Computing at Mulbarton Primary School

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*
- *can analyse problems in computational terms, and have repeated practical experience of writing computer programs 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. – National Curriculum 2014*

Intent

At Mulbarton Primary School, we recognise that children are growing up in an exciting world where technology plays an increasingly prominent role in people's everyday lives. We aim to deliver a computing curriculum that ensures children leave our school as responsible and knowledgeable digital citizens. We wish to develop children's confidence, and subsequently knowledge, when encountering new technology: a vital skill in the ever evolving and changing landscape of technology. Through our curriculum, we intend for children not only to be digitally competent and have a range of transferrable skills for the future workplace but also to be responsible when online.

We use the NCCE Teach Computing scheme to deliver our computing curriculum and Project Evolve for online safety lessons.

Implementation

The implementation of the Teach Computing Scheme ensures a broad and balanced coverage of the National Curriculum requirements, which is research based. Each half term covers a different aspect of computing with on-line safety featuring throughout the units. We believe children should have a sound understanding of online safety and how to maintain a safe use of the internet. Consequently, we teach this as a core part of the curriculum at least once every half-term using Project Evolve resources.

The Teach Computing scheme of work is organised into five key areas, creating a cyclical route through which children can develop their computing knowledge and skills by revisiting and building on previous learning.
Children encounter computing lessons which focus on:

- Computer systems and networks
- Programming
- Creating media
- Data handling

The content of lessons will equip children for life in a digital age. Lessons incorporate a range of teaching strategies, including independent tasks, paired and group work. Differentiated guidance is available within the scheme to ensure that content specific to each session can be accessed by all children.

We have interactive boards and computing facilities to engage our pupils in all areas of the curriculum. We have a several class set of laptops and at least 5 iPads per class which are used to enhance learning across all subjects as well as the delivery of the computing curriculum. iPads are well equipped with a variety of learning apps to support independent learning in KS1. Within classrooms, teachers make use of the Apple TV facility which allows children to learn collaboratively and develop their ideas and skills as well as the use of a visualiser in most classrooms. We use a range of computing programs to support learning for pupils at school as well as at home. Children in KS1 have access to E-Books through our new Rocket Phonics scheme and we play phonics learning games to support in class learning. In KS2 we use programs such as Times Table Rock Stars (TTRS) for the children to use at home to encourage the practice of times tables in maths.

In the EYFS we offer opportunities for children to begin to familiarise with technology in the world and allow children to explore through imaginative play. For example, old cameras, pretend phones, keyboards, torches, Beebots. We also use learning games and apps on iPads regularly.

Impact

Children leave our school equipped with a range of skills to enable them to succeed and be active participants in an increasingly digital world. They are critical thinkers who understand how to make informed and appropriate digital choices. They understand the importance that computing will have in both their educational and working life and in their social and personal futures.

Our curriculum enables the children to understand that technology helps to showcase their ideas and creativity and equips them to use technology both individually and as part of a collaborative team. Children are aware of online safety issues and know how to deal with any problems of an online nature, in a responsible and appropriate manner.