS2, pupils will 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 ranged, 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 present data and information.
- Use technology safely, respectfully and responsibly.
- Recognise acceptable and unacceptable behaviour.
- Identify a range of ways to report concerns about content and contact.

### 5. PLANNING AND DELIVERY OF THE CURRICULUM

#### 5.1 Assessment

- Teachers will record pupils' ability and progression through two types of assessment formative and summative.
- Formative assessments will be carried out during lessons, based on individual objects and outcomes these assessments will be conducted informally by the class teacher.
- Summative assessments will be completed at the end of every half term.
  Pupils' capabilities will be reviewed using open-ended tasks, providing them with an opportunity to demonstrate their capabilities in relation to the unit of work.





- Pupils' progress will be tracked, and individual targets will be set; pupils will be regularly assessed against these targets.
- Where a pupil is not meeting the expected standard, a supportive intervention will be put in place – this could include the provision of a TA.
- Computing skills and competencies will be reliably and consistently assessed and recorded as part of computing lessons, as well as across the curriculum in other subjects.

### 5.2 Teaching

- The teaching of computing will ensure that pupils of all abilities are able to engage with the curriculum as effectively as possible, enhancing their computing knowledge and skills.
- The skills needed for pupils to access the wider curriculum using ICT will be mapped and developed to ensure that pupils can use computing applications progressively through the curriculum.
- Teachers will use ICT to allow pupils to investigate, solve problems, refine their work, learn from their mistakes and reflect critically.
- There will be a good balance across the whole school between the highquality use of ICT to support and enhance teaching and learning, and the individual pupil's productive use of ICT for their own learning.
- When administering homework tasks, teachers will be sensitive to the fact pupils may not have access to a computer at home.
- ICT will be used to support and extend learning beyond the school, through activities integrated with pupils' school-based learning.
- Teachers will evidence pupils' work in the 'EFPS Evidence Portfolio'.

### 6. ROLES AND RESPONSIBILITIES

### 6.1 Headteacher and Governors

The governing board will be responsible for:

- Monitoring the effectiveness of the computing curriculum.
- Monitoring the progress and attainment of pupils in computing.
- Holding the headteacher and computing subject leader to account for pupils' computing attainment and progress and the delivery of the computing curriculum.
- Ensuring the school has appropriate filters and monitoring systems in place on its ICT system to safeguard pupils during computing lessons.





### 6.2 Subject Leader

The computing subject leader will be responsible for:

- Monitoring the progression of teaching and learning in computing.
- Managing resources and advising staff on the use of materials.
- Supporting teaching staff to deliver the computing curriculum and monitoring the quality of teaching and learning.
- Keeping abreast of technological developments and using these to inform practice.
- Leading staff training on new computing initiatives.

### 6.3 Teaching Staff

Teachers will be responsible for:

- Planning and delivering lessons in line with this policy.
- Providing equality of opportunity to all pupils through their teaching approaches and methods.
- Keeping up-to-date assessment records.
- Ensuring pupils' development of skills and knowledge progresses through their learning and understanding of computing.
- Setting pupils appropriate targets based on their needs and prior attainment.
- Maintaining an enthusiastic approach to computing.
- Taking part in computing training and other CPD opportunities.

### 6.4 The ICT Technician

The ICT technician will be responsible for:

- Maintaining and keeping ICT equipment in good working order.
- Dealing with any reports of broken, damaged or faulty equipment.
- Ensuring the school's Data and Cyber-security Breach Prevention and Management Plan is adhered to.
- Carrying out checks on all computers once per term.
- Adjusting access rights and security privileges in the interest of the school's data, information, network and computers.
- Monitoring the computer logs on the school's network and reporting inappropriate use to the headteacher.
- Disabling the user accounts of staff and pupils who do not follow school policies, at the request of the headteacher.
- Assisting staff with authorised use of ICT facilities, if required.





- Assisting the headteacher in all matters requiring reconfiguration of security and access rights, and all matters relating to this policy.
- Accessing files and data to solve problems for a user, with their authorisation – if an investigation is required by the headteacher, authorisation from the user is not required.

### 6.5 Pupils

Pupils will be responsible for:

- Using the school's ICT facilities appropriately.
- Being aware of the school's rules around the use of ICT equipment during lessons.
- Understanding how the use of ICT improves learning.

#### 6.6 Parents

Parents will be responsible for encouraging ICT skills and safe ICT use at home.

### 7. EQUAL OPPORTUNITIES

- All pupils will be provided with equal learning opportunities regardless of their background or characteristics, in line with the school's Pupil Equality, Equity, Diversity and Inclusion Policy.
- To ensure pupils with SEND can achieve to the best of their ability, targets for pupils with SEND will be adapted and the delivery of the curriculum will be differentiated for these pupils.
- The curriculum and targets will also be adapted for other pupils based on their needs, e.g. pupils with EAL.
- Where possible, ICT will be used in a specialist way to support pupils with SEND. The school will look to utilise software systems that can be modified to aid language, spelling or reading development.
- The school will aim to maximise the use and benefits of ICT as one of many resources to enable all pupils to achieve their full potential.

#### 8. ONLINE LEARNING AND SAFEGUARDING

- 8.1 The school recognises the importance of teaching pupils about online safety, the potential dangers of the internet and their responsibilities when using communication technology as set out in the school's Online Safety Policy.
- 8.2 As part of the school's commitment to the principles outlined in 'Keeping children safe in education: 2023/yearly update', the school will:





- Offer a safe online environment through filtered internet access.
- Ensure the filtering systems in place will prevent pupils from accessing terrorist and extremist materials, in accordance with the school's Online Safety Policy and the Prevent duty.
- Take care to ensure the use of filtering and monitoring does not cause "over blocking", which may lead to unreasonable restrictions on what pupils can be taught.
- Run assemblies about the potential dangers of the internet and how to stay safe online.
- Teach pupils about internet safety and cyberbullying during PSHE and internet safety lessons.
- Pupils and staff who use the school's ICT facilities inappropriately will be reported to the headteacher, and the DSL where appropriate.
- The ICT technician will keep internet filters and other safeguarding controls up-to-date, to avoid misuse and protect pupils.

### 9. HEALTH AND SAFETY

- All electrical wires and sockets, where possible, will be kept out of the way of pupils.
- Visual electrical inspections will be undertaken by the ICT technician on a regular basis any other problems will be reported immediately to the health and safety officer and ICT technician.
- Pupils will be given a five-minute break if they are using the computer for more than one hour at a time.
- The rules for correct use of ICT will be displayed in each classroom, and both staff and pupils will be expected to familiarise themselves with, and adhere to, these rules.

### 10. IMPLEMENTATION OF THIS POLICY

- The provision of the computing curriculum will be monitored and assessed by the computing subject leader and headteacher.
- The suitability of all ICT equipment and programs will be assessed and updated, if necessary, by the ICT technician to ensure they are sufficient for effective learning.
- Staff will be provided with high-quality training regarding both curriculum delivery and the safeguarding issues around internet safety.
- Any breach of this policy will be reported to the headteacher.





- Use of the school's internet connection and network use will be recorded and monitored by the ICT technician.
- The ICT technician has the ability to remotely view or interact with any computers on the school's network. The ICT technician will use this to help implement this policy and to identify

RATIFIED BY
Computing Lead Date
Head Teacher
Governor
REVIEW DATE: APRIL 2024 (Annually)



