



## COMPUTING POLICY

*To be read in conjunction with Online e-Safety Policy*

Garlinge Primary School and Nursery is a place for everyone to succeed and thrive with inclusion at its heart.

*Educational visits and learning outside the classroom are an integral part of life at Garlinge Primary School and Nursery, furthering the education of the pupils. Educational visits and learning experiences outside the classroom are arranged for pupils at Garlinge Primary School and Nursery when pertinent to the Learning Intention of the lesson.*

### **Purpose of study**

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. 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 – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

### **Rationale**

Computing is a tool for learning and is key to raising standards across the curriculum. Pupils use tools such as computers, recording and video equipment to communicate and handle information and present it in a variety of ways. They learn to program and control a variety of electronic devices and develop the use of programming and control in everyday life. They use computer models to explore and test answers to questions.

### **Aims**

- To equip all learners with the experiences and skills of computational thinking and creativity that they will use in a rapidly changing technological world
- To ensure all learners in our environment will be confident and independent in their use of Computing to solve problems across the curriculum
- To meet the requirement of the Early Years Foundation Stage Curriculum and National Curriculum as fully as possible to enable all children to reach the highest possible standards of achievement.
- To develop growing awareness of how Computing is used in the world around them and of the benefits that it provides
- To provide pupils with the knowledge and understanding to use technology safely and responsibly.

## **Objectives**

These objectives are derived from the aims and guide our decisions in planning a scheme of work. They will form the basis for evaluation and assessment.

To enable all children to use Computing with purpose and enjoyment:

- By providing tasks which are interesting and give scope for individual responsibility
- By using Computing to produce and enhance work for display
- To enable all children to develop the necessary skills to exploit Computing
- By offering experiences of free choice leading to more focused tasks
- By ensuring enough access by pupils to become proficient in the basic Computing skills
- To encourage all children to become autonomous users of Computing
- By teaching children to be responsible in caring for the equipment
- By planning activities which allow children opportunities to apply their skills in a variety of different subject contexts.
- To enable all children to appreciate the benefits of Computing and its increasing input
- By focused discussions in groups or as a class about the benefits and limitations of Computing
- To meet the requirement of the Early Years Foundation Stage Curriculum and National Curriculum as fully as possible and enable all children to reach the highest standards of achievement
- By intervening, where appropriate, to reinforce an idea or teach a new point.
- By planning activities which allow different levels of achievement or incorporate possibilities for extension work
- To create the atmosphere and levels of resources to encourage all members of the school community to learn with Computing
- By raising the profile of Computing in the school and providing a continuous programme of staff development

## **Principles of Teaching and Learning**

### **Differentiation and Special Educational Needs and Disabilities (SEND)**

Pupils with SEND needs will be entitled to the same access to Computing as their peers. In planning lessons teachers will identify the learning goals for the majority of the children as well as extension activities for the more able including gifted and talented pupils. Teachers will liaise with the SENDCo on the use of Computing to improve their achievement in the curriculum. For example, to improve writing and presentation, to practise skills or to focus on the interpretation of graphs.

### **Breadth and Balance**

Teachers and support staff will ensure that they understand the skills and concepts to be taught and the role of discussion in developing a critical awareness of the use of Computing. The scheme of work for Computing provides guidance on the skills and knowledge to be covered by each year group in terms of Computer Science, Digital Literacy and Information Technology. Teachers will

need to plan their work so that Computing skills are taught, practised, developed and embedded throughout the curriculum.

### **Variety**

Pupils will have the opportunity to participate in a variety of activities to learn to use Computing and apply these skills in a meaningful context. They will also evaluate how Computing is used in everyday life and compare this with the way it is used in school through:

- Short directed activities to practise a specific skill
- Activities with a subject content to practise and develop skills previously learned
- Open ended activities which allow pupils to choose which tools to use or select from a variety of media
- Whole class discussion to allow reflection on the use of Computing

### **Relevance**

Work planned for children will be relevant to them and their lives. It will build on their existing skills and provide opportunities to develop new ones. Wherever possible real data will be used and the use of email, and the internet, will be used to link with children where appropriate. This can include contact with other schools, countries and cultures.

### **Cross-curricular Skills and Links**

The nature of Computing as a tool means that there will be many opportunities for links with other subjects. Teachers will plan some activities to develop and enhance Computing capability and others which support the subject being taught.

### **Home, School and Community Links**

Computing developments and achievements are shared and a positive relationship fostered with home, school and the wider community.

### **Equal Opportunities**

At Garlinge Primary School and Nursery, we are committed to ensuring equality of opportunity for all pupils, staff, parents and carers irrespective of race, gender, disability, religion & belief, sexual orientation, marital status, pregnancy & maternity, age or socio-economic background. We aim to develop a culture of inclusion and diversity in which all those connected to the school feel proud of their identity and ability to participate fully in the curriculum and school life. All children are entitled to equal access to all Computing equipment in order to develop their personal Computing capability. Children may work singly or in pairs to achieve this. Where children work in groups, care should be taken to ensure all children are active and have equal access to the equipment.

## **Health and Safety**

Garlinge Primary School and Nursery has a detailed risk assessment to help ensure safe use of Computing in the school. This has been shared with staff during INSET. This risk assessment aims to reduce risks when using computers in school. Health and Safety when using computers falls into three broad categories:

### Internet Safety/Child Protection

While the internet serves as a wonderful educational tool, it is an unregulated one and teachers, parents, carers and children should be aware of the inherent dangers of using the world wide web and accessing material on computers, mobile phones or other devices.

### Physical Hazards

Accidents involving computers can happen as more people use computers both at work and at home. These could be accidents involving burns, shocks, injuries, falls, cuts and crushing. Our risk assessment aims to reduce these risks.

### Health Risks

There are a number of health risks from using computers, most of which can be minimised or eliminated by awareness of the risks and by following advice available. Examples of risks are repetitive strain injury, eye-strain, stress and epilepsy.

Children and adults using computers at Garlinge Primary School and Nursery follow the school risk assessment and it is attached as an appendix to this policy.(See school Health and Safety Policy and e-Safety Policy).

## **Assessment, Recording and Reporting**

Each teacher will maintain records of children's progress in acquiring basic computer skills. This is undertaken during the year to assess children at an Emerging, Expected or Exceeding level related to their year group. Assessment of Computing capability will be achieved by planning appropriate curriculum activities in line with the school's general policy for assessment and reporting. Regular monitoring of all aspects of Computing informs the Subject Leader and School Improvement Plan (SIP).

## **Management and Administration**

The curriculum will be planned to allow pupils a wide range of activities to cover and teach the programmes of study for Computing. Teachers will use the key stage plans to ensure that pupils have sufficient access to experiences and equipment to receive a balanced experience of Computing.

The scheme of work for Computing and subject schemes of work will provide the basis for termly cross-curricular planning showing learning objectives, experiences and types of activities. Planning should identify opportunities for assessment and resources to be used.

All learning styles are considered alongside open questioning to challenge children's thinking, learning and ability to reflect on the choices they have made.

### **The Role of the Subject Leader**

The Subject Leader will work with all stakeholders to ensure implementation of the school's Computing Policy and SIP and will be responsible for monitoring curriculum coverage and the impact of teaching and learning. The Subject Leader will plan and lead the development of all school staff in Computing and provide regular reports on the level of resources.

### **Resourcing**

Resources are purchased and deployed effectively to meet the requirements of the Foundation Stage Curriculum and National Curriculum. A Computing asset register is maintained.

### **Equality Statement**

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### **Review**

This policy will be reviewed as appropriate in response to local or national initiatives, evaluation of monitoring procedures and as detailed in the SIP.

Regular reports are made to the governors on the progress of Computing provision.