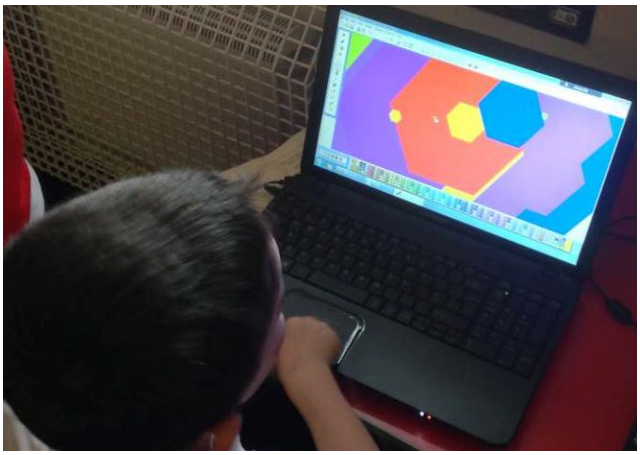
Computing

"The whole and wholesome development of each child in a happy, caring and stimulating learning environment"

Together we grow and learn

May Bank Infants School Computing Curriculum Intent Statement



Intent

At May Bank Infants School, we intend to inspire pupils to develop a love of the digital world, see its place in their future and give pupils the confidence to become digitally literate. We see the planning and teaching of computing as an essential part of the curriculum; a subject that not only stands alone but is woven and should be an integral part of all learning. Computing is a significant part of everyone's daily life and children should be at the forefront of new technology, with a thirst for learning what is out there. Computing in our school can provide a wealth of learning opportunities and transferrable skills explicitly within Computing lessons and across the curriculum.

Through the study of Computing, children will be able to develop a wide range of fundamental skills, knowledge and understanding that will equip them for the rest of their lives. At the core of the curriculum is computer science, in which children are taught the principles of coding, how digital systems work and how to put this knowledge to use through programming. We intend for our children to use information technology to create programs and find solutions for problems.

Whilst we acknowledge the importance of being digitally literate and adaptable and confident with ever changing technologies, at the forefront of our curriculum is E-Safety which underpins everything we do. Our children are explicitly taught and reminded frequently about E-Safety to ensure that they have an understanding of procedures they should follow to be as safe as possible when using technology.

Our curriculum content ensures that the requirements of the National Curriculum are delivered whilst it also allows for a broad and deep understanding of computing and how it links to children's lives. It offers a range of opportunities for consolidation, challenge and variety. This allows children to apply the fundamental principles and concepts of computer science. Our computing curriculum allows children to develop analytical problem-solving skills and it also enables them to become responsible, competent, confident, safe and creative users of information technology.

Implementation

The Computing curriculum teaches Computing skills in a carefully planned progression, with units taught building on skills learned in previous year groups. We offer a structured sequence of lessons, helping teachers to ensure that they have covered the skills required to meet the aims of the National Curriculum. Skills are built on, repeated and build again during the children's time in school. Though Computing is taught discretely, we also seek to use the knowledge across the curriculum through a range of presentation programmes, supporting other areas of learning across the school.

Our Computing curriculum is progressive throughout the whole school. In the EYFS, we give the children in the EYFS many opportunities to explore, use and see and experience technology in order to prepare them for Key Stage 1. This includes providing the children with play-based, unplugged (no computer) activities that focus on building children's listening skills, curiosity and creativity and problem solving. Technology in the Early Years could also mean:

- taking a photograph with a camera or tablet
- searching for information on the internet
- playing games on the interactive whiteboard
- exploring an old keyboard or other mechanical toys
- using a Beebot
- watching a video clip
- listening to music

Allowing children the opportunity to explore technology in this carefree and often child-led way, means that not only will they develop a familiarity with equipment and vocabulary but they will have a strong start in Key Stage 1 Computing and all that it demands.

In KS1, the focus is on developing the use of algorithms, programming and how technology can be used safely and purposefully. Children learn to understand what algorithms are, and how they are implemented and how to create, debug and predict the behaviour of simple programs. They are taught how to create, organize, store, manipulate and retrieve digital content as well as learning to recognise common uses of technology. Most importantly, children learn how to use technology safely and respectfully and they are taught where to go for help and support when they have concerns regarding their online safety. Assessment for learning opportunities are built into each lesson. Self-evaluation and reflective learning allow teachers to evaluate and assess progress. Tools are provided for summative assessment, allowing progress to be recorded and tracked. Staff use a range of resources to support their teaching, including Espresso Coding and materials produced by CEOP (Child Exploitation and Online Protection Centre).

We also celebrate Safer Internet Day each year in school using a range of progressively challenging resources in each year group including Digi Duck and Smartie the Penguin, plus we share information with parents so that they feel more confident in knowing how to keep their child safe at

home. The importance of online safety is also shown through displays within the learning environment.

Where possible, cross-curricular links are made in order to support other areas of learning. Our lesson plans and resources help children to build on prior knowledge at the same time as introducing new skills and challenges.

Impact

Our children across the school enjoy Computing and know why they are doing things, not just how. The children complete the tasks and projects set for them with enthusiasm and these carefully planned tasks enable the children to demonstrate their growing skills and confidence in persevering and collaborating in order to reach a satisfactory conclusion to a problem. The curriculum provided ensures that children develop the creative, technical and practical expertise need to perform everyday tasks confidently and to participate confidently and successfully in an increasingly technological world. The curriculum provided also results in the children understanding and appreciating the value of Computing in the context of their personal wellbeing and the creative and cultural industries and their many career opportunities.

Our well-planned, progressive curriculum results in the children make good progress in Computing from their own individual starting points. As a consequence of this, by the end of their time at May Bank the vast majority of our children have met the requirements of the National Curriculum objectives in Computing and are well prepared for their future learning at their next school.

Teachers have high expectations and quality evidence of learning is presented in a variety of forms. By the end of their time in school the vast majority of children have met the expected standards for their age in Computing. Children use digital and technological vocabulary accurately, alongside a progression in their technical skills. They are confident using a range of hardware and software and produce high-quality purposeful products. Children see the digital world as part of their world, extending beyond school, and understand that they have choices to make. They are proficient users of technology who are able to work both independently and collaboratively.

The biggest impact that we celebrate in our children is their understanding of the consequences of using the Internet and that they are also aware of how to keep themselves safe online. Consequently, they are confident and respectful digital citizens going on to lead happy and healthy digital lives.

'Computing is not about computers anymore. It is about living.'
Nicholas Negroponte

'Everybody in this country should learn how to program a computer because it teaches you how to think.'
Steve Jobs