

Computing Policy

Intent

At Callowell, our curriculum is designed to developing **independence** and **resilience** in our learners whilst improving their **oracy** skills. We provide our learners with a wide range of experiences and activities to broaden their **cultural development** beyond their own community and promote **inclusion**.

In Computing, our aims are to ensure all of our pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms 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.

Implementation

As a school, we use the Purple Mash Computing Scheme of Work to implement our Computing curriculum. Our programme of study sees dedicated Computing lessons split into three strands: Computer Science, Information Technology and Digital Literacy. These give the children repeated practical opportunities to develop their coding skills combined with e-safety training and familiarisation with commonly used programmes to prepare them to meet their future technology needs.

For the Early Years and Foundation stage, we aim to make the children familiar with using a range of simple programmes on Purple Mash and Mini Mash. Their programme of study also helps to develop their fine motor skills through manipulation of a mouse. Our intention is to enable them to **independently** log on and open programmes by the time they enter Key Stage 1.

We are proud of our **inclusivity** at Callowell and recognise the fact that we have children of differing ability in all our classes, and so we provide suitable opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this in Computing through a range of strategies including setting tasks of increasing difficulty and challenge with children reaching as far as they are able, paired work, discussion and the deployment of adults to support and guide individuals or small groups.

We use our Computing skills to support research and presentation in cross-curricular lessons.

Impact

We expect the children to be able to meet the National Curriculum expectations.

By the end of the Early Years and Foundation stage, the pupils should develop their fine motor skills so that they can use a range of technology competently, safely and confidently. They should also be aware of their own health and wellbeing related to technology, including sensible amounts of 'screen time'.

By the end of Key Stage 1, pupils should understand what algorithms are, create and debug simple programs and use logical reasoning to predict the behaviour of simple programs. They should also use technology purposefully to create, organise, store, manipulate and retrieve digital content. Finally, they should understand how to use technology safely and respectfully, keeping personal information private and identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

By the end of Key Stage 2, pupils should be able to design, write and debug programs that accomplish specific goals and solve problems by decomposing them into smaller parts. They should use sequencing, selection, and repetition in programs, work with variables and use logical reasoning to explain how some simple algorithms work, detecting and correcting errors. They should understand computer networks and how they can provide services, such as the world wide web as well as the opportunities they offer for communication and collaboration. They should be able to use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. They should use their skills to select, use and combine a variety of software on a range of digital devices to design and create a range of programs, systems and content to accomplish given goals. Finally, they should use technology safely, respectfully and responsibly, recognising acceptable/unacceptable behaviour, identifying a range of ways to report concerns about content and contact.

We aim for all the children at Callowell Primary School to learn how to use technology to further their understanding of the world around them and develop the skills to access a wider world increasingly reliant on technology