Computing

Intent, Implementation and Impact

'We need technology in every classroom and in every student and teacher's hand, because it is the pen and paper of our time, and it is the lens through which we experience much of our world'

– David Warlick

INTENT

Our intent is to equip all pupils with a wide range of fundamental skills, knowledge and understanding to be successful both inside and outside the classroom. We aim to remove anxiety and develop confidence in using technology, to develop computational thinking and problem solving in pupils from an early stage. Our pupils are provided with the opportunity to create a wide range of digital artefacts. As knowledgeable practitioners, we want to ensure there is no gender imbalance in pupils' confidence and ability within computing. We want to ensure that all members of the Boundary family use technology positively, responsibly and safely.

IMPLEMENTATION

We follow the 'Teach Computing' Curriculum, which covers all aspects of the National Curriculum. This scheme was chosen as it has been created by subject experts and based on the latest pedagogical research. Our curriculum is rich in computer science knowledge, explores a range of information technology and develops digital literacy. The spiral curriculum at Boundary allows pupils to revisit prior learning before engaging in lessons that develop new knowledge (knowing that…) and skills (knowing how…). The computing curriculum is split into 4 key concepts to support long term memory: Computer Systems, Programming, Using Data and Creating Media (EYFS have their own computing curriculum linked to EYFS framework). Our computing curriculum is taught as a discreet subject, with digital literacy imbedded across the curriculum. Pupils are required to use knowledge of computer science, computational thinking, and write code to solve problems. Pupils are taught to use technology safely, respectfully and responsibly, and are given opportunities to communicate ideas creatively by utilising a wide range of applications, software and devices. Summative assessments are used to determine whether pupils can remember what they have been taught and can apply this knowledge as intended. Teaching staff are well trained and subject specific CPD is available to all staff from the National Centre for Computing Education (NCCE).

IMPACT

All pupils will understand how computers are used in society. All pupils will have the knowledge and skills to use a range of technology confidently, creatively, effectively and safely, having a high level of digital literacy. All pupils will have the confidence to use unfamiliar systems and software and learn through practice. Our pupils will have knowledge of how computers have contributed to past achievements and how technologies can transform lives. All pupils will fully understand benefits and the consequences of using the internet and have full awareness of how to keep themselves, and others, safe online.