



**October 2023**

## **Computing Policy**

*(to be read alongside Online Safety Policy)*

### **PURPOSE AND AIMS**

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.

#### **Our aims at Montgomery Infant School and Nursery are:**

- provide a broad, balanced, challenging and enjoyable curriculum for all pupils.
- can understand and apply the fundamental principles and concepts of computer science, including logic, algorithms, communication 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
- respond to new developments in technology
- develop the understanding of how to use computers and digital tools safely and responsibly

### **PROVISION**

The school believes that IT, computer science and digital literacy:

- are essential life skills necessary to fully participate in the modern digital world.
- allows children to become creators of digital content rather than simply consumers of it.
- provides access to a rich and varied source of information and content.
- communicates and presents information in new ways, which helps pupils understand, access and use it more readily.
- can motivate and enthuse pupils.
- offers opportunities for communication and collaboration through group working
- has the flexibility to meet the individual needs and abilities of each pupil.

### **INTENT, IMPLEMENTATION and IMPACT**

We aim to prepare our learners for their future by giving them the opportunities to gain knowledge and develop skills that will equip them for an ever changing digital world.

Knowledge and understanding of ICT is of increasing importance for children's future both at home and for employment.

Our Computing curriculum focuses on a progression of skills in digital literacy, computer science, information technology and online safety to ensure that children become competent in safely using, as well as understanding, technology. These strands are revisited repeatedly through a range of cross curricular activities during children's time in school to ensure the learning is embedded and skills are successfully developed.

In the Early Years Foundation Stage, it is important to give children a broad, play-based experience of IT and computing in a range of contexts, including off-computer activities and outdoor play.

Computing is not just about computers. Early years learning environments should feature IT scenarios based on experience in the real world, such as in role play.



Our whole curriculum is shaped by our school vision which aims to enable all children to flourish to become the very best version of themselves they can possibly be. We teach the National Curriculum, supported by clear skills and knowledge progressions ensuring that the children's learning is maximised to its full potential.

The implementation of our curriculum ensures that when children leave school, they are competent and safe users of ICT with an understanding of how technology works. They will have developed skills to express themselves and be creative in using digital media and be equipped to apply their skills in Computing to different challenges going forward.

## MONITORING, EVALUATION AND IMPROVEMENT

The role of the leader in monitoring pupil outcomes is to audit teachers' judgements. The Computing lead ensures their subject is accessible in provision and for all. This done through environmental walks, lesson dips, provision audits, quality of displays and also collectively in staff meetings. The Computing lead works collectively with teachers to examine the strengths and limitations in provision to diagnose why the outcomes are as they are. The lead then creates action plans to improve achievement where necessary.

We believe that the use of ICT in schools brings great benefits. To live, learn and work successfully in an increasingly complex and information-rich society, our children must be able to use technology effectively. The use of these exciting and innovative technology tools in school and at home has been shown to raise educational standards and promote pupil achievement. Yet at the same time we recognize that the use of these new technologies can put young people at risk within and outside the school. Children are taught e-safety in discrete lessons.

This policy is to be read in conjunction with our "Online Safety" policy, which is updated each year in line with KCSiE updates.