



Westfield Infant School Spotlight on Computing



What is Computing and how is it taught?

At Westfield Infant School, our intention is that pupils will be able to use their computing skills across the curriculum and to inform and enhance life-long learning. We use a scheme of work called The National Centre for Computing Education (Teach Computing) for our discreet computing lessons and the online Project Evolve scheme to teach internet safety.

We intend for pupils to have a foundational understanding of computing to include algorithms, simple programs, logical reasoning, and prediction. We also aim for pupils to purposefully and creatively store, manipulate and retrieve digital content as well as being able to recognise how technology is used across the wider world. We believe that young children need a strong, but age-appropriate, understanding of how to keep safe when using modern computing technology and the internet. This will then allow pupils to feel protected, well-informed, and able to self-regulate when using technology and the internet, and all it has to offer.

The National Centre for Computing Education (Teach Computing) provides a comprehensive framework for teaching computing in Key Stage 1 (ages 5-7).

The curriculum is designed to be flexible and adaptable, so it can be tailored to meet the needs of individual schools and pupils.

Although the National Centre for Computing Education (Teach Computing) does not cover EYFS we have included Technology in our EYFS Curriculum to ensure children acquire foundational knowledge to begin Teach Computing when they enter Year 1. The disciplinary knowledge included is:

- To show an interest in technological toys such as IWB, iPads, toys with knobs, pulleys and buttons
- To learn about esafety
- To know how to operate simple equipment
- To access, understand and interact with a range of technology within the Year R environment
- To draw pictures on IWB, changing colour and pen size
- To draw pictures on IWB and begin to change colours
- To use the iPad to take pictures
- To use the IWB, changing games and programmes
- To explore how a Bee-Bot works
- To use the internet with adult supervision to find and retrieve information
- To begin to give reasons why we need to stay safe online
- To use the BeeBots and program them to go forwards and backward

How do we support all learners to access the subject?

Lessons are adapted to create computational thinking for all pupil's ability levels. At Westfield Infant School, we believe in creating inclusive lessons which are accessible to all pupils.

Key vocabulary is displayed on the knowledge organiser (which is shown at the start of each lesson) and read out loud, providing an opportunity for the teacher to explain the definition of key vocabulary. Activities are modelled before pupils complete them. When necessary, pupils work collaboratively within computing lessons, through partner discussions and some activities. This enables SEND and EAL pupils to have relevant language modelled to them from their peers. Teachers planning computing ensure activities are scaffolded appropriately for SEND and EAL pupils.

How do we assess the children's knowledge and understanding in this subject?

At the start of each computing lesson, a starter recaps the previous lesson's learning. Pupils are encouraged to talk with a partner and share their thoughts on the previous learning before moving onto new learning. Teachers conduct ongoing (formative) assessments by observing and questioning their pupils during lessons to see whether they are able to achieve the lesson objective. Pupils are given verbal feedback and misconceptions are addressed during lessons. Open-ended questions are written on the screens to ensure all teachers are consistent when asking key questions. Exit tickets at the end of lessons allow the teacher to assess the understanding of learning. Weekly review sessions held every Friday allow pupils to recap learning from that week, that term and the previous term. Teachers use these sessions to assess how well pupils have retained knowledge and provides an opportunity for retrieving learning.

How do we involve parents and carers in this subject?

The Computing Lead posts online guidance from The National College's Wake Up Wednesday every week which includes guidance for parents/carers to keep their children safe online and support their mental health and well-being.

How do we promote wider opportunities for this subject area?

Every year during our Healthy Schools week we take part in Safer Internet Day, an assembly is held to introduce this to the children which focuses on a theme of Internet safety such as 'Together for a better internet.' We share the assembly information with parents/carers with guidance to support them. The children take part in safer internet activities throughout the week.