The Pebblebed Hub of the Jubilee with Pebblebed Federation

Subject Intent Statement for Computing

Our Vision

I have come to you that you will have life and have it to the full
John 10:10

Intent

In the Pebblebed Hub of the Jubilee with Pebblebed Federation, we feel our curriculum should be giving children real experiences and preparing them for life. 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 part of all learning. Computing, in general, is a significant part of everyone's daily life and children should be at the forefront of new technology, with a thirst for learning what is out there. Computing within schools can therefore provide a wealth of learning opportunities and transferrable skills explicitly within the Computing lesson and across other curriculum subjects.

Through the study of Computing, children will be able to develop a wide range of fundamental skills, knowledge and understanding that will actually equip them for the rest of their life. Computers and technology are such a part of everyday life that our children would be at a disadvantage if they were not exposed to a thorough and robust Computing curriculum. Children must be given opportunities to develop their skills and knowledge in order to provide them with essential knowledge that will enable them to participate effectively and safely in the digital world beyond our gates.

In line with the 2014 National Curriculum for Computing, our aim at the Pebblebed Hub within The Jubilee with Pebblebed Federation, is to provide a high-quality computing education which equips children to use computational thinking and creativity to understand and change the world. The curriculum will teach children key knowledge about how computers and computer systems work, and how they are designed and programmed. Learners will have the opportunity to gain an understanding of computational systems of all kinds, whether or not they include computers.

Implementation

At The Pebblebed Hub of the Jubilee with Pebblebed Federation, computing is taught using a blocked curriculum approach. This ensures children are able to develop depth in their knowledge and skills over the duration of each of their computing topics which are often richly linked to engaging contexts in other subjects and topics. Across the federation we have a set of laptops, I-Pads, Chrome Books, sensing equipment and Bee Bots to ensure that all year groups have the opportunity to use a range of devices and programs for many purposes across the wider curriculum, as well as in discrete computing lessons. Employing cross-curricular links, motivates pupils and supports them to make connections and remember the steps they have been taught. This could be using presentation programs in History or Science, data handling in Science and Geography or sensing equipment in Science. Cornerstones planning allows for these links to be made across the curriculum.

The implementation of the curriculum also ensures a balanced coverage of computer science, information technology and digital literacy. The children will have experiences of all three strands in each year group, but the subject knowledge imparted becomes increasingly specific and in depth, with more complex skills being taught, thus ensuring that learning is built upon. For example, children in Key Stage 1 learn what algorithms are, which leads them to the design stage of programming in Key Stage 2, where they design, write and debug programs, explaining the thinking behind their algorithms.

Our curriculum allows for all children from all backgrounds to access good quality computing at school. This is especially important for those who have limited access to computing at home.

Throughout all of their learning, children will be taught about using computers safely, especially the internet. They will be taught how to deal with issues that might arise as they use the internet, especially who they can go to with concerns. They will use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Intended Impact

By the time they leave The Pebblebed Hub of the Jubilee with Pebblebed Federation, children will have gained key knowledge and skills in the three main areas of the Computing Curriculum: computer science (programming and understanding how digital systems work), information technology (using computer systems to store, retrieve and send information) and digital literacy (evaluating digital content and using technology safely and respectfully). The objectives within each strand support the development of learning across the key stages, ensuring a solid grounding for future learning and beyond.

Our approach to the curriculum results in a fun, engaging, and high-quality computing education.

Children will:

- know how to use appropriate programs to display information such as Word, PowerPoint and Publisher.
- know how to work safely with computers and how to keep themselves safe.
- understand how computer programs need instructions and how to find errors in these instructions and debug them.
- develop the skills of evaluating content on the internet and how to use it as part of a research project.

know how IT can be used to complement their learning across the curriculum.