Individual Year Group Plans

ICT

Co-op Academy Brownhill

Intent

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through information and communication technology – at a level suitable for the future workplace and as active participants in a digital world. All of these principles are taught through a spiral curriculum, building on knowledge, skills and vocabulary that is taught each year. Books are used as our overarching theme and other curriculum areas also feed into the scheme to enhance an all-encompassing education.

Implementation

Our curriculum design is based on evidence from cognitive science and this help to inform the main principles used when implementing our curriculum. These are:

- Teachers will give the children opportunity to activate prior leaning, which is relevant to the lesson.
- Children will be exposed to new knowledge and skills in small steps that builds on prior knowledge following the curriculum, without overloading the working memory.
- Teachers will deliver new content in a concise way.
- Lessons will provide opportunity to consolidate and master computational thinking and creativity.
- Teachers will sequence the delivery of new learning well so that students are supported in transferring this to their long-term memory.
- Lessons will provide children with strong links to all relevant aspects of the curriculum, allowing the children to make links between the different subjects and develop their knowledge and skills in a coherent way.
- Teachers will provide broad and diverse learning opportunities to ensure that knowledge and skills learnt are flexible and easily transferrable.
- Lessons will provide rich opportunity to develop the computer science, digital literacy, information technology, E-Safety and the associated vocabulary.
- Lessons will capitalise on every second of learning.
- Assessments of pupil's prior knowledge and learning will inform teachers' next steps in planning.
- Enriched opportunities through extra-curricular activities and experiences, external visitors, parental involvement and whole school ICT focus days to give context to knowledge and learning.
- Lessons will be inclusive, celebrating the cultural diversities in the school and ensuring all pupils are able to safely access age appropriate digital content.
- Cooperative values will be embedded throughout all learning, supporting pupil's development socially and emotionally.

Impact

We expect that:

- Our children will develop knowledge in order to use technology responsibly and safely by recognising unacceptable behaviour and content, knowing how to report concerns.
- Our children will have a deep understanding of core skills and knowledge which then gives them confidence and ambition to access the world around them.
- Our children will become digitally literate and be confident in ICT preparing them for the future work place and becoming active participants in a digital world.
- Our children will develop a wealth of vocabulary, computer skills and knowledge which are easily retrievable from the long term memory.