

## COMPUTING POLICY

**Subject Leader:** Emily Trott

**Review Date:** February 2025



This policy reflects the vision statement and aims of our school and should be read in conjunction with the policies listed at the end of this document, the National Curriculum for computing and Development Matters for the Early Years expectations.

### **Rationale**

Through the first-hand experience of using a range of technologies children will be provided with opportunities to develop and use knowledge, skills and understanding of computing for a variety of purposes. Children will become aware of the importance of technology in their daily lives and in the wider sense of the world around them and be prepared for the world that they are growing up in.

### **Aims**

That each child should:

The school's aims are to:

- Provide a broad, balanced, challenging and enjoyable curriculum for all pupils.
- Develop pupil's computational thinking skills that will benefit them throughout their lives.
- Meet the requirements of the national curriculum programmes of study for Computing at Key Stage 1 and 2
- To respond to new developments in technology
- To equip pupils with the confidence and skills to use digital tools and technologies throughout their lives.
- To enhance and enrich learning in other areas of the curriculum using IT and computing.
- To develop the understanding of how to use computers and digital tools safely and responsibly

The National Curriculum for Computing aims to ensure that all pupils:

- can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- are responsible, competent, confident and creative users of information and communication technology

### **Rationale**

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**

### Early years

It is important in the foundation stage 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. Children gain confidence, control and language skills through opportunities such as 'programming' each other using directional language to find toys/objects, creating artwork using digital drawing tools and controlling programmable toys. Outdoor exploration is an important aspect and using digital recording devices such as video recorders, cameras and microphones can support children in developing communication skills. This is particularly beneficial for children who have English as an additional language.

### **By the end of key stage 1 pupils are taught to:**

- understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions
- write and test simple programs
- use logical reasoning to predict the behaviour of simple programs
- organise, store, manipulate and retrieve data in a range of digital formats
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

## **PLANNING**

Lessons are planned using the National Curriculum and school's Computing Skills Progression objectives. Lesson plans for main sections of the curriculum (e.g. coding) are also available for teachers to use and adapt as necessary for their class. A minority of children will have particular teaching and learning requirements which go beyond the provision for that age range and if not addressed, could create barriers to learning. This could include G&T children, those with SEN or those who have EAL. Teachers must take account of these requirements and plan, where necessary, to support individuals or groups of pupils to enable them to participate effectively in the curriculum and assessment activities. During any teaching activities, teachers should bear in mind that special arrangements could be made available to support individual pupils. This is in accordance with the school inclusion policy. These children should be identified and discussed at pupil progress meetings to ensure that appropriate provisions and/or interventions are effected.

Children in the EYFS and Badgers are given plenty of opportunities to develop their technology and computing skills through planned activities such as investigating how to use a laptop to play games and create pictures as well as using some simple programmable toys. All children have the experience of using CD players, programmable toys, digital cameras, intel microscopes and using the interactive whiteboard in the computer room.

### **Assessment and Record Keeping**

Assessment is carried out according to the school's Assessment Policy. Pupils are involved in assessing their own work, recognising their strengths and areas for development and identifying the next steps for learning.

Throughout the school teachers and teaching assistants assess the skills learned and record observations that link into the teacher's overall assessment of the subject. Observations recorded in EYFS are recorded on Target Tracker or in evidence folders. At the end of the year this evidence is reported as emerging, expected or exceeding to parents, the LA and to the appropriate Key Stage 1 teacher to assist in future planning. In KS1, children are assessed as beginning, beginning plus, working, working plus, secure or secure plus.

### **Resources**

Each classroom has access to at least 1 laptop. Key Stage 1 classes have access to 15 iPads. All classes and the hall have an interactive whiteboard and there is also an interactive whiteboard in the computer room and an additional six laptops. Each class have access to digital cameras, tough-cams, microscopes, visualisers, talking books, Bee Bots, Pro Bots and programmable toys. Fifteen iPads can be used for group work. The library is computerised and all the curriculum laptops are fully networked.

This curriculum policy should be read in conjunction with our:

Assessment Policy

Behaviour and Discipline Policy

Early Years Foundation Stage Policy

Equality and Diversity Policy

Online Safety Policy

Inclusion Policy

Learning and Teaching Policy

Marking Policy

SEND Policy