The Whitchurch CE Federation

The Inquisitive Me - Computing

"Technology will not replace great teachers but technology in the hands of great teachers can be transformational." – George Couros

Intent

At The Whitchurch CE Federation, we aim to prepare our learners for their future by giving them the opportunities to gain knowledge and develop skills that will equip them for an ever-changing digital world. Our aim is to provide a high quality computing education that equips pupils to use computational thinking and creativity to understand and change the world.

Our Computing curriculum focuses on a progression of key concepts in digital literacy, computer science, information technology and online safety to ensure that children become competent in safely using, as well as understanding, technology. Children are encouraged to develop their curiosity, problem solving and reasoning skills in order to communicate, connect, collect and code. These key concepts are revisited repeatedly through a range of themes during children's time in school to ensure the learning is embedded and concept and skills are successfully developed.

The core of our computing curriculum is computer science, where pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Thus meaning that they are able to use, and express themselves and develop their ideas through, information and communication technology safely and at a level suitable for the future workplace and as active participants in a digital world.

Implementation

To ensure a broad range of skills and understanding, Computing is taught through our key concept of to connect, to collect and to code and to communicate. The computing Scheme of Work is underpinned by e-safety, as we feel that it is pivotal that children understand that there are dangers associated with the internet and that they know what precautions to put in place to keep themselves safe. We will plan for and provide creative use of technology to enhance pupil's learning and the opportunities to use their skills throughout the wider curriculum.

In Key Stages 1 and 2, computing is taught using lesson plans and resources created by 'Purple Mash'. However, these materials may be supplemented, or even replaced, by other resources at the class teachers' discretion in order to ensure that the highest quality lessons are delivered.

The curriculum leader provides a long term plan for each year group, which also outlines useful resources and support for teachers.
In order for our children to flourish in this connected world our curriculum ensures they have a thorough understanding of coding, e-safety, multimedia applications and the opportunity to experience and apply this knowledge through the wider curriculum. We aim to give our children access to and experience of a range of technology which they will learn to use purposefully, respectfully and safely. The concepts, knowledge and skill build year on year in order to continually challenge and engage our learners. Our curriculum has four key concepts which the children will connect with during their time with us.

To code: Children will learn competence in coding for a variety of practical and inventive purposes, including the application of ideas within other subjects.
To connect: Children will gain the ability to connect with others safely and respectfully, understanding the need to act within the law and with moral and ethical integrity.
To communicate: Children will gain the ability to communicate ideas well by using applications and devices throughout the curriculum.
To collect: Children will gain the ability to collect, organise and manipulate data effectively

Impact

The implementation of this curriculum ensures that when children leave The Whitchurch CE Federation, they are competent and safe users of ICT with an understanding of how technology works. They will have developed skills to express themselves, be creative in using digital media, and be equipped to apply their skills in Computing to different challenges going forward.

The impact of the curriculum is measured by:
- Teacher assessments
- Pupil Voice discussions of their learning with the subject leader
- Regular lesson observations and learning walks