

Willowbrook Primary School

Computing

Intent

At Willowbrook, we are aware computing is a significant and essential part of daily life and we believe our computing curriculum will give our pupils the life-skills they need to embrace the everchanging technology in a socially responsible and safe way. We want children to be excited by new technologies and keen to investigate and explore them, whether this be for their own enjoyment or in readiness for the workplace in the future.

Our computing curriculum, at Willowbrook, offers a progression of skills in digital literacy, computer science and information technology. These strands are revisited repeatedly in a range of contexts during children's time in school to ensure their learning is fully comprehended. Online safety is covered in depth at the start of each year but is embedded in our computing teaching and teachers respond to any issues they are made aware of so children are constantly reminded how to treat others with respect online as well as knowing where and what to do if they have concerns online.

Implementation

At willowbrook, computing is normally taught as a discreet lesson but where appropriate meaningful links have been made to our rich thematic curriculum. This is because we recognise it is important for children to be taught specific computing skills so they can develop a depth of knowledge and skills but we also recognise the values of a thematic based approach, which can allow children to make connections between curriculum areas and thus provide purposeful and engaging opportunities for our children. During computing lessons, children will have access to either laptops or I pads and I pad minis so they can access a range of apps and software.

In the Early Years, children will begin to gain an awareness of how to keep themselves safe online. They will have access to a range on different technologies including I pads and CD players.

In Key Stage One, children will have half termly topics, which cover the three strands of Digital Literacy, Information Technology and Computer Science. As part of the Information Technology skills they will explore paint and word packages, providing them the opportunity to work creatively as well as learning key skills for creating, organising and storing digital content which they will need beyond their school career. When focusing on Computer Science they will develop their reasoning skills to work logically, understanding algorithms to create and debug simple programs. As part of their Digital Literacy they will begin to understand what a computer is and how it works. They will also begin to use the internet for research, developing their understanding of the need to keep personal information private as well as learning what to do and where to go for help and support when they have concerns about content or contact on the internet.

In Key Stage Two, the children will continue with their learning of the three strands of computing through termly topics, which allow children to gain a greater depth of understanding in each topic. During the teaching of Information Technology they will develop and consolidate their prior knowledge of word when they are introduced to PowerPoint, with their presentations linking to our thematic curriculum. Links will also be made to mathematical skills when they learn how to use Excel. When children build on their programming skills in Computer Science they will continue to develop their skills of logical reasoning, decomposition and evaluation. They will analyse problems and gain repeated practical experience of writing computer programs to solve problems. Within Digital Literacy children will develop practical skills in the safe use of the internet and networks, which will link to our thematic curriculum.

Impact

After the implementation of this robust computing curriculum, children at Willowbrook Primary will be digitally literate and able to join the rest of the world on its digital platform. They will be equipped, not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly, safely. The biggest impact we want on our children is that they understand the consequences of using the internet and that they are also aware of how to keep themselves safe online.

As children become more confident in their abilities in computing, they will become more independent and key life skills such as problem-solving, logical thinking and self-evaluation will become second nature.