Computing at Westfields Junior School

At Westfields Junior School, we aim to prepare our children for their future by giving them the opportunities to gain knowledge and develop skills that will equip them for an ever changing digital world.

Knowledge and understanding of ICT is of increasing importance for children's future both at home and for employment.

Our Computing curriculum focuses on a progression of skills in digital literacy, computer science and information technology to ensure that children become competent in safely using, as well as understanding, technology.

We believe that computing is an essential part of the curriculum; a subject that not only stands alone but is woven and should be an integral of all learning especially with its links to other curriculum subjects. This is why we provide a wealth of learning opportunities and transferrable skills explicitly within the Computing lesson as well as across our whole curriculum.

Coverage

- Our Computing curriculum is divided into 3 key areas:
1. Digital Literacy: Half termly themes across the whole school linked to the DfE (Education for a Connected World)
  ✓ Autumn 1: Self-image and online reputations
  ✓ Autumn 2: Online Relationships
  ✓ Spring 1: Online Bullying
  ✓ Spring 2: Health, well-being and lifestyle
  ✓ Summer 1: Privacy, security, copyright & ownership
  ✓ Summer 2: Managing online information
2. Computer Science: Use of Phil Bagge planning for Scratch, Flowol and Crumble software.Taught termly, building on knowledge from previous years.
3. IT Skills: Range of software on the laptops including Microsoft Word, Mircosoft Excel, Micosoft Powerpoint, Gmail, Prezi and Google Sites.
- Across our curriculum, children have access to laptops and year group sets of iPads as well as a wide range of other technological resources.
- In addition, we use a range of apps and software including ClassDojo, Chatterpix, SimpleMind+, iMovie, Flip, Freeform, Blooket, Garageband, Adobe Spark, SORA, TTRS and Spelling Shed.

Progression

- Digital Literacy: Each year groups builds on from previous learning, starting from looking at what the words mean in Year 3 to identifying examples and applying knowledge to real-life context in Year 6.
  ✓ SI&OR: What identity is → Media influence on identity
  ✓ OR: Risks with communication on devices → Implusive and rash communication and reporting
  ✓ OB: Explain what bullying is → Capture evidence and reporting
  ✓ HWB&L: Negative impact of too much technology → Self-regualtion and scientific impact
  ✓ PSC&O: Copying work is a problem → App permissons and targeted adverts
  ✓ MOI: Personal information → Influence, manipulation and persuasion
- Computer Science: Year 3 use simple sequences in everyday life simple blocks, Year 4 explore timed and indefinite loops, Year 5 develop a knowledge of conditions and Year 6 Coding focuses on variables and nested loops.
- IT Skills: Year 3 and 4 begin with basic Computing skills such as typing. Year 3 and 4 develop Word and Powerpoint, Year 5 Spreadsheets and email and Year 6 Prezi and web publishing.

Enrichment

- BeBras Educational Thinking Competition
- Leaders Award (STEM project)
- Year 4 Music provision on iPads
- Annual Safer Internet Day
- Digital Leaders responsibility and Radio Leaders responsibility

Cross-Curricular Links

- PSHE – All year groups - Cyberbullying/online safety
- Year 3 – Science by creating hybrid animals online, Geography using Chatterpix to identify and explain features of Japan
- Year 4 – Maths within coding and History using the green screen to showcase learning about Ancient Greece
- Year 5 – Science and D&T link with moon buggies and green screen filming with Mexico documentaries
- Year 6 – D&T and Math link with shop window projects and perspective pictures in Art
- Lexia and Times Tables Rockstars for interventions
- Music – Garageband used to compose
- Multiple apps used across the curriculum either as a consumer (e.g. Blooket, MentiMeter) or as a creator (e.g. iMovie, Freeform)

Assessment

- Whole class and verbal feedback
- Use of retrieval practice at the beginning and end of lessons
- Use of quizzes, starter and plenary activities
- Teacher assessment, self-assessment and peer assessment of learning (Computing Books) and computer generated learning (Pupil Portfolios/ClassDojo/Flip)
- Self-evaluations used for Coding to identify who used support cards and who accessed extension tasks
- Referral to the progression document
- Completion of the Computing Foundation Subject Assessment document identifying children not achieving expected standard and those exceeding

Inclusion / Challenge & Inspire

- Everyone has access to the Computing Curriculum.
- Key vocabulary is shared and discussed throughout lessons.
- Key skills are modelled by adults and children.
- Retrieval practice promotes deeper knowledge.
- Key questions develop a deeper level of thinking.
- Secure teacher subject knowledge promotes support and extension through teaching approaches, strategies, task design, adaptations and differentiation.
- To support, challenge & inspire children, the following is provided: self-selection and tiered activities; identifying simple examples of discussed ideas; choice of app to present learning on; differentiation through outcome; adult support and peer-support.
- Support cards from Scratch Computer Science Coding and extension tasks are provided for children to explore independently.
- Challenges and extensions are set to further develop skills of talented children.
- Range of presentation options in order to support and challenge children access Digital Literacy content and record/present knowledge.