



Edward Feild Primary School COMPUTING in a Nutshell



RESEARCH	<p><i>“Over the past few decades, Computational Thinking (CT) has gained widespread attention and been regarded as one of the essential skills required by those growing up in the digital era. To nurture the next generation to become creative problem-solvers, there is a growing need to implement CT education into the school curriculum.” (Kong & Abelson, Computational Thinking, 2018).</i></p> <p>Computer literacy and the safe use of technology are widely accepted as essential skills in the ‘digital era’ and as such it is crucial that we teach these skills throughout primary school.</p>
VISION	<p>A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.</p>
CURRICULUM	<p>At EFPS, we ensure our computing lessons cover the skills required to meet the aims of the national curriculum. The content allows for a broader, deeper understanding of the areas of computing identified in the curriculum. Pupils are taught a coherent and ambitious, knowledge-based curriculum with skills embedded. Our aims are to ensure that all pupils gain a coherent knowledge and understanding of how to use the internet safely and to build important computing knowledge and skills.</p> <p>Our lessons aim to develop children’s efficiency, problem solving skills and a deep understanding of the uses of computing through explicit teaching of internet safety, email, coding, spreadsheets, touch-typing, graphing, networks, word processing. Teachers have access to Purple Mash and can opt to use other computing programs where appropriate to provide a range of motivating and engaging activities, to encourage children to question, respond, debate, and reflect on safe and efficient use of computing and technology.</p>
IMPLEMENTATION	<p>In Reception you will see computing embedded throughout the year, using the 2Simple part of the Purple Mash scheme of work. The following units of work are available in 2Simple: Communication & Language, Expressive Arts, Literacy, Mathematics, Physical Development, Personal Social and Emotional Development, Understanding the World. Throughout KS1 and KS2 teachers use lesson plans from the Purple Mash scheme of work. Lesson input is presented via PowerPoint presentation and children usually use Chromebooks or i-pads.</p>

	<p>Computing lessons enable pupils to grasp the difficult computing concepts of calculating within spreadsheets and increasingly complex coding, with a balance between learning about technology in the world around them and how they can use computing to enhance their own lives. All children expand on their skills of problem solving, understanding uses for technology, and calculating and organising data. Online safety is a hugely important part of the computing curriculum and as such, all children use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour and identify a range of ways to report concerns about content and contact.</p>
<p>LEARNING ENVIRONMENT AND RESOURCES</p>	<p>When entering a computing lesson at Edward Feild, you will see:</p> <ul style="list-style-type: none"> • All children logging on, demonstrating that the computers are used regularly in every classroom. • Relevant computing vocabulary displayed to refer to, spoken and used by all learners. • Links made to previous topics taught, to develop and support long-term memory. • Links made to how technology is used in everyday life and why it is important for children to learn these skills. • Children working collaboratively with talk partners, supporting each other, speaking in full sentences and often having opportunities to communicate and challenge each other using technology. <p>Children all have their own Purple Mash log-in and can use this resource at home as well as in the classroom. The Purple Mash scheme of work covers the curriculum comprehensibly and offers ‘crash courses’ for year groups that are starting a computing topic after Year 1 and will have missed the progression offered by the scheme when used from Reception through to Year 6.</p>
<p>ASSESSMENT</p>	<p>Key questions are built into lessons to identify misconceptions and next steps in learning</p> <p>Summative assessments - planned tasks aimed at targeting next steps in learning.</p> <p>All children in the school will be able to speak confidently about their computing learning, skills, and knowledge. Children’s work is stored in Purple Mash, so that progress is easy to track.</p> <p>Assessment quizzes and final tasks are part of each unit of computing work.</p>
<p>FEEDBACK</p>	<p>Verbal feedback by teachers-with a focus on use of technical vocabulary and oracy, talking in full sentences.</p> <p>Verbal feedback by pupils-Peer assessment- pupils often work together at the start of the unit of work and share ideas, helping each other to debug or make corrections for a program to work correctly</p> <p>Mid-lessons feedback by teachers and pupils- children’s work shared on the whiteboard -teachers address misconceptions, correct learning or plan learning for next lessons</p> <p>End of lessons-reflections on learning - children use will share their work and check that the programs they have created work correctly and help each other to debug in some programs.</p>
<p>IMPACT</p>	<p>Computing plays a huge part in ensuring the curriculum we deliver to our children is engaging and current. We ensure that the teaching and learning of computing enables all of our pupils to continue to learn and</p>

grow in this digital world we live in and provides them with the skills and knowledge to do this well and safely. We try to link skills taught to real-life situations to ensure that our pupils can see the importance and necessity of computing in our ever-growing, technological world. This is important in a society where technologies and trends are rapidly evolving.

The successful teaching and use of computing are evident in the enthusiasm our children have for the use of technology to aid and enhance their learning and also in the work produced with the use of computers and ensuring we do this by giving our children the opportunities to apply their computational skills

We encourage our children to enjoy and value the Computing curriculum that we deliver. Fundamentally, we ask the 'why' and not just the 'how' to explore the depth of each objective within a stimulating environment that encourages children to discuss, reflect and appreciate the impact that Computing has on their learning, development and wellbeing. Finding the right balance with technology is key to an effective education and a healthy lifestyle. We feel the way that we implement Computing at EF helps children realise the need for the right balance and one they can build on in their next stage of education and beyond

We look for positive impact through observing learning regularly, early intervention where necessary and reviewing pupil's digital skills through tools across Purple Mash. Progress of our Computing curriculum is measured through outcomes and the record of coverage through work saved in pupils' personal document folders and saved 'to do' content electronically.