Computing Curriculum Intent

It is our intent at St Hugh's Catholic Primary Voluntary Academy to provide all of our children with a high-quality education in computing which provides access to an ever changing and expanding digital world. We wish to develop a love of computing and provide children with the ability to enhance their knowledge, skills and understanding through different types of media whilst keeping safety at the forefront of their minds. We believe that this will give our children the tools they need to succeed in a digital world.

In regards to online safety, GDPR will play an important role in allowing children to recognise what information is personal to them and who and when it is safe to share it. To do this effectively, children must have a clear understanding of the meaning of personal information and recognise their own responsibility in safeguarding this. Children will be taught about their digital footprint and where to seek support and advice should they need it. We believe a strong understanding of these things will enable children to access modern technologies and communicate effectively whilst developing an ever increasing understanding of how to keep themselves safe from evolving dangers in the digital world.

At St Hugh's Catholic Primary Voluntary Academy we want children to become digitally literate by developing a range of transferrable skills which can make them active participants in a digital world and prepare them for the world of work. We aim to encourage children to use, express themselves and develop their ideas through a range of information technology.

A core aspect of our computing teaching will be the teaching of 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. We aim to make explicit links to maths, science and design and technology.

Implementation

Our Computing curriculum amalgamates the best components of two schemes of learning; from iLearn2 and NCCE with additional resources from Barefoot Computing, Mr P ICT and Project Evolve.

To ensure a broad range of skills and understanding, Computing is taught across three main strands: digital literacy, computer science and information technology. As part of information technology, children learn to use and express themselves and develop their ideas through ICT, for example: writing and presenting as well as exploring art and design using multimedia.

Within digital literacy, children develop practical skills in the safe use of ICT and the ability to apply these skills to solving relevant, worthwhile problems, for example: understanding safe use of internet, networks and email.

In computer science we teach children to understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation. Also to analyse problems to computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.

At St Hugh's Catholic Primary Voluntary Academy, we give children access to a wide range of good quality resources and provide cross curricular opportunities for children to apply their Computing knowledge and skills.

At times, areas of the computing curriculum are taught discreetly to ensure children can become confident in the specialist areas of this. There will still be cross-curricular links where appropriate. Children are encouraged to be creative thinkers and designers by first—accessing step by step guides of key program building in a range of programs/apps before creating their own designs in a variety of areas.

Impact

The implementation of this curriculum ensures that children will have developed the knowledge, skills and understanding to help them access and use a range of technology in a safe and creative way. Children will have developed skills that equip them to use computational thinking and creativity to understand and change the world.

Children's skills will have progressed to enable them to not only have met the requirements of the National Curriculum but to also enjoy using technology to develop knowledge and ideas as well as express themselves safely and creatively as responsible citizens.