



Computing Intent, Implementation, Impact Statement

Intent

At Middlefield Primary Academy, we follow the Kapow scheme for Computing. The scheme aims to instil a sense of enjoyment around using technology and to develop pupil's appreciation of its capabilities and the opportunities technology offers to, create, manage, organise, and collaborate. Tinkering with software and programs are part of the ethos of the scheme as we want to develop pupils' confidence when encountering new technology, which is a vital skill in the ever evolving and changing landscape of technology. Through our curriculum we intend for pupils to not only be digitally competent and have a range of transferable skills at a suitable level for the future workplace, but also to be responsible online citizens.

The scheme of work enables pupils to meet the end of Key Stage Attainment targets outlined in the National Curriculum and the aims align with those in the National Curriculum. When used in conjunction with Kapow's RSE and PSHE scheme, our Computing scheme of work also satisfies all the objectives of the DfE's Education For a Connected World framework. This guidance was created to help equip children for life in the digital world, including developing their understanding of appropriate online behaviour, copyright issues, in discerning consumers of online information and healthy use of technology.

Implementation

The Kapow scheme is a whole school approach that is designed with three strands which run throughout:

- Computer science
- Information technology
- Digital literacy

The curriculum is organised into five areas, creating a cyclical route through which pupils can develop their computer knowledge and skills by revisiting and building on previous learning:

- Computer systems and networks
- Programming
- Creating media

- Data handling
- Online safety

The implementation insures a broad and balanced coverage of the National Curriculum requirements, and the units provide pupils with the opportunity to learn and apply transferable skills. Where meaningful units have been created to link to other subjects such as science, art, and music to enable the development of further transferable skills and genuine cross curricular learning. Lessons incorporate a range of teaching strategies from independent tasks, paired and group work as well as unplugged and digital activities. This means that the lessons are engaging appeal to a variety of learning styles.

Strong subject knowledge is vital for staff to be able to deliver a highly effective and robust computing curriculum. Each unit of lessons include teacher videos to develop and support subject knowledge and support ongoing CPD.

Impact

The impact of this curriculum can be constantly monitored through formative and summative assessment opportunities. Each lesson includes guidance to support teachers in assessing pupils against the learning objectives. At the end of each unit, the children complete an end of unit assessment known as a POP task (Proof Of Progress). The POP task is completed and assessed at a delayed time after the unit has been taught to assess depth of learning. At the end of each half term, teacher judgements and any completed POP tasks are used to record attainment and uploaded to Insight Tracker. To ensure knowledge is retained and that cognitive pathways continue to be deepened, Retrieval Practice is completed twice per unit; this can be evidenced in books or discussed as whole class.

Periodically, throughout the academic year, the subject lead will conduct a 'Pupil Book Study', taking a selection of books from each year groups and analyse the prior learning. They will hold a focus group with children to discuss the learning and ascertain quality through vocabulary, sequencing and content.

After the implementation of the Computing units, pupils should leave school equipped with a range of skills to enable them to succeed in their secondary education and Active participants in the ever-increasing digital world.

The expected impact of following the scheme is that children will:

- Be critical thinkers and able to understand how to make informed and appropriate digital choice in the future.
- Understand the importance of computing will have going forward in both the educational and working life and in their social and personal features.
- Understand how to balance time spent on technology and spent away from it in a healthy and appropriate manner.
- -understand that technology helps to so showcase their ideas and creativity. They will note that different types of software and hardware can help them achieve a broad variety of artistic and practical aims.
- - Share a clear progression of technical skills across all areas of a national curriculum - computer science, information technology and digital literacy.

- - Be able to use technology both individually and part of a collaborative team.
- Be aware of only safety issues and protocols to be able to deal with any problems in a responsible and appropriate manner.
- - have an awareness of developments in technology and have an idea of how current technologies work and relate to one another.

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