Computing Curriculum Rationale



At Abbey Lane Primary School, we have a clear and simple vision for our Computing curriculum: to teach our children to be safe, confident and motivated users of technology. We recognise that we have an important role to play in preparing pupils for the future by giving them the skills and knowledge to use a range of devices both as an aid to learning across the curriculum and in their everyday lives.

We split Computing into three strands at Abbey Lane Primary School:

• Information Technology - we aim to provide our children with the ability to use a range of different programs and applications, whilst also giving them the confidence and problem solving skills to access new and emerging technologies

• Digital Literacy - our vision is for our children to be confident in their ability to find, evaluate, use and communicate information online in a respectful and safe manner

• Computer Science – we intend for our children to develop their creativity, perseverance and problem-solving skills to create a range of content.

Online Safety is a crucial life skill which is embedded not just in our Computing curriculum, but also in Citizenship (PSHE/RHE).

INTENT		IMPLEMENTATION		IMPACT	
Alignment to the National Curriculum	At Abbey Lane Primary School, we aim to ensure all children receive a broad and balanced curriculum so that every child is able to make good progress. We root our Computing learning in the National Curriculum, as well as across different strands within the Early Years Statutory Framework. We use the Sheffield Computing Scheme of Work as a basis for the units we teach, adapting them to fit our cohort of children. Those elements of the Online Safety curriculum that relate to understanding of the way devices and networks function are woven into our bespoke curriculum.	Pedagogical Approaches	We use a range of engaging strategies to deliver the curriculum, including the use of a variety of hardware and software as well as offline resources, teaching strategies, group work, real-life practical experiences, problem solving and making links to other areas of the Abbey Lane Primary School curriculum. In the Computer Science strand, children are encouraged to investigate how algorithms work and to adapt ones given to them, before planning and create their own algorithms to solve given problems. In the Information Technology and Digital Literacy strands, good examples are discussed, skills are modelled, before children apply the skills learnt to their own project. Knowledge organisers are utilised to support each area of the curriculum.	Approach to assessment	Teachers assess based on the disciplinary and substantive knowledge outlined in the 'implementation of objectives' document produced for each unit of work. Feedback is given to children during lessons and gaps identified and acted upon when pupil work is marked.
End points	We intend to teach pupils to use technology positively, responsibly and safely, so that they can become creators, not just consumers. By the end of KS1, children will have developed basic computer skills, be able to use the school technology to write for a purpose, create and debug simple algorithms, and understand the basics of grouping and sorting data. By the end of KS2, children will have an understanding of how networks and computers work, be able to produce audio and visual pieces of work, and create algorithms that make use of repetition, decomposition, selection and variables.	Teachers' Expert Knowledge	All teacher's development is informed by the national curriculum. Teachers are provided with a range of resources to support subject knowledge including implementation of objectives documents. Further, the Computing lead organises and delivers training, including from professionals such as the Sheffield CLC, and offers support where needed.	Performance Data	Teachers and leaders can track children's progress, which can be seen through analysing data from year group assessment grids undertaken at the end of each teaching unit. This is supplemented by scrutiny of children's work.

Sequencing	Children will develop a progressive understanding of substantive and disciplinary knowledge and this is built upon as children move up through the school.	Promoting Discussion and Understanding	We ensure children are aware of how to stay safe online with practical strategies they can use, delivering relevant parts of the Online Safety curriculum through Computing lessons and making strong links to the Citizenship – PSHE/ RHE curriculum.	Pupils' Work	Pupil's work, when scrutinised, will show their understanding of the curriculum, whether it is done on paper, or saved on the school network or in the cloud. This work is used by the Computing lead to ensure there is progression and increasing independence as pupils move through school.
Addressing Social Disadvantage	At Abbey Lane Primary School we believe that all children should be guaranteed equal access to our Computing curriculum. We understand that children come to us with different experiences and so we provide meaningful learning opportunities for all children, matching the challenge of the task to the ability of the child and providing necessary support.	Knowing More and Remembering More	We check existing knowledge and misconceptions and gaps in learning when beginning new and linked units of work and build in opportunities to revisit and consolidate tricky concepts. We also respond to pupil voice, adapting the delivery to respond to the needs of pupils. Opportunities for revisiting and recapping previous knowledge are built into each unit, allowing children to build upon previous learning; this repetition allows key knowledge to be further embedded.	Talking to Pupils	In Pupil Voice conversations, children can talk with confidence about different concepts in the Computing curriculum, articulating their ideas with a developing vocabulary. In terms of the online safety units linked to the Computing curriculum, children can explain and discuss issues around being safe when online and know who they can report their concerns to.
Local Context	Children are taught how to use search engines, which they can use to find out what events are going on in their local area.	Teacher Assessment	Assessment for learning takes place regularly and gaps are addressed where possible immediately or in the proceeding lessons. Following completion of each unit, accurate assessment of pupil's substantive and disciplinary knowledge at the end of each unit.		