Edward Feild Primary School DESIGN TECHNOLOGY in a Nutshell

RESEARCH	Research suggests that DT encourages children's creativity and encourages them to think about important issues such as sustainability and enterprise. For children, having to think about specific purposes and users for their products is much more demanding than simply following instructions to make something. Children have to think, decide and plan, as well as go and create.
VISION	At EFPS, our vision is to provide children with a Design Technology curriculum that enables learners to confidently and competently apply their knowledge, vocabulary and skills to solve problems to Research and Evaluate, Design, Make and Evaluate products.
CURRICULUM	In DT, we offer a coherently planned sequence of lessons to help teachers ensure they have progressively covered the knowledge, understanding and skills required in the National Curriculum of ***Design, Make, Evaluate, Technical Knowledge & Cooking and Nutrition***. We aim to inspire children through a broad range of practical experiences to create innovative designs which solve real and relevant problems, critically evaluate existing products and then take risks and innovate when designing and creating solutions to the problems. As part of this process, time is built in to reflect, evaluate and improve on prototypes using design criteria throughout to support the process. Opportunities are provided for children to evaluate key events and individuals who have helped shape the world, showing the real impact of design and technology on the wider environment and helping to inspire children to become the next generation of innovators.
IMPLEMENTATION	• In **EYFS**, you will see DT taught through continuous provision and topic work within 'Expressive Arts and Design- exploring and using media and materials and being imaginative' and 'Physical Development- moving and handling'. Children safely use and explore a variety of materials, tools and techniques. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories. • In **KS1**, DT is taught through blocking lessons (including continuous provision) in a unit together for 2 weeks to fully immerse the children. • In **KS2**, DT maybe taught through a DT Day, 2-week block or over 6 weeks, depending on the learning needs of the class and year groups.

	• **In both KS1 and KS2**, units are carefully mapped out across dual year groups (Year 1/2, Year 3/4 and Year 5/6) to ensure coverage of the National Curriculum expectations and progression across key stages. • DT skills and understanding are built into the lessons, following a clear structure which allows for the revision of ideas to become part of good practice and ultimately help to build a depth of children's understanding. Through revisiting and consolidating skills, our lessons and resources help children build on prior knowledge alongside introducing new skills and challenge. • We follow a cycle of **Research and Evaluate, Design, Make and Evaluate**. Teachers plan a unit using the support of the 'Kapow scheme' (or Design technology association) and a PowerPoint planning template which includes: a *Big Question, Audience, Purpose, Effect,* a written or oracy outcome, ideas for teaching the unit within a context (including hooks, trips and links to other curricular areas), key concepts and vocabulary. When using the template, teachers refer to the whole-school DT Progression Document to see previous knowledge and skills taught where their teaching of each unit 'fits' within the design technology curriculum. • Key vocabulary is explicitly taught and re-visited in each lesson. This vocabulary is then included in display materials and additional resources to ensure that children are allowed opportunities to repeat and revise this knowledge. Children are expected to be able to use and apply the vocabulary speaking in full sentences in order to evaluate and explain ideas. Pupils are encouraged to use and apply the vocabulary in one written task per DT unit. • Where possible, English and topic units are interwoven with DT planning across the school, allowing key vocabulary to be used orally and in written form throughout the unit in different contexts, such as department-planned Whole Class Reading, writing in English and maths. This gives disadvantaged pupils and children with SEND the time and contextual understanding to fully comprehend and use the vocabulary effectively, thereby allowing them to make progress. • Throughout our DT lessons, we intend to inspire pupils to develop a love of DT and see how it has helped shaped the ever-evolving technological world we live in.
CHALLENGE and SUPPORT	Children are supported and challenged through teacher questioning and working with a partner to discuss and reflect upon their own work. Children are supported through scaffolding: by working with adults, partners, structures of tasks, materials and templates through the design, make and evaluate processes. Children may be supported with lesson starters inspired by products and designers.

	Children are challenged and given time to evaluate and adapt and their ideas. Key vocabulary is taught, modelled and encouraged. This gives disadvantaged pupils and children with SEND the time and contextual understanding to fully comprehend and use the vocabulary effectively, therefore allowing them to make progress.
LEARNING ENVIRONMENT & RESOURCES	The learning environment across school is consistent with DT technical vocabulary displayed, spoken and used by all learners. Shared DT resources such as tools are available across the whole school, kept in the DT resources cupboard or within each department. Staff are encouraged to contact the DT subject leader when looking for specific resources and are expected to order their own single use equipment according to each unit within the department as required. Whole school and parental engagement are currently being improved using DT-specific home learning and opportunities suggested by teachers. General DT resources, such as tools, are available for use across the whole school, and are organised in the DT cupboard or art areas. Materials required are ordered by each department. Chromebooks, laptops and iPads are used within some lessons for pupils to carry out product research.
ASSESSMENT	• **Key questioning** skills built into all lessons, at all stages of learning to identify misconceptions and next steps in learning. • **Unit assessment grids** outlining key skills are stuck into books at the start of each unit for self and teacher assessment. • **Success Criteria** - for each lesson for children self-assess • **KWL grids** (what I know, what I want to learn, what I have learned) are used in UKS2 at the beginning (whole class) and end of a unit (individual). • **Mind Maps** are used in LKS2 and whole class mind maps in KS1 at the beginning of a unit. • **Summative assessments** aimed at targeting next steps in learning-**final outcome, which is either written or oral.** *LKS2 is trialling end of unit quizzes.*
FEEDBACK	**In the moment feedback:** **Verbal feedback by teachers**-with a focus on use of technical vocabulary, speaking and listening skills, talking in full sentences. **Verbal feedback by pupils** **Self Assessment and Peer Marking -using Success Criteria**

IMPACT	Each year, pupils enhance their DT skills through projects they undertake as individuals and in groups. The lessons allow for many opportunities for cross curricular learning, enabling children to access core subjects in a different context, often with a real-life problem-solving context. They can apply and understand the processes involved as problem solvers and innovative designers, seeing a project through from the initial design brief and research, to the final prototype and evaluation, always keeping in mind the client. DT is a popular and valuable subject for all pupils, particularly those with SEND. Knowledge and understanding are drawn from across the curriculum and helps to develop and enable maths, literacy and communication skills that can be applied in practical ways. The lessons ensure our pupils are fully equipped with the skills and knowledge required to undertake a variety of challenges and understand the importance of Design Technology in the world.