

## Elmtree Infant and Nursery School



*Together we reach for the stars*



# ELMTREE INFANT AND NURSERY SCHOOL

## POLICY FOR COMPUTING

This policy outlines the guiding principles by which this school will implement Computing in the context of the school's curriculum policy statement and its staffing, health & safety and equal-opportunities policies.

### Intent

Computing has deep links with mathematics, science, and design and technology. The core of computing is computer science, in which pupils are taught the principles of information and computation. Computing requires pupils to become digitally literate, able to use and express themselves and develop their ideas through information and communication technology and become active participants in a digital world.

Through the use of Computing/ICT pupils will learn how to communicate through the medium of text, pictures and sound and to communicate on-line and to handle information using software and apps on a variety of devices.

- pupils will gain an understanding of computing and be able to apply the fundamental principles and concepts of computer science.
- pupils will learn how to analyse problems in computation terms and have practical experience of writing simple computer programs to solve such problems.
- pupils will learn how to evaluate and apply information technology.
- pupils will learn how to become responsible, competent, confident and creative users of information and communication technology.

In line with our school values Elmtree we will:

**Be Curious** – We will ask questions to expand our knowledge and challenge our ideas.

**Be Resilient** – We will deepen our knowledge of computing and ICT by continuing to challenge our understanding.

**Be Inclusive** – We will ensure that everyone has the chance to share their knowledge and participate in discussions and activities.

**Be Ambitious** – We will challenge ourselves to discover information and present our knowledge to inform and teach others.

**Be Respectful** – We will ensure we respect others beliefs and engage in purposeful discussions of different views to develop our understanding and knowledge of the wider world.

### **Implementation**

Our aim is to produce learners who are confident and effective users of Computing and ICT and understand and apply the fundamental principles and early concepts of computer science. We aim to do this by meeting the requirements of the National Curriculum Computing Programmes of Study for Key Stage 1 and the Statutory Framework for the Early Years Foundation Stage as fully as possible and helping all pupils to achieve the highest possible standards of achievement.

We will:

- help children recognise that a range of technology is used in places such as homes and schools and help them select and use technology for a particular purpose.
- help pupils understand what algorithms are: how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
- help pupils to create and debug simple programs.
- help pupils to use logical reasoning to predict behaviour of simple programs.
- help pupils to use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- help pupils to recognise common uses of information technology in the wider world.
- help pupils to use technology safely and respectfully, keeping personal information private
- help pupils identify where to go for help and support when they have concerns about content or contact in the online world.

To facilitate the implementation of the computing curriculum we have put in place the following:-

- Access to desktop computers in the Nursery, in the Classrooms, in the ARP, in the Library and in the Computer Suite. New technologies will be added as appropriate.
- We will follow a computing programme that covers the objectives from the National Curriculum Computing Programmes of Study for Key Stage 1 and the recommendations set out in the Statutory Framework for the Early Years Foundation Stage where the children work towards the Early Learning Goals for Understanding the World.
- Children will be encouraged to make use of technology and talk about their experiences, develop an understanding of how technology can assist and extend their learning, and develop an awareness of the applications of technology in their everyday lives.
- All classes will be timetabled a weekly slot for Computing. Other timetabled slots will be available for cross curricular ICT. This will allow flexibility for teachers to book sessions that fit with their weekly planning.
- E-Safety is the responsibility of all adults working with children. The children in Key Stage 1 will follow a tailored programme for introducing E-safety as part of their Computing lessons.

In addition to the above we will employ Teaching and Learning Strategies to support children in the development of their computational thinking skills.

Computing and ICT are a valuable part of the curriculum, not only as a discrete subject but also as a subject to be embedded into all curriculum areas to enhance and enrich the pupils' learning experience.

Pupils need to know that they are in control of the technology, that it responds to their commands and is a tool to be utilised appropriately. Teachers will employ a range of teaching strategies to include:

- using the interactive screens/whiteboards/visualisers to demonstrate to a group of pupils or the whole class as appropriate.
- lead a group or class discussion about the advantages and limitations of Computing/ICT.
- support children in class when using tablets or other technology for a particular task.
- use other technologies as appropriate to support whole school and class assemblies and parent information sessions.

### Record Keeping and Assessment

Ongoing assessment is undertaken for Reception, Year 1 and Year 2 to inform planning for the following term. The children are assessed and categorised as either 'Working Towards' 'Met' or 'Greater Depth'. Work sampling is undertaken termly for each Year Group to show progression from Reception through to the end of Year 2.

### Impact

- Through observation and practical assessment, we expect that all pupils:
- will show an understanding of computing and be able to apply the fundamental principles and concepts of early computer science skills and computational thinking.
- will learn how to analyse problems in computational terms and have practical experience of writing simple computer programs to solve such problems.
- will learn how to evaluate and apply information technology.
- will learn how to become responsible, competent, confident and creative users of information and communication technology.

The school's Marking and Feedback policy allows children's levels of independence to be evident, as instances where pupils have the most secure knowledge and skills can most easily be recognised when they have applied learning independently and in a range of ways, including across different areas of the curriculum. On occasions when such extended depth has yet to be developed, an expected core impact of our curriculum is that pupils are at least ready to move on to the next key stage of learning.

### Equal opportunities in Computing

Computing and ICT are taught within the guidelines of the school's equal-opportunities policy.

- We ensure that all our children have the opportunity to gain skills, knowledge and understanding regardless of gender, race, class, physical or intellectual ability.
- Our expectations do not limit pupil achievement and assessment does not involve cultural, social, linguistic or gender bias.
- We aim to teach in a broad global and historical context, using the widest possible perspective and including the contributions of people of many different backgrounds.

- We value computing as a vehicle for the development of language skills, and we encourage our children to talk constructively about their computing experiences.
- We recognise the particular importance of first-hand experience for motivating children with additional learning needs.
- We exploit computing's special contribution to children's developing creativity and we develop this by encouraging logical and computational thinking.

### **SEN Provision in Computing**

In order to meet the learning needs of all pupils, teachers differentiate computing and ICT work. They work to meet individual learning needs and to mark work, and plan homework effectively. All pupils have access to a broad and balanced Computing curriculum. The National Curriculum Inclusion Statement states that teachers should set high expectations for every pupil, whatever their prior attainment. Teachers use appropriate assessment to set targets which are deliberately ambitious. Potential areas of difficulty are identified and addressed at the outset. Lessons are planned to address potential areas of difficulty and to remove barriers to pupil's achievement. In many cases, such planning will mean that pupils with SEND and disabilities will be able to study all aspects of the Computing Curriculum.