



COMPUTING TEACHING AT HENRY WHIPPLE

Our overarching philosophy that underpins the teaching of all curriculum areas at Henry Whipple 'Knowledge is Power' Our aim and intent in Computing is to prepare all our children to be 'thinkers of the future' and receive an ambitious and relevant computing education so they understand and can change our ever-evolving digital world.

Big Ideas

At Henry Whipple we want all of our children to be prepared to be responsible participants in an increasingly digital world. We want our children to have the computing knowledge and skills which to use throughout their future lives and careers.

We explore the deep links computing has with science, design technology, engineering and mathematics (STEM).

We want our children to have high aspirations aware of opportunities for a career utilising computing knowledge and skills and those with include STEM.

For children to be digitally literate to enable them to have the knowledge and skills to:

- Confidently and creatively express themselves
- Develop ideas
- Show resilience
- Think critically to solve problems

Content and Sequencing

We use the Teach Computing Curriculum to ensure all aspects of the National Curriculum are covered comprehensively with key concepts, knowledge and vocabulary revisited and built upon across year groups, key stages and lessons.

The learning journey starts in EYFS through carefully planned continuous provision. Children explore a range of remote-control vehicles, Beebots, and exploring technology in continuous provision in readiness for Key Stage 1.

The content of the curriculum is taught through 4 main taxonomy strands with E-Safety across each unit.

Computing systems and networks	Creating media	Programming	Data and information
E-Safety			

Cross- Curricular Links

Connections in Computing are explored through the deep links it has with science, design technology, engineering and mathematics (STEM)

Becoming digitally literate and responsible users of technology is connected to our PSHE curriculum

Vocabulary

The Teach Computing Curriculum identifies key vocabulary children must know in each teaching block and year group. There is a planned progression of vocabulary across the 4 blocks of learning (computing systems, programming, creating media and data). Vocabulary is introduced and revisited at the beginning of each lesson and block of teaching and learning. Vocabulary is explicitly modelled within the context of the teaching knowledge which aids children to retain and use it to explain their learning.

Knowledge Retrieval

The Teach Computing Curriculum plans for knowledge, skills and vocabulary to be revisited throughout and across year groups. At the beginning of lessons teachers assess prior knowledge and learning enabling them to address any gaps in learning or misconceptions There are opportunities for children to retrieve and recall their prior knowledge and explicitly recognise and make connections between their learning. The final lesson during a teaching unit is designed for children to apply what they have learnt to create an end product/project.

Enrichment

Broadening cultural capital and social equity for our children through enrichment opportunities with Nottingham University and Ignite! and after school learning opportunities ensures children experience a breadth of opportunities which also involve explicit links to STEM learning.

Pupil STEM leaders promoting their peers interest and curiosity in STEM and the links to computing and digital technologies