

Computing Curriculum

Intent

At Hazel Wood Infant School, we aim to give children a Journey of Opportunities that develop a love of learning based upon independence, creativity, resilience and being a team player. Computing is an essential part of everyday life and will continue to evolve in, as yet, unknown ways. Our children, therefore, need the ability and the confidence to adapt to new technological opportunities as they arise. It is important that we provide all our children with the skills, knowledge and attitude that will prepare them for the challenge of our rapidly changing and increasingly connected world. We aim to model and educate our children on how to use technology positively, responsibly, and safely. We want our children to understand that there is always a choice with using technology and to model positive use to enable them to participate effectively and safely in the digital world beyond our gates.

Implementation

The teaching of Computing across the school follows the National Curriculum and the Early Years Foundation Stage, through the use of hands-on exploration and practical experiences, both unplugged and plugged resources. We integrate technology into all areas of school life in order to enhance and extend our children' learning. In our computing curriculum we plan regular opportunities to use technology in meaningful contexts within and across other subject areas. For example, by teaching and practising internet research skills whilst investigating a history topic, by using the word and excel to collect our data and create graphs during our Design and Technology project, and by developing problem solving skills while programming our Bee-bots in our Geography session. We also recognise that the use of technology can enhance communication between the school and parents and use social media to celebrate children's learning and share information e.g. E-safety advice. Computing covers three distinct but related strands:

Digital Literacy - is at the heart of our computing curriculum. It ensures that children are able to use technology safely and responsibly to express themselves, communicate with others and develop their ideas. We recognise that the digital world is constantly changing so we regularly update and review our curriculum to ensure we teach appropriate skills and knowledge that the children can readily apply across to situations they will encounter in a wide range of online platforms e.g. educational apps, recreational games and social media.

Information Technology - is about using and understanding what technology is. Not just computers, but a range of equipment such as laptops, iPads, and Bee-bots. We teach the skills required for practical purposes, such as using search technology, collecting and presenting information, manipulating data, creating artwork or simple computer program.

Computer Science - Children need to understand the Science and skills behind computers, to do this we use 'Computational Thinkers' to embedded this throughout our curriculum - introducing the children to the theory and logic the computers use. All children are exposed to Computing Language, so they understand these concepts e.g. logic, evaluation, algorithms, abstraction, deconstruction, patterns.

Impact

When children leave our school, we want them to have the knowledge and understanding that will prepare them for KS2, with the skills and knowledge to use technology effectively and 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 become second nature.