

Computing Curriculum Statement

The vision for computing at Bellfield Junior School is to deliver an engaging and inclusive curriculum in order to equip all of our children with the digital knowledge and skills ready for secondary school and in order to succeed in life.

Each year group teaches units across 5 key curriculum areas: e-safety, programming, data handling, creating media and computing systems & networks. Units are planned with built in progression of key computational knowledge and skills across units and year groups. A variety of different outcomes are produced, such as: websites, spreadsheets, databases, office-based information texts, games and animations, digital videos, radio plays and more. Learning opportunities include independent work, paired work and whole class presentations on mediums such as iPads and laptops. As a school, we have adopted the paired programming pedagogical approach to share cognitive load through the collective memory which all staff have been trained in by the computing lead.

Units of work have been adapted from the 'Kapow Primary' computing scheme and tailored to our children, showing progression across the computing national curriculum areas of computer science, information technology and digital literacy, building on the knowledge and skills built in previous years. This gives all pupils the opportunities to build knowledge and experiences. The scheme is authored by primary computing specialists using readily available software, creating a full scheme of work that we adapt to our teaching and learning needs, with clear progression of knowledge, skills and learning throughout the school. We further demonstrate and consolidate the use of these skills throughout the wider curriculum.

Due to the high percentage of disadvantaged children at Bellfield Junior School, at the beginning of each unit of work, children are introduced and taught 6 key computing vocabulary words which they may not have encountered before, enabling all children to be able to access lessons and expand their computational knowledge.

All year groups will experience 'Safer Internet Day' during the year which will enhance their knowledge and global resilience online. This is consolidated by following the 'Education for a Connected World framework' for e-safety lessons, with a solely e-safety unit in half term 1 and an e-safety lesson preceding all other units every half term covering a variety of technological topics and issues. Each half term has an e-safety theme which each year group learn about with an inbuilt progression of lessons.

Working Deeper

Children are encouraged to work deeper and extend their knowledge in computing when it is evident that they have mastered what is currently being asked of them – be it for a particular lesson or for that particular unit. This is encouraged through challenging the children via collaboration, letting them discuss and present ideas, considering other points of view and making decisions in order to increase their stakes in their own learning. Through higher order skills, such as creating, evaluating and analysing, children can work deeper in a more meaningful, personal and relevant way. All units and lessons following ‘Kapow Primary’ have detailed explanations on all lesson plans describing to teachers how they can push their more able children on to working at a greater depth within the lesson. Mixed ability seating and the sequencing of lessons as part of a spiral curriculum all contribute to pushing our children to work at a deeper level within computing. Children who show a talent, flair or interest in computing are provided the opportunity to work deeper within a computing after school club, ran by the computing lead.

Staff development

For computing, staff development is achieved through internal training every term over the year, where staff can be informed and enhance their knowledge of the computing curriculum as a collective, led by either the computing lead or an external practitioner. Furthermore, staff are encouraged to query and discuss computing knowledge, skills and progression with the computing lead as and when they need to develop their subject knowledge, often about units of work that they are about to undertake in their year groups. Use of Kapow Primary also provides an in-built CPD for staff to enable them to learn as they plan and develop subject knowledge through bite-sized videos with rich, visual demonstrations of proven techniques developed in the classroom by top specialists.

Assessment

Assessment in computing is aided through end of unit quizzes that enable teachers to make accurate end of unit assessments. The quizzes question children about their knowledge and skills of the unit they have just completed, as well as questioning them on previous units to assess what they are accessing from their long-term memory. End of unit quizzes are multiple choice, which enables those children who need extra support to access and show a true reflection of what they have learned in computing, not being held back by their progress in English. The last question of each

quiz is open ended, which allows those children working at a greater depth to show their deeper level of understanding and learning.