COMPUTING POLICY 2023

Corrie Nursery and Primary School

Approved by:	FGB		Date: March 2023
Last reviewed on:	March 2023		
Next review due by:	Spring term 2025		

Mission Statement:

Corrie nurtures and encourages all children to realise their personal best and to fulfil their potential in the academic, sporting and performing opportunities provided in and out of school. Our carefully planned climate of celebration of pupil achievement includes a sense of enjoyment that childhood days will be remembered as fun. Our vision is of an environment where our children can develop the life skills necessary to become fully integrated members of society. Corrie aims to do this by providing a caring and stimulating learning environment where all are welcome, respected and encouraged to achieve the highest standards in both work and play. Through mutual respect and appreciation we aim to provide enrichment and enjoyment for everyone. By fostering support and loyalty we offer an environment in which we clearly value the contribution of each individual.

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.

Aims:

The national curriculum for computing aims to ensure that all pupils can:

- Understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.
- Evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Be responsible, competent, confident and creative users of information and communication technology.

Attainment Targets:

By the end of EYFS and each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study. This information is from the EYFS 2020 Framework and the 2014 Computing National Curriculum.

In EYFS, Pupils should be able to:

- Explore and investigate the uses of technology and how things work.
- Find out about how technology is used in familiar places such as homes and schools.
- Learn to select and use technology for a particular purpose.
- Be aware of sensible amounts of 'screen time'.

In Key stage 1, Pupils should be taught to:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
- Create and debug simple programs.
- Use logical reasoning to predict the behaviour of simple programs
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- Recognise common uses of information technology beyond school.
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

In Key stage 2, Pupils should be taught to:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
- Understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web; and the opportunities they offer for communication and collaboration.
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.
- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information .
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Teaching and Learning Style:

At Corrie, we use a variety of teaching and learning styles. Children will develop skills in computing in weekly taught lessons and will be given opportunities to apply these skills throughout the curriculum. This may include whole class, small group, paired or individual work. Children are encouraged to become independent learners and have the opportunity to use a range of information technology resources to support their learning across the curriculum. In all classes there are children of differing abilities. We recognise this fact and provide suitable learning opportunities for children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies to ensure progress and participation for all children. In groups throughout all key stages, the lessons are differentiated and in some lessons children work in pairs on open-ended problems or games. Children have the opportunity to use computing in all areas of the curriculum, where it will enhance their learning. Wherever possible, we encourage children to use and apply their knowledge, skills and understanding in everyday situations.

Computing Curriculum Planning:

At Corrie, we implement the requirements of the National Curriculum 2014 for Computing. In Reception, teaching is based on the Early learning Goals. In computing, we plan using a progression of skills to ensure coverage and progression. The class teacher plans the teaching of ICT both in discrete lessons and through other areas of the curriculum. The subject leader monitors teaching and learning in computing throughout the school, by classroom observations, work scrutiny and pupil and staff voice interviews.

Teaching Computing to Children with Additional Needs:

At Corrie, we teach computing to all children, whatever their ability. It is part of the school curriculum policy to provide a broad and balanced education for all children. We provide learning opportunities that are matched to the needs of children with learning difficulties. Work in computing takes into account the targets set for individual children in their individual plans.

Assessment and Recording:

We assess children's learning through observation and outcome in lessons. We make medium-term observations and assessments to measure progress against the attainment targets. At Corrie, we input our observations and assessments into TargetTracker which, termly, is used to give us a medium term assessment to inform our next steps/targets. TargetTracker is used in every year group to show clear progression throughout school.

Resources:

There are a range of resources to support computing teaching across the school. All classrooms have access to laptop trolleys and to a set of iPads. A range of software is available on all laptops in school. A range of apps is available on all iPads. These are updated regularly.

Monitoring and Review:

 Monitoring of the standards of children's work and of the quality of teaching in computing is the responsibility of the computing subject leader. The work of the computing subject leader also involves supporting colleagues in teaching, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. The computing subject leader gives the head teacher an annual summary in which s/he evaluates strengths and weaknesses in the subject and indicates areas for further improvement. It is the responsibility of class teachers to consistently follow this policy to ensure continuity and progression. It is the head teacher's responsibility to support the strategic plan for computing.

Remote and Online Learning:

We use Google Classroom to provide remote learning to support children when they cannot attend school (due to illness). We use this platform to support homework also. Children can continue their learning online at home by using resources such as Reading Eggs and TT Rockstars.

Please see the link to the remote learning policy and the online agreement letter.