KINNERLEY CE PRIMARY COMPUTING
INTENT – IMPLEMENTATION – IMPACT

Our knowledge rich curriculum builds from EYFS to the National Curriculum Objectives for Y1-6.

The curriculum makes links with the wider world, advancing the Spiritual, Moral, Social and Cultural development of our learners and growing their understanding of British Values.

Our curriculum is delivered as part of cohesive units of work, promoting the School Motto 'Dream, Believe, Aspire, Achieve' and underpinned by our school vision: *To create a school community based on Christian values, in which we strive to foster a love of learning, pride in achievement, and the spiritual and moral compass of our children, equipping them to find their own special place in society and the world.*

We are inspired by the Bible verse, Philippians 4v8, which encourages us to think and strive for the good, 'Whatever is true…noble…honest…just…. think on these things.'

EYFS COMPUTING LINKS			
This document demonstrates which statements from the 2020 Development Matters are prerequisite skills for Computing within the national curriculum. The table below outlines the most relevant statements taken from the Early Learning Goals in the EYFS statutory framework and the Development Matters age ranges for Two and Three and Three and Four-Year-Olds and Reception to match the programme of study for Computing. The most relevant statements for Computing are taken from the following area of learning: Personal, Social and Emotional Development • Physical Development • Understanding the World • Expressive Arts and Design			
Two and Three year olds	Personal, Social and Emotional Development		• Begin to show 'effortful control'. For example, waiting for a turn and resisting the strong impulse to grab what they want or push their way to the front.
	Physical Development		• Begin to show 'effortful control'. For example, waiting for a turn and resisting the strong impulse to grab what they want or push their way to the front.
	Understanding the World		• Repeat actions that have an effect
	Expressive Arts and Design		• Start to make marks intentionally
Three and Four Year olds	Personal, Social and Emotional Development		• Remember rules without needing an adult to remind them.
	Physical Development		• Match their developing physical skills to tasks and activities in the setting.
	Understanding the World		• Explore how things work.
	Expressive Arts and Design		• Create closed shapes with continuous lines, and begin to use these shapes to represent objects. • Draw with increasing complexity and detail, such as representing a face with a circle and including details.
Reception	Personal, Social and Emotional Development		• Show resilience and perseverance in the face of a challenge. Know and talk about the different factors that support their overall health and wellbeing: - sensible amounts of 'screen time'.
	Physical Development		• Develop their small motor skills so that they can use a range of • tools competently, safely and confidently.
	Expressive Arts and Design		• Explore, use and refine a variety of artistic effects to express their ideas and feelings.
ELG	Personal, Social and Emotional Development	Managing Self	• Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. • Explain the reasons for rules, know right from wrong and try to behave accordingly.
	Expressive Arts and Design	Creating with Materials	Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

Key Stage One National Curriculum Expectations	Key Stage Two National Curriculum Expectations
Pupils should be taught to: • understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions • create and debug simple programs • use logical reasoning to predict the behaviour of simple programs • use technology purposefully to create, organise, store, manipulate and retrieve digital content • recognise common uses of information technology beyond school • 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.	Pupils should be taught to: • design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts • use sequence, selection, and repetition in programs; work with variables and various forms of input and output • use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Intent

Our Computing curriculum, based on the Teach Computing scheme of work from Year 1, offers sequences of lessons to ensure pupils have progressively covered the knowledge, understanding and skills required in the National Curriculum. Within an ever changing and technological world, at Kinnerley we understand and value the importance of teaching Computing from a young age. Future generations will rely heavily on their computational confidence and digital skills in order to support their progress within education and their chosen career paths. It is the school's aim to equip children with the relevant skills and knowledge that is required to understand the three core areas of Computing; Computer Science, Information Technology and Digital Literacy, and to offer a broad and balanced approach to providing quality first teaching. Computing is an integral part to a child's education and everyday life and we intend to support our pupils to access and understand the core principles through engaging and exciting activities. At Kinnerley, we strive to ensure that children develop as respectful, responsible and confident users of technology, ensuring they understand the advantages and disadvantages associated with online experiences and they are aware of measures that can be taken to keep themselves and others safe online. Pupils will develop disciplinary skills and understanding as well as substantive knowledge. Our Computing curriculum aims to explore the children's own environment whilst broadening their horizons. As with all our curriculum it will align with our Christian based school values of Community, Kindness, Courage and Thankfulness.

Implementation

At Kinnerley School we have mixed age classes and so to ensure continuity and progression of skills and learning, a two-year rolling curriculum has been created using Teach Computing, which covers all aspects of the National Curriculum. This ensures that children will be taught all areas across the scheme. Teach Computing was chosen as it has been created by subject experts and based on the latest pedagogical research. It was also chosen due to the range of equipment free lessons. 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.

We have a variety of hardware available to help deliver our Computing curriculum including: laptops, iPads, interactive whiteboards, desktop computers.

Pupil's learning is assessed regularly in order to inform future planning, and tasks are made relevant to the learning themes where possible to add interest and engagement.

Impact

Within our Computing lessons, we encourage a creative and collaborative environment in which pupils can learn to express and challenge themselves and each other.

We will assess the success of the curriculum itself via the analysis of yearly progress data, lesson observations and pupil and staff voice. This in turn, will inform future adaptions of the scheme of work and help to ensure that progression is evident.

In order to demonstrate that we have accomplished our aims, pupils at Kinnerley should:

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.