



Green Lea First School
Computing

'Learn, Explore, Achieve'

Intent

At Green Lea First School, it is our intent is to equip our children to participate in a rapidly changing world where work and leisure activities are increasingly transformed by technology. It is our intention to enable children to find, explore, analyse and present information in a safe, responsible and respectful manner. Our computing curriculum enables children to develop their programming, problem solving and reasoning abilities. It enables children to understand and apply the essential principles and concepts of Computer Science, including logic, algorithms and data representation, analyse problems in computational term, and have repeated practical experience of writing computer programs in order to solve such problems.

Implementation

At Green Lea First School, we use Purple Mash to teach our computing curriculum. To ensure effective implementation of our computing curriculum, we have adopted the principles of Rosenshine's instructional strategies. We provide explicit and systematic instruction, breaking down complex concepts into manageable parts, and offering ample opportunities for guided practice and feedback. This approach allows Children to gradually build their knowledge and skills, leading to a deeper understanding of computing concepts. This scaffolded approach supports our children with SEND (Special Educational Needs and Disabilities) as each step is broken down in manageable parts as not to overload them. We teach our foundation subjects in blocks which means children can really deepen their understanding and knowledge.

Purple Mash is designed to provide a clear progression of skills and knowledge across different year groups. We have carefully sequenced the content to ensure that Children can build upon prior learning and acquire new concepts progressively. Our curriculum

covers a broad range of topics, including computer hardware and software, programming/coding, data representation, internet safety, logical reasoning, digital creation and media. The skills they develop with this subject are transferable to other subject areas for example how to record data in a Science lesson. Online safety is also taught through PHSCE sessions as well as during Internet Safety Weeks.

By following our concept-led curriculum, Children will develop a range of transferable skills, including problem-solving, critical thinking, collaboration, and creativity. They will learn how to design, create, and debug programs, fostering computational thinking and logical reasoning abilities. Moreover, they will gain an understanding of the ethical implications of technology and learn how to navigate the digital world safely and responsibly. Our computing curriculum aims to prepare Children for their future in a rapidly changing digital landscape. It provides them with the knowledge and skills they need to succeed in their next educational journey and beyond, whether they choose to pursue further studies in computer science or apply their computational thinking skills in other domains.

With regards to Early Years, although it is no longer in development matters, it is imperative that our children have access to technology from an early age. In the Early Years setting, computing activities are designed to be hands-on and interactive, allowing children to explore and experiment with various devices and software. Through age-appropriate apps, games, and devices, they learn to navigate digital interfaces, manipulate objects on the screen, and develop basic digital literacy skills.

Impact

At Green Lea, we expect to see a range of positive impacts on our Children. Through our emphasis on progression, Children will demonstrate increasing competence and fluency in coding and digital literacy. They will be able to create and debug programs independently, demonstrating their understanding of algorithms, variables, loops, and conditionals. They will develop an appreciation for the power of technology and its potential for innovation and creativity. Our Children will also gain a solid understanding of internet safety and digital citizenship, ensuring responsible and ethical use of technology. They will be equipped to navigate the digital world with confidence, recognizing potential risks and making informed decisions to protect their online identities and privacy. They will also be well-prepared for future academic and career pathways related to computer science, as well as the ever-increasing demands of the digital age.