



Computing Rationale

Rationale

At Pleasant Street Primary School, we believe that developing a child's computing skills is vital for their successful future. In an ever-changing world where technology is leading the way, we aim to develop confidence and enthusiasm of the topic and to explore computational thinking. We want pupils to grow throughout their computing education; for them to aim high in their future aspirations to become engineers, programmers, developers and anything they set their talents to. Our lessons are ones that pupils remember with fondness and to engage with the broad range of opportunities that go above and beyond that of a regular primary school curriculum expectation.

The safety of our children within the growing and developing technological world is paramount – we empower our pupils to become confident, aware, and capable users of the online world; through regular STEM opportunities being delivered and the higher-level technology present within the school. At our school, Computing is more than a curriculum subject, but a way to integrate a community within the school that provides up-to-date information to help families.

Characteristics

We expect children at our school to demonstrate the following Computing subject specific characteristics:

- Understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Analyse problems in computational terms, and have repeated the practical experience of writing computer programs in order to solve such problems.
- Evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Responsible, competent, confident and creative users of information and communication technology.
- Reflective on their learning to progress through skills and build on the objective of previous learning within the four strands of our computing curriculum: Digital Literacy, Computer Science, Information Technology, and Information Beyond Technology.

Curriculum Intent

At our school we aim for all children to become empowered by the possibilities of the developing digital world. They should take in their new skills and become independent because of it. It is because of this, we want to model to our pupils how to use the technology in a positive, safe and responsible manner. Each year group is given the opportunity to become immersed within new technologies.

Through planning we embed Computing throughout the curriculum with regular opportunities to explore their topic technologically in strong, relevant, and meaningful links. The intent of these opportunities is to enhance computational awe, even when outside a Computing lesson. Our curriculum encompasses Digital Literacy, Computer Science, Information Technology, and Information Beyond Technology. We understand the wider accessibility boundaries that present outside the curriculum and we work to resolve them so that learning can continue. We endeavour to enrich our pupils' experience of Computing to be one that is positive and enduring; so that it feeds their future passions.

Learning can be reflected upon through floor books for each class.

Curriculum Implementation

At Pleasant Street Primary School, our Computing curriculum is centred around the main strands of computing: Digital Literacy, Computer Science, Information Technology, and Information Beyond Technology. Our Computing curriculum has been designed and built to ensure that skills, learning and knowledge are repeated and extended upon so that pupils progress to a high standard. Skills being revisited and developed over the course of years at our school ensure that they progressively deepen their learning and provide a further challenge. We use the MGL curriculum at our school as a basis for planning and delivering lessons. The curriculum allows a love for the subject within pupils, the school, and our community to grow: the curriculum creates an excitement and a longing for each lesson.

In addition to the curriculum, we provide specialist Computing teaching for our pupils in each class fortnightly for a full half term. Each class also experiences one lesson a term to experience a lesson based around our topic of 'Awe and Wonder' in which the children will experience new technology to promote a love of the subject – these lessons are delivered by our specialist MGL staff. Our school offers in-house experiences and technologies that are enhanced: virtual reality headsets allow pupils to enrich their learning in all subjects across the curriculum; a 3D printer to create ideas; augmented reality with VirtualTee and MergeCube to bring lessons to life. Our partnership with Computing specialists, MGL, enables our children to access new and ground-breaking technologies that they would usually not experience within a standard primary school curriculum – experiences such as: Spheros, iPencils, Microbits, drone video capturing and use. The growing level of in-house knowledge and the support of specialist MGL staff provides ongoing CPD for staff. Computing lessons take place weekly and are tracked through the floor books, ensuring computing is given sufficient time and so that learning can become embedded and enriched. We believe that by crafting our curriculum in this way improves the potential for children who attend our school to retain what they have been taught, build and progress in their abilities, and take it with them into all future endeavours.

Curriculum Impact

We encourage the pupils in our school to enjoy, value and show natural eagerness for the curriculum that we deliver. Our children understand the importance of asking questions and showing intrigue in learning, as well as the journey to achieve the objective. Our learners discuss, reflect and appreciate the impact of an effective education and healthy digital lifestyle.

The way that we implement computing across our whole school curriculum helps children to realise the need of the right balance and one they can continue to build on in the next stages of education and beyond into future life. The Computing skills learned at our school will be life-long. Regular discussions between staff and pupils are used to embed learning and knowledge. The way pupils' work is showcased and celebrated shows the impact of our curriculum. Pupils are able to reflect on their learning and develop their skills within Computing through use of evidenced floor books to track the progression of their skills throughout every year at our school. Dedicated STEM sessions from MGL allow our school to provide Computing skills and experiences that go above and beyond that of the expected curriculum.