# Rowdown Primary School Computing Policy



Date	January 2025
Edited by:	Suraj Sudev
Sections edited:	Use of Project Evolve added to E-Safety sections
	Use of MicroBit and LEGO Coding added
	Termly units changed to half termly units
Review date:	Feb 2027

### <u>Introduction</u>

A high-quality computing education equips pupils to use computational thinking and creativity. As such, Rowdown Primary School recognises that its pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to use it effectively.

# Legal Requirements:

In accordance with the National Curriculum, we provide education in computing for all pupils registered at the school.

The scheme of work for Education in Computing covers all the requirements prescribed by the National Curriculum. Computing is taught in half termly units across the school in a combination of technology based topics.

## **Teaching and Learning:**

In delivering the computing curriculum, Rowdown Primary school undertakes:

- To equip all learners with the experiences and skills of IT that they will use in a rapidly changing technological world.
- Ensure earners in our environment will be confident, independent and adaptable in their use of IT to solve problems across the curriculum.
- Every child will have the opportunity to learn Computing at school, with exposure to computer science supporting both problem solving and reasoning skills.

 To equip all children with an awareness to keep themselves safe in an increasingly online world, supported by the use of *Project Evolve* to teach E-safety in a structured and engaging manner.

By doing so, the school's aims are to:

- To teach computer science as an academic discipline, recognising that it underpins many other subjects and has concepts and ways of working that they will use as adults, such as computational thinking, programming, algorithms and data structure, systems architecture, design and problem solving.
- To recognise that computer science is a highly creative discipline which develops key thinking skills of logical reasoning, modelling, abstraction, and problem-solving.
- To enable all children to use IT with purpose and enjoyment by providing tasks which
  are interesting and give scope for individual responsibility thereby empowering
  children to become independent and collaborative learners who take increasing
  responsibility for their own progress
- To enable all children to develop the necessary skills to use IT effectively.
- To enable all children to become autonomous users of IT by providing a digital literacy- rich learning environment throughout the school, providing a relevant, challenging and enjoyable curriculum for all children
- To develop e-learning, including the use of the internet, cloud based learning and email, so that learning can take place at home or wherever there is access to IT, and to create links both locally and internationally.
- To ensure that IT is used to improve access to learning for pupils with a diverse range of individual needs, including those who are more able, with SEN and disabilities.
- Incorporate innovative tools such as *MicroBit* and *LEGO Coding* to inspire creativity and build essential programming and engineering skills.
- To understand the capabilities and limitations of IT and the implications and consequences of its use.
- To be open-minded in their approach to IT so that they will be able to adapt easily to the IT systems and approaches they will encounter in their future lives
- To be offered equal opportunities in IT irrespective of gender, race or religion
- To respond to new developments in technology.
- To empower children with the opportunities to share their IT and computing expertise to train and support their peers.
- To consolidate and further the cross curricular links between IT and other subjects, particularly in the arts.
- To provide all staff with individualised professional development opportunities, including frequent IT and computing training.

Each class has access to laptops and iPads to use in their classrooms. This allows for the creative use of IT across all subjects and allows for specific teaching of computer science. This is highlighted in the computing plan and in subject plans.

Each classroom and training room is equipped with an interactive whiteboard, which is frequently used as a teaching resource across the curriculum. As part of our investment, projectors-based boards have now been replaced with wall-mounted touch-screen technology.

Digital cameras are available for use in creative subjects. These are also supplemented by a set of iPads to be used across all subject areas.

#### **Equal opportunities:**

Inclusion and adaptations for children with SEN and EAL are taken into account in our planning and teaching as they are in all areas of the curriculum. Within the teaching of Computing we make the most of opportunities to help the children develop their sensitivity to relevant issues such as the internet and communication, and to develop positive and safe attitudes towards using technology. We endeavour to draw on the varied experiences and backgrounds of our pupils and staff in order to make Computing relevant and interesting to our pupils. Through Computing children have the opportunity to develop many key skills such as thinking, researching, evaluating, reflecting and de-bugging.

# **Social Cultural and Vocational Development:**

The teaching of computing is a key opportunity for children to develop socially and culturally. In using computers, ensuring that children are doing so safely is of paramount importance. The school has agreed rules for the safe and responsible use of IT and the internet, which are to be displayed around the school and in classrooms. All pupils are required to abide by these rules. Staff are also aware of the E-Safety policy, which clearly states the rules and regulations regarding the safe use of school devices by staff and the use of personal devices on school grounds. The school enhances its E-safety teaching through the use of Project Evolve, providing a comprehensive and engaging resource to guide children in safe online practices. The school uses a filtering system to ensure pupils are not able to access inappropriate content.

# Recording, Marking, Assessment and Reporting:

Assessment takes place at the end of each unit in the scheme of work. This indicates what most pupils should know and understand. Judgements about children's achievements are made through formal assessment and regular marking of pupils' work. Pupils are guided about what they have done well, what they need to improve and ways in which they might make that improvement. Teachers are encouraged to complete assessments at the end of each unit of work. These assessments should indicate what students know and understand.

## Management:

The teaching, assessing, and resourcing of Education in Computing is managed by the Computing curriculum leader, in close collaboration with Senior Management. Pupils' work is stored in appropriate folders in the Student Drive. These folders are looked at regularly throughout the year. The scheme of work is evaluated annually. The use of innovative tools, including *MicroBit* and *LEGO Coding*, is monitored and reviewed to ensure they align with the curriculum goals and enhance learning outcomes. Resources are bought with the annually allocated Computing budget and stored in the Computing room—a central place for use by all staff.

Date: January 2025