The Intent, Implementation and Impact of our Curriculum – Computing.

We aim to ensure all pupils have access to a robust and challenging computing curriculum that takes account of the wide range of skills, experience and prior learning of all of the children at Holy Trinity R.C. Primary School.

Intent

When planning and teaching computing at Holy Trinity, we believe that it 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. In delivering outstanding computing at a primary school level, intent should be to equip pupils with the foundational knowledge and skills to thrive in a digital world. The curriculum should be designed to promote computational thinking, creativity, and understanding of technology, preparing children for the opportunities and challenges of the modern age. The intent should encompass a progressive and well-sequenced curriculum that enables pupils to become digitally literate and competent users of technology. It should also foster an appreciation for online safety, ethical practices, and responsible use of digital resources.

Implementation

Outstanding implementation of computing in a primary school involves a holistic approach that integrates the subject across the curriculum. It should feature dedicated computing lessons as well as opportunities for cross-curricular application of computing skills in subjects such as mathematics, science, and design & technology. Utilising a range of resources, tools, and software, pupils should engage in hands-on activities that develop their coding abilities, problem-solving skills, and computational thinking. Teachers should foster a collaborative and inclusive learning environment where pupils are encouraged to experiment, make mistakes, and learn from their experiences. The implementation should prioritise the professional development of staff to ensure they are confident and competent in delivering high-quality computing education. Teachers should receive up-to-date training on emerging technologies and pedagogical approaches, enabling them to inspire and challenge pupils to excel in computing. Furthermore, partnerships with industry experts, coding clubs, or external

organisations can enhance the implementation of computing by providing real-world contexts and diverse perspectives.

In Key Stage 1 the children will learn to understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. They will be taught to create and debug simple programs and use logical reasoning to predict the behaviour of simple programs. They will be shown how to use a range of technology purposefully to create, organise, store, manipulate and retrieve digital content as well as recognise common uses of information technology beyond school. They will be taught to use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. Each of these skills will be taught through exciting half termly units.

In Key Stage 2 the children will design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. They will use sequence, selection, and repetition in programs, use logical reasoning to explain how some simple algorithms work and correct errors in algorithms and programs. Children will be taught to understand computer networks, including the internet, and the opportunities they offer for communication and collaboration. They will use search technologies effectively, learn to appreciate how results are selected and ranked, and be discerning in evaluating digital content. Children will be taught to select, use and combine a variety of software (including internet services) on a range of digital devices to create a range of programs, systems and content that accomplish given goals. They will use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Even our children in Early Years provision will be exposed to the understanding of internet safety as they explore the world around them and how technology is an everyday part of their learning and understanding of the world.

Impact

The impact of outstanding computing provision in a primary school is evident in the progression, attainment, and attitudes of pupils towards the subject. Through rigorous assessment and tracking of pupil outcomes, schools can demonstrate how computing education has enriched pupils' digital skills, problem-solving capabilities, and critical thinking abilities. After the

implementation of this robust computing curriculum, pupils at Holy Trinity will be digitally literate and able to join the rest of the world on its digital platform. They will be equipped, not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly – safely. The biggest impact we want on our children is that they understand the consequences of using the internet and that they are also aware of how to keep themselves safe online.

As children become more confident in their abilities in Computing, they will become more independent and key life skills such as problem-solving, logical thinking and self-evaluation become second nature. Ultimately, the impact of outstanding computing provision should empower pupils to become responsible digital citizens who are prepared for future technological advancements and opportunities.