Jump Primary School

Computing Curriculum Map

I am talented; together we are AWESOME!

Intent

At Jump Primary we believe that the knowledge of computing and the skills it provides are a fundamental part of education for all pupils. Technology is transforming the lives of everyone. Through teaching computing, we equip pupils with the necessary knowledge, skills and understanding to participate in a rapidly moving world where work and leisure activities are increasingly changed by technology.

The curriculum is designed to cover the three main strands of computing, which are:

- Computer Science
- Digital Literacy (which includes Online Safety)
- Information Technology

In order to do this effectively, we have chosen to use the Kapow Computing scheme. Kapow Primary's Computing scheme aims to instil a sense of enjoyment around using technology and to develop pupil's appreciation of its capabilities and the opportunities technology offer to create, manage, organise and collaborate. Tinkering with software and programs forms a part of the ethos of the scheme as we want to develop pupil's confidence when encountering new technology, which is a vital skill in the ever evolving and changing landscape of technology. Through the computing curriculum, we intend our pupils to not only be digitally competent but also to be responsible online citizens. The scheme enables pupils to meet the end of Key Stage Attainment targets outlined in the National Curriculum and also satisfies the objectives from the DfE's Education for a Connected World framework to help equip children for life in the digital world, including developing their understanding of appropriate online behaviour, copyright issues, being discerning consumers of online information and healthy users of technology.

<u>Pupils at Jump Primary School will leave Year 6 able to:</u>

- Think critically and understand how to make informed and appropriate digital choices in the future.
- Understand the importance that computing will have going forward in both their educational and working life and in their social and personal futures.
- Understand how to balance time spent on technology and time spent away from it in a healthy and appropriate manner.
- Understand that technology helps to showcase their ideas and creativity.
- Demonstrate the knowledge that different types of software and hardware can help them achieve a broad variety of artistic and practical aims.

- Show a range of technical skills across all areas of the National curriculum - computer science, information technology and digital literacy.
- Use technology both individually and as part of a collaborative team.
- Articulate online safety issues and protocols and be able to deal with any problems in a responsible and appropriate manner.
- Demonstrate an awareness of developments in technology and have an idea of how current technologies work and relate to one another.

Implementation

The National Curriculum purpose of study states: “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.” Therefore, the Kapow Primary scheme of work is designed with three strands which run throughout:

Computer science

Information technology

Digital literacy.

The curriculum overview shows how the units cover each of the National Curriculum attainment targets as well as each of these three strands. The progression of skills document shows the skills which are taught within each year group and how these skills develop year on year to ensure attainment targets are securely met by the end of each key stage. The teaching sequence is organised into five key areas, creating a cyclical route through which pupils can develop their computing knowledge and skills by revisiting and building on previous learning:

- Computer systems and networks
- Programming
- Creating media
- Data handling
- Online safety

The implementation of Kapow Primary Computing ensures a broad and balanced coverage of the National curriculum requirements, and the ‘Skills showcase’ 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 variety means that lessons are engaging and appeal to those with a variety of learning styles. Differentiated guidance is available for every lesson to ensure that lessons can be accessed by all pupils and opportunities to stretch pupils' learning are available when required. Knowledge organisers for each unit support pupils in building a foundation of factual knowledge by encouraging recall of key facts and vocabulary.

Impact

The impact of our computing programme of study is constantly monitored through both formative and summative assessment opportunities. Each lesson includes guidance to support teachers in assessing pupils against the learning objectives and each unit has a unit quiz and knowledge catcher which can be used at the start and/ or end of the unit.

After the implementation of our computing curriculum, pupils will leave Jump Primary School equipped with a range of skills to enable them to succeed in their secondary education and be active participants in the ever-increasing digital world. We encourage our children to enjoy and value the curriculum we deliver. We want learners to discuss, reflect and appreciate the impact computing has on their learning, development and wellbeing. The impact of following the Kapow Primary Computing scheme of work is that children will:

- Think critically and understand how to make informed and appropriate digital choices in the future.
- Understand the importance that computing will have going forward in both their educational and working life and in their social and personal futures.
- Understand how to balance time spent on technology and time spent away from it in a healthy and appropriate manner.
- Understand that technology helps to showcase their ideas and creativity.
- Demonstrate the knowledge that different types of software and hardware can help them achieve a broad variety of artistic and practical aims.
- Show a range of technical skills across all areas of the National Curriculum - computer science, information technology and digital literacy.
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