Computing at Essex

Intent

All pupils at Essex Primary have the right to rich, deep learning experiences that balance all aspects of computing and provide insights into both natural and artificial systems. With technology playing such a significant role in society today, we believe 'computational thinking' is a skill pupils must be taught, if they are to be able to participate effectively and safely in this digital world. Therefore, a high quality computing education enables pupils to:

- Become digitally literate, socially responsible, effective users of technology
- Use creativity to understand and change the world
- Access a wide range of technology, including chrome books, iPads and interactive whiteboards
- Express themselves and develop their ideas through information and computer technology as active participants in a 21st century digital world
- Understand and apply the essential principles and concepts of computer science, including 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, analytically, to solve problems
- Communicate ideas well, by utilising appliances and devices throughout all areas of the curriculum

We want our pupils to be successful in the 21st century workplace and to know the career opportunities that will be open to them through studying computing.

Implementation

Computing is taught in discreet computing lessons. The computing curriculum is delivered using the 'Teach Computing' scheme of work, which meets the needs of all our pupils. Built around an innovative progression framework where computing content has been organised into interconnected networks so that concepts and skills build progressively on prior knowledge and experiences.

Having discreet lessons means that pupils are able to develop depth in their knowledge and skills, over the duration of each of their computing topics. Where appropriate, meaningful links are made between the computing curriculum and the wider curriculum.

During computing lessons, pupils use individual chrome books in order to access a range of apps and software. Discreet computing lessons focus on the curriculum skills of information technology, digital literacy and computer science. Pupils' progress is assessed using the digital tool, 'Target Tracker'.

Impact

Outstanding teaching and learning practices are embedded at the core of Essex computing lessons. Pupil voice questionnaires, continued CPD, monitoring of teaching and pupils' work, ensures pupils develop a secure foundation from which they can build their computing knowledge and skills, to be well prepared for the next stage in their education.

The practices we have embedded in our curriculum, and through the teaching of computing, enables pupils at Essex to experience what computing is like in the real world. Pupils have created coding projects which have been engaging and have brought computing to

Enrichment

At the start of the day and during lunch times, pupils have access to computers to complete homework or for their own private study, supervised by teachers.

Pupils in the early years have participated in the ERASMUS Co-make project which encourages computational thinking from a young age.

Pupils have benefitted from a series of workshops led by a computing expert developing their physical computing skills across a range of creative projects.