

Intent

Our aim at Ormiston Herman Academy is to provide a high-quality computing education which equips children to use computational thinking and creativity, giving them the life-skills that will enable them to embrace and utilise new technology in a socially responsible and safe way in order to thrive. The curriculum will teach children key knowledge about how computers and computer systems work, and how they are designed and programmed.

By the time they leave our school, 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). Through our computer science lessons we want children to develop creativity, resilience, problem-solving and critical thinking skills. We want our pupils to have a breadth of experience to develop their understanding of themselves as individuals within their community but also as members of a wider global community and as responsible digital citizens.

Implement

At Ormiston Herman Academy, we follow the 'Teach Computing' scheme of work which covers all aspects of the National Curriculum. This scheme was chosen as it has been created by subject experts and based on the latest pedagogical research. It provides an innovative progression framework where computing concepts, knowledge and skills has been organ

The curriculum aims to equip young people with the knowledge, skills and understanding they need to thrive in the digital world of today and the future. The curriculum can be broken down into 3 strands: computer science, information technology and digital literacy, with the aims of the curriculum reflecting this distinction.

This scheme of work gives full coverage of the national curriculum for computing aims to ensure all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation (Computer science)
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems (Computer science)
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems (Information technology)
- are responsible, competent, confident and creative users of information and communication technology. (Digital literacy)

A key part of implementing our computing curriculum is to ensure that safety of our pupils is paramount. We take online safety very seriously and we aim to give children the necessary skills to keep themselves safe online. Children have a right to enjoy childhood online, to access safe online spaces and to benefit from all the opportunities that a connected world can bring them, appropriate to their age and stage. Online safety and responsible use of technology are topics covered in Computing and PSHE lessons, assemblies and during events such as Safer Internet Day.

Impact

Within Computing, we encourage a creative and collaborative environment in which pupils can learn to express and challenge themselves. The success of the curriculum itself is assessed via the analysis of yearly progress data, lesson observations and through discussions with the children about their learning.

In order to demonstrate that we have accomplished our aims, pupils at Ormiston Herman Academy:

- Be enthusiastic and confident in their approach towards Computing.
- Present as competent and adaptable 'Computational Thinkers' who are able to use identified concepts and approaches in all of their learning.
- Be able to identify the source of problems and work with perseverance to 'debug' them.
- Create and evaluate their own project work.
- Have a secure understanding of the positive applications and specific risks associated with a broad range of digital technology.
- Transition to secondary school with a keen interest in the continued learning of this subject.