Computing Intent Implementation and Impact Statement

Rationale

Computing at Croftlands Infant and Nursery School equips children to use technology in a safe and respectful manner. It encourages critical thinking, problem solving, imagination and creativity through allowing children to create programs and express themselves in a digital literate manner.

Intent

At the forefront of teaching computing in Croftlands Infant and Nursery School is Online Safety. Within EYFS class discussions, the children will carefully consider how to use the technological equipment safely following our school rules and what they should do if they come across something they don't like. Across Key Stage 1 half termly Online Safety topics are delivered in all classes and are planned to develop resilience.

We want to teach children to manage risks safely when using technology and know who they can talk to if they are concerned or upset when using it. Topics are split into six online safety strands including, creating their own online safety rules, social and emotional wellbeing, responsible internet use, keeping information safe, digital citizenship and playing games and having fun. Each strand is covered once in each year group.

In the Foundation Stage, our young digital citizens develop a greater Understanding of the World by recognising a range of technology that is used in their homes and school. Through experimenting with a range of different equipment such as iPads, laptops, cameras, walkie talkies and mechanical toys, the children will begin to speculate on why things happen or how things work and interact with age appropriate computer software.

Throughout Key Stage 1, the children's use of digital technologies continues through the use of iPads and laptops. In Year 1, the children will explore different apps to celebrate events on the iPads, laptops and begin to create, organise, store, manipulate and retrieve digital content. Moving on from this, the children will become treasure hunters and use programmable BeeBot toys and apps to begin to understand what algorithms are, how they are implemented as programs and that programs execute by following precise and unambiguous instructions. In Year 2, the children's iPad and laptop skills are built upon. They will begin by becoming photographers and storytellers, enhancing their ability to create, organise, store, manipulate and retrieve digital content. Through the use of simple on-screen programming software, the children will become computer programmers, implementing algorithms, learning to create and debug simple programs and use logical reasoning to predict the behaviour of simple programs. We want to prepare our children for the future and have planned for children's basic laptop skills to be developed and built upon across the Key Stage. This ranges from basic typing and mousepad skills in Year 1 through to understanding what algorithms are, how they are implemented as programs on digital devices.

Implementation

Our Computing curriculum map has been developed to ensure coverage and progression across the key stages based on the content outlined in the National Curriculum.

Foundation subjects are taught in blocks and within computing. In this way the children can engage fully and become immersed in the topic, making it easier to remember what is being taught and thus embed key learning, knowledge and skills. Our working walls reflect each computing topic and are a constant reminder of previous learning.

Our medium terms plans have been carefully brought together from the Icompute cmputing Scheme of Work to set out the learning objectives for each lesson, identifying the resources to be used. Each computing lesson will begin by recapping our school "Online Safety Rules" and by revisiting and consolidating previous learning.

Through the use of careful modelling, skilful guidance, clear expectations and scaffolding of learning the children will become successful, competent digital citizens working together in groups to create digital content and use technological equipment safely.

Impact

A variety of methods are used to find out what the children know and understand.

Activities are differentiated to suit the different abilities and learning styles. Computing lessons allow for collaborative learning and thus encourage children to talk in pairs, small groups or through class discussion, to share learning. Evidence of the children's learning journey through each computing topic is recorded within the class subjects folder with comments noted. Examples of the children's work is saved on laptops and printed out for display purposes. Previous topics and skills are revisited to assess if the children have remembered learning some time later.

We have developed 'I can…' assessment sheets, with statements taken directly from the National Curriculum Programmes of Study. As each unit of work is covered, we consider the related intended learning, recognise children who are working at or beyond the expected level for Key Stage 1, as well as identifying the children who need and who will therefore receive support.

Computing monitoring includes work scrutinies, lesson observations and/or learning walks, pupil voice interviews/questionnaires in order to ascertain correct curriculum coverage, the quality of teaching and learning as well as the children's attitudes to and retention of computing learning. This information is then used to inform further curriculum developments and provision is adapted accordingly.

Supporting families with Computing

We encourage you to talk to your child about the learning and support them in ensuring they are using technology at home safely.

You can find useful websites and articles to support your child using technology at home safely by following the link below. https://www.esafety.gov.au/educators/classroom-resources/hectors-world/student-home

https://www.childnet.com/resources/smartie-the-penguin

Our Class Dojo and individual class pages will showcase examples of the Computing learning taking place in classes. https://teach.classdojo.com/#/schools/56054212b7f25f4b718f48c1/story