Computing at Hyde Park Infant School

Intent

Hyde Park Infant School, recognises the importance in providing children quality provision of technological resources and activities to prepare and upskill them for the digital world they live in. Technology is an integral part of teaching and learning and is used discretely as well as embedded in our creative curriculum. Our progressive curriculum equips pupils to not only use information technology to create, search or collaborate with others; ensuring they are digitally literate but equips them to apply computational thinking through developing logical thinking to their learning and thus, the world around them.

Computer Science teaches the early understanding of science and engineering in which pupils are taught how digital systems work, how they are designed and programmed, how to create simple programs and, investigating solutions and 'fixing' problems. Pupils are equipped to use information technology as a search tool as well as to create content. To ensure all pupils are digitally literate we give experience of using information and communication technology to express themselves and collaborate with others, focussing on online safety at a level suitable for the future workplace and as active participants in a digital world.

Implementation

We teach a procedural and non-procedural knowledge-based computing curriculum, which allows children to practise the skills needed as well as providing them with opportunities to practise and develop mastery in the key processes of computing: Computer science, Digital literacy, and Information technology. This is supported through the continuous application through other subjects in the curriculum. Each year group has a progressive computing curriculum. The school implements the Purple Mash and Mini Mash programmes across the school. In Computer science the Early Years children use programmable toys to develop an understanding of programming, and I-Pad apps such as Beebots, Daisy Dinosaur and Cargo bot, and practical yet creative resources are used to support computational thinking and logical reasoning, such as building towers and patterns. In Key Stage One, computational thinking is developed through programming a sequence of instructions, predicting, and describing what will/has happened and beginning to know and to use the language of algorithm and debugging.

All pupils have access daily to classroom interactive whiteboards, networked pcs, and tablets as well as voice recorders and cameras. Early Years pupils explore creating shapes and simple text on screen and explore using a range of technology such as taking photographs and recording narration. Key Stage One pupils' progress into discussing different ways of showing information (recognising they can use text, image or sounds). They are equipped to use technology to collect photographs, videos and sound and are beginning to collaborate to present this information to others (such as through a PowerPoint presentation which can include text), they are developing understanding of saving and retrieving their information. Pupils use the range of technology in school to collect information, as well as using online searches to gather information and can present their ideas to others and independently save and retrieve their work. We recognise the huge importance that online safety holds for all pupils and all pupils participate in the annual Internet safety day with differentiated activities to support their understanding of the range of technologies available in their wider life and the 'Screen cross code' of Zip it, Block it, Flag it. All pupils recognise that technology is in our world, with Key Stage One children able to discuss technology they see in their home, school and community. Pupils learn how to recognise when it is important to tell someone you feel worried or need help. They begin to understand what personal information is, explain why it is important to be kind to others as well as understanding there are rules to keep them safe when using online technologies both in school and at home. They begin to explain why we must keep personal information private, recognising not everything they see online is the truth and explain why we need show kindness in real life as well as online.

Impact

Through the implementation of our progressive Computing curriculum, pupils will be digitally literate and able to access the world around them through the technologies. They will be equipped with the understanding and skills to use technology for a purpose use technology effectively and collaborate with others; and will remain safe while doing so. Our curriculum supports all pupils to understand the wonder of the internet yet understanding not everything seen or heard online may be truthful and therefore that they are aware of how to keep themselves safe online. Through the experiences of Computer Science, pupils will develop the invaluable skills of computational thinking: problem solving, logical thinking and self-evaluation; skills that can be transferred to all areas of learning both in school and at home in the community.

Progress

In Hyde Park Infant School, children follow a progression of national curriculum objectives. These objectives are underpinned by a progression of both procedural and nonprocedural knowledge indicators. These enable teachers and children to plan and track their own progress throughout the key stage.

Cross Curricular Links

Computing is across all areas of the curriculum. It is used regularly by teachers to enrich learning by accessing resources in all areas of learning. Children will be expected to use the acquired skills in every area of the curriculum. Computing is seen in all foundation subjects as well as Maths and English.

Local Link

At Hyde Park Infant School, we believe it is important wherever possible to link to our local community, Pupils engage with a skilled practitioner in our Digital Artist extra-curricular activity session to explore and consolidate skills.