



Curriculum Progression: Computing at Milford Infants' School

Intent

At Milford Infants' School, we aim to provide children with meaningful opportunities to enable them to be a positive part in the ever-changing digital world around them. The digital world is a very real and significant part of our children's lives. By teaching a high-quality computing curriculum, we aim to enable the children to become digital creators, investigators, researchers, communicators and citizens. Our Computing Curriculum focuses on five key areas: Technology in Our Lives, Programming, Handling Data, Multimedia Use and Creation and Online Safety. Through our Computing Curriculum, the children will learn to use a range of technology confidently, safely and responsibly enabling them to go into the world digitally literate, ensuring that children become competent in using and understanding technology. We recognise the importance of children understanding how to keep themselves and others safe online and aspire for children to become computational thinkers. Computational thinking encourages children to develop creativity, resilience and a range of problem-solving and critical thinking skills, which will enable children to conceptualise, understand and use computer-based technology.

Implementation

At Milford Infants' School, we teach computing through the following four main areas: Programming; Technology Around Us; Multimedia; and Handling Data to enable children to understand and apply concepts of computing. E-safety runs alongside these areas. Computing is taught in an exciting and engaging way. A wide range of technology supports the teaching of computing and children have access to these devices to use and present in other areas of the curriculum.

In Pre-School and Reception, children engage in exploration of technology through child-initiated play. Alongside this, children are taught how to use technology safely and how to follow the rules given by trusted adults.

In Key Stage 1, Computing lessons are taught in weekly sessions. The children are taught to recognise how technology is used in their environment. They learn how to present information in different ways and how to use technology to collect and handle data. The children also begin to learn about computer programming and gain a greater understanding of what algorithms are and begin to utilise these in programming.

When adapting this curriculum to meet the needs of all children, especially those with SEND, we make reasonable adjustments, using practical, concrete, realistic and stimulating resources to simplify the concepts that are being taught. With support, the pupils will overlearn and recap the 'sticky knowledge' and key vocabulary.

Three and Four Year Olds	Reception – EYFS	ELG	Year 1	Year 2
The 'technology' strand has been removed, though it is still expected that children will be introduced to appropriate technology and use it within their provision. The most relevant statements from Development Matters age ranges for Three and Four-Year-Olds and Reception as well as highlighting the statements within the ELGs which feed into the programme of study for computing have been selected.			Multimedia Children use technology purposefully to create, organise, store, manipulate and retrieve digital content.	
Personal, Social and Emotional Development Remember rules without needing an adult to remind them. Physical Development Match their developing physical skills to tasks and activities in the setting. Understanding the World Explore how things work.	Personal, Social and Emotional Development Show resilience and perseverance in the face of a challenge. Know and talk about the different factors that support their overall health and wellbeing: -sensible amounts of 'screen time'. Physical Development Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Expressive Arts and Design Explore, use and refine a variety of artistic effects to express their ideas and feelings.	Personal, Social and Emotional Development ELG Managing Self Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. Explain the reasons for rules, know right from wrong and try to behave accordingly. ELG Building Relationships Work and play cooperatively and take turns with others. Communication and Language ELG Speaking Offer explanations for why things might happen, making use of recently introduced vocabulary from stories, non-fiction, rhymes and poems when appropriate. Expressive Arts and Design ELG Creating with Materials Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	Technology in Our Lives Children recognise common uses of technology beyond school. Children use technology safely and respectfully, keeping personal information private.	
			Programming Children understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. Children create and debug simple programs. Children use logical reasoning to predict the behaviour of simple programs.	
			Handling Data Children understand how to use technology purposefully to create, organise, store, manipulate and retrieve digital content.	
			Online Safety Children can use technology safely and respectfully, keeping personal information private; they identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	

Impact

Teachers will have high expectations of children, and a variety of forms will be used to gather and assess the impact of the computing curriculum. These will include analysing assessments, conducting regular pupil voice sessions and completing lesson observations and skill audits. Our aims for the children at Milford Infants' School are:

- For computing to be enjoyed by all children across the school.
- For children to be able to use digital and technological vocabulary accurately.
- For children to be confident using a range of hardware and software to produce products.
- For children to have a greater understanding of the digital world as part of their world, extending beyond school.
- For children to create and evaluate their own work.
- For children to identify ways in which they can keep themselves safe when using technology.