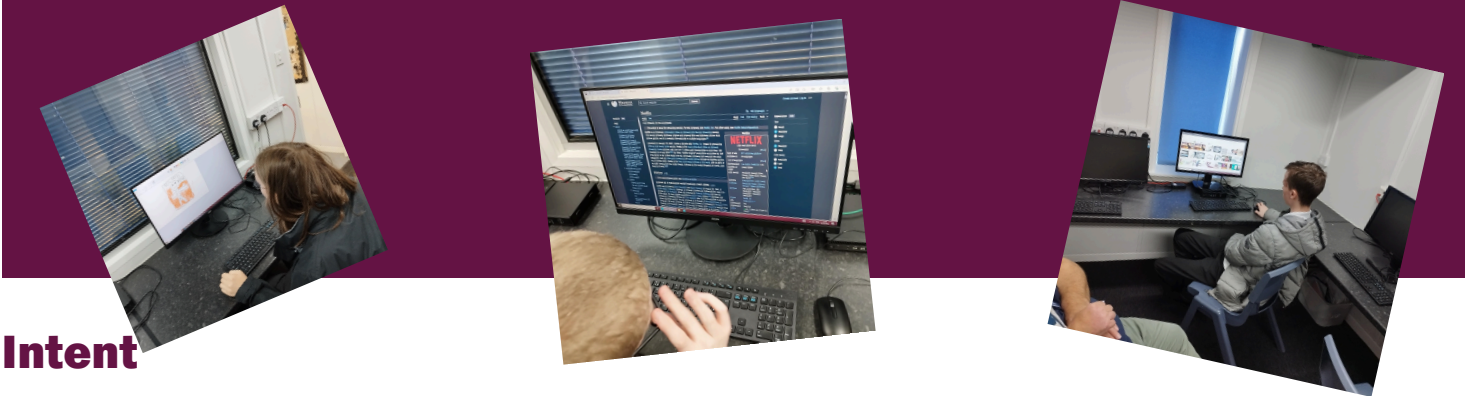


Computing



Intent

At WHSS, we recognise that Computing is an important tool in both the society we live in and in the process of teaching and learning. A high-quality computing curriculum is essential to prepare children for an ever-changing digital world. Through the study of computing, children will have the opportunity to develop a wide range of fundamental skills, knowledge and understanding that will equip them for the rest of their digital lives. Our Computing curriculum aims to empower children with essential digital skills and a deep understanding of technology, fostering creativity and computational thinking while also giving them the skills to be a responsible digital citizen. Children who think computationally are often better able to conceptualise, understand and use computer-based technology. Computational thinking allows us to solve problems, design systems and understand the power and limits of human and machine intelligence. Our Computing units focus on a progression of skills in digital literacy, computer science and information technology to ensure that children become competent in using and understanding technology. We recognise the importance of children understanding how to keep themselves and others safe online. We aim for children to have a breadth of experience to develop their understanding of themselves as individuals within their community but also as members of a wider global community and as responsible digital citizens. We aspire for children to become autonomous, independent users of computing technologies, gaining confidence and enjoyment from their digital activities. Our curriculum encourages the use of technology to support learning across the entire curriculum and aims to be accessible to every child. We aim for children to become digitally literate and competent end-users of technology who, through our computer science lessons, develop creativity, resilience and a range of problem-solving and critical thinking skills.

Implementation

Each lesson contains revision, analysis and problem-solving. Through the sequence of lessons, we intend to inspire children to develop a love of the digital world, see its place in their future. Our lesson plans and resources help children to build on prior knowledge at the same time as introducing new skills and challenges. In lower school, the focus is on exploring and developing the basic skills needed to use technology safely and purposefully. Children will also look at what algorithms are and begin to utilise these in programming. In upper school, lessons will develop their knowledge of computer networks, Internet services and the safe and purposeful use of the Internet and technology. They will also look at algorithms, programming and coding but in a more complex way and for different purposes. As our students move into Years 10 and 11, they also have the opportunity to access BTEC Information and Communication Technology.

Impact

Learning in computing will be enjoyed across the school. Teachers will have high expectations and quality evidence will be presented in a variety of forms. Children will use digital and technological vocabulary accurately, while also demonstrating progression in their technical skills. They will be confident using a range of hardware and software and will produce high-quality, purposeful products. Children will see the digital world as part of their world, extending beyond school and understand that they have choices to make. They will be confident and respectful digital citizens, going on to lead happy and healthy digital lives. Children will have the opportunity to gain relevant qualifications within the subject.