Curriculum statement
Computing

Intent

At Claremont we recognise that computing is an integral part of everyday life having deep links with maths, science and design and technology. Computing will play an immeasurable part in our children's futures and our computing curriculum gives children a wide-ranging and real-world experience of computing that will prepare them for adult life within the ever-changing technological landscape. Our aim is to provide a broad and balanced curriculum whilst ensuring that pupils become digitally literate and digitally resilient. Technology is ever evolving and we aim to develop pupils who can use and express themselves, develop their ideas through, information and communication technology at a suitable level for the future workplace and as active participants in a digital world. Our computing curriculum teaches them to use the Internet in a safe and respectful way so that each child will become a responsible, competent, confident and creative user of information and communication technology. They will understand the necessary precautions to take, to stay safe and know how to minimise the risk to themselves and others and know where to seek help. They will also utilise the Internet efficiently to enhance their learning of all subjects. A high proportion of our children have English as an Additional Language (EAL) so we ensure that teachers and TA's incorporate key vocabulary and clearly model skills using visual aids, ICT and cues to enhance the learning. All children are given the opportunity to access the curriculum at their level and are provided with the resources required to enhance their understanding

Our computing curriculum aims to develop a high level of digital literacy and confidence in real-world technologies by:

- Developing an understanding of algorithms, abstraction, logic and data representation.
- Giving the children practical experience of writing programs to solve problems enabling them to have a 'can do' attitude when engaging with technology and its associated resources.
- Allowing children to experiment with and evaluate new technologies in an analytical manner.
- Making links with digital literacy skills so that children can safely, creatively and confidently navigate their digital landscape.

Implementation

To ensure high standards of teaching and learning in computing, we implement a curriculum that is progressive throughout the whole school.

Computing is taught using the 2014 National Curriculum as its basis. We utilise the Purple Mash scheme of work to support our planning and provide engaging and pioneering lessons. The Purple Mash scheme of work enables clear coverage of the computing curriculum whilst also providing support and CPD for less confident teachers to deliver lessons. Repetition of a unit does not mean pupils are repeating an activity, it simply means pupils are building on established skills whilst also embedding previous concepts. Units are practical and engaging and allow computing lessons to be hands on. Units cover a broad range of computing components such as coding, spreadsheets, Internet and Email, Databases, Communication networks, touch typing, animation and online safety. Children at Claremont are fully encouraged to engage with ICT and technology outside of school. Each teacher and pupil at Claremont has their own unique Purple Mash login and password. Computing work can be stored and saved using pupil log in details and homework or '2do's' can also be set for pupils to access and complete tasks at home that link with their current class learning.

In our EYFS curriculum, computing is covered in the 'Technology' section of Understanding the World and is delivered through continuous provision. Children in nursery and reception have the opportunity to play games, draw pictures, move mechanical objects and use technology to deepen their own understanding of computing.

We encourage children to develop their confidence in using computers in real-world contexts by giving them a range of web apps that they can access at home. This will enable them to practice the skills that they have learned in a wide range of contexts and will also support staff in their professional development so that the risk of deskilling is reduced.

To implement the curriculum the school uses the following hardware:

- Dell laptops
- Learnpads
- ipads
- Chromebooks
- Laptops for remote learning
- Samsung tablets
- Beebots.
- Webcams for virtual visits / visitors
- Microphones / Dictaphones

We also use the following software/web apps:

- Google Suite for Educators.
- Purplemash
- Sumdog Maths
- Sumdog Grammar
- Sumdog Spelling
- Accelerated reader
- Espresso
- Scratch web

To support the discreet teaching of ICT, each class has access to interactive whiteboards, visualiser and soundbar. Teaching is delivered using this technology. We encourage staff to deliver lessons that prepare children for a future where computers will be an essential part of 21st century living and to enhance their employment prospects.

Impact

The impact of this computing curriculum is that our children will be:

- Digitally literate
- Inspired to further explore the world of computing and express themselves
- Develop their ideas through information and technology as an active participant of a digital world.

Our Computing Curriculum is high quality, well thought out and is planned to demonstrate progression and build on and embed current skills. We focus on progression of knowledge and skills in the different computational components and, like other subjects, discreet vocabulary progression also form part of the units of work. Children are assessed each term in line with all other non-core subjects. Staff evidence this through the Purple Mash online portal where children's work is saved. We also measure the impact of our curriculum through the following methods:

- Pupil discussions and interviewing the pupils about their learning (pupil voice).
- Moderation staff meetings with opportunities for dialogue between teachers.
- Dedicated Computing leader time.
- Progress of children is tracked throughout their time at Claremont Primary School.