Computing

Intent

Technology is a significant part of everyone's daily life and children should be at the forefront of using new technology. Computing within schools can therefore provide a wealth of learning opportunities and transferrable skills explicitly within the Computing lesson and across other curriculum subjects.

At HMFA schools we follow the Kapow Primary's Computing scheme which 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 forms a 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 not only to 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 combined with our Jigsaw PSHE scheme, the 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, being discerning consumers of online information and healthy use of technology.

Implementation

Pupils at St Weonards Academy participate in weekly high-quality Computing activities following the National Curriculum. Our children's computing skills are built upon and developed throughout their time at school. Teachers are provided with a clear breakdown of knowledge, skills and understanding to ensure a seamless progression. Specific vocabulary and phrases for each skill set are taught and built up within each key phase.

We are passionate about promoting Computing through an enjoyable, creative and cross-curricular approach which allows teachers to weave Computing opportunities into topics throughout each term. The children are able access to a wide range of quality resources and provide cross-curricular opportunities for children to apply their Computing knowledge and skills.

Computing as a standalone subject has a number of key components, each of which we aim to teach and fully instil the value of amongst our children. These can be categorised as:
- Computer science – Children are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.
- Information technology – Children are equipped to create programs, systems and a range of content in order to develop products and solutions.
- Digital literacy – Children are taught to use, access and express oneself through digital technology, including a critical understanding of technology's impact on the individual and society, at a level suitable for the future workplace and as active participants in a digital world.

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

Impact is constantly monitored through both formative and summative assessment opportunities. Pupils are assessed at the end of a lesson and at the end of a unit.

After the implementation of Computing our pupils should leave 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.

The Impact expected impact of the scheme of work is that children will:
- ✓ Be critical thinkers and able to 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. They will know that different types of software and hardware can help them achieve a broad variety of artistic and practical aims.
- ✓ Show a clear progression of technical skills across all areas of the National curriculum - computer science, information technology and digital literacy.
- ✓ Be able to use technology both individually and as part of a collaborative team.
- ✓ Be aware of online safety issues and protocols and 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.
- ✓ Meet the end of key stage expectations outlined in the National curriculum for Computing.