Computing Vision

"If we teach today as we taught yesterday, we rob our children of tomorrow." John Dewey *philosopher, psychologist, and educational reformer*

At Thursfield Primary School we have a clear and simple vision: the children should be online-safe, online-inspired and online-confident.
Computing is an integral part of our everyday life and will play an immeasurable part in our children's futures. At Thursfield Primary school we will provide all of our children with the skills, creativity and enthusiasm to live and thrive in a world increasingly dependent on computing. As computing technology underpins today's modern lifestyle it is essential that all pupils gain the confidence and ability that they need in this subject, to prepare them for the challenge of a rapidly developing and changing technological world.
During their learning journey, children have many opportunities to learn and apply their computing skills. While all the basics computing skills are covered across the curriculum, eg making a simple Word document or using Paint programs, the children's experiences soon progress from these basic skills to beginning to blog, make web pages, create computer games and animations through code and getting ready for a more social world by practising skills for online media.
This vast range of experiences ensures the children leave with all the skills they need to prepare them for 21st century lifestyles.
We at Thursfield Primary aim to utilize the most up to date resources and recognize the need to remain aware of the potential uses of any emerging technologies, to ensure our children have the best possible skills set when they leave in Year 6.

Intent

At Thursfield Primary School we embrace the 'Rose and Shine Principles of Learning' for all pupils including our children with Special Educational Needs and Disabilities (SEND). The delivery of the Computing curriculum involves the careful planning of lessons ensuring plenty of opportunities for the over learning of key facts and the mastery of key skills. We remove barriers to allow all pupils to achieve by producing 'Learning Passports' with our SEND children. These outline personal learning preferences and the reasonable adjustments which need to be made by school in order for each pupil to access the full computing curriculum and to achieve the high expectations which are set for them.

Computing, in general, is a significant part of everyone's daily life and children should be at the forefront of new technology, with a thirst for learning what is out there. Computing within schools can therefore provide a wealth of learning opportunities and transferrable skills explicitly within the Computing lesson and across other curriculum subjects.

Through the study of Computing, children will be able to develop a wide range of fundamental skills, knowledge and understanding that will actually equip them for the rest of their life. Computers and technology are such a part of everyday life that our children would be at a disadvantage would they not be exposed to a thorough and robust Computing curriculum. It is essential to give all children equal opportunities across all subjects but especially computing as some disadvantaged children may not have been exposed to this in their daily lives.

At Thursfield we have highlighted the changing world we live in and how important computing is, but at the forefront of our curriculum is E-safety. The ever changing world of technology can expose children to more risks. E-safety is a vital part of our curriculum and every lesson will be under pinned by E-safety - ensuring each child has an understanding of procedures they can follow to be as safe as possible when using technology.

Implementation

Computing will be taught at least once a week per term through our concept curriculum-this ensures full coverage of the in-depth curriculum. Children will be taught through 3 different modules – E-safety, digital literacy and computer science each building on the skills and concepts taught previously. E-safety is explicitly taught for one module however, this is the root of our computing curriculum with each lesson having explicit E-safety links.

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.

In Key Stage 2 the children will design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems such as micro bits; 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 experience computing to ensure 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

After the implementation of this robust computing curriculum, children at Thursfield 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.