Design Technology

Curriculum Intent:

The intention of our Design Technology curriculum is to encourage all children to foster an interest in designing and making, whilst developing their curiosity about how different technologies operate within the wider world around them. This allows all children to utilise their own creativity and imagination to research, apply, design, make and evaluate real-life products, that have been carefully selected to make cross-curricular links throughout our Curriculum and support retrieval. Our bespoke Curriculum design ensures that children take part in focused purposeful tasks in which they progressively develop practical skills and technical knowledge, spanning across the four disciplines of food, textiles, structures and mechanisms throughout each year group. Each of the units follow a clear design process adhering to a strict design brief; through discussion and research, designing and making, evaluating and modifying their work, children record their achievements in their DT subject exercise books.

Curriculum Vision:

We aspire for our DT curriculum to develop the transferable skills of creativity, problem-solving and critical thinking which pupils can use across the curriculum and beyond. Our Design and Technology curriculum (alongside wider STEM based subjects) aims to develop resourceful and innovative students who are naturally inquisitive to make links in their learning and use technology responsibly – thus preparing them for a rapidly changing world.

I am the Nursery teacher and Design & Technology Subject Champion at Parish CE Primary School. With a strong passion for making and designing, I am dedicated to inspiring creativity and problem-solving in our children through a hands-on, inclusive DT curriculum that nurtures innovation and practical skills from an early age.

Design Technology Subject Champion – Miss Warbrick.

Transferrable concepts:

Design Technology develops a range of transferable concepts. These include:

- **Problem-solving**: Developing creative and practical solutions to real-world challenges.
- **Critical thinking**: Analysing needs, evaluating options, and making informed design decisions.
- **Project management**: Planning, organizing, and managing resources effectively to meet deadlines.
- **Collaboration**: Working as part of a team, often across disciplines.
- **Communication**: Presenting ideas clearly through sketches, models, prototypes, and digital tools.
- **Technical literacy**: Using tools, materials, and technology safely and effectively.

These skills are applicable in fields such as engineering, architecture, product design, and beyond.

Pedagogical Approach:

Our approach to teaching and learning is supported by Rosenshine's Principles of Instruction (Review, Check for understanding, Provide Models, Provide Scaffolds, Guide practice). Our art lessons follow a 'QUEST approach' ensuring consistency across school. Beginning with a question to answer, this is even introduced in Reception and ensures consistency in teaching and learning.

Each unit also has a knowledge planner (supported by DT association resources) with the specified sequence of learning. With each lesson containing opportunities to build upon knowledge and skills with children given the opportunity to routinely orally retrieve key substantive and disciplinary knowledge. Whole–school links to our curriculum intent are also made ensure our 'Rainbow Promises' permeate throughout our teaching and learning.

Miss Robey
@MissRobey_

Year 4 had a brilliant time yesterday making burritos in our Apple of my Eye workshop. They demonstrated brilliant cooking and food preparation techniques, working outstandingly as teams ❤️ Their burritos smelled incredible & went down a treat! 🌟 @parishschool1

Mr Molyneux
@MrMolyneux

Year 2 have been researching existing superhero capes and have been practising their threading skills with cheerios before applying this skill to complete the tricky running stitch. Miss Carr was incredibly proud of their resilience today. 🪡🧵🦸 @parishschool1 #ParishDT

Miss Wells
@MissWells1204

This morning we made our own smoothies in DT. We put our chopping skills into practice and had lots of fun making them! The children were very excited and enjoyed tasting their delicious drinks ✨🍓🍌🍎🍊🍍🍈 @parishschool1

Curriculum Sequencing and Progression:

<u>Each year group will experience 3 topics which will cover the following:</u>
Food
Textiles
Mechanism
Structure/Electrical

<u>Each of our DT topics follow the same structure including:</u>
Researching
Applying
Designing
Making and Evaluating

Curriculum implemented has been supported by The DT Association's "Projects on a Page" is sequenced by Key Stage and topic, with progression built into each planner to support skill development across year groups. It follows the National Curriculum and is designed to be flexible, imaginative, and easy to implement.

Our Rainbow Promises in DT:

Resilience and Perseverance:

Our Design and Technology curriculum builds resilience and perseverance by encouraging children to problem-solve, learn from mistakes, and improve their designs through iterative processes. They develop a growth mindset by facing challenges and persisting until they achieve a successful outcome.

Articulate Learner:

Our Design and Technology curriculum helps children become articulate learners by encouraging them to explain their ideas, justify design choices, and reflect on their processes using subject-specific vocabulary. Through discussion, evaluation, and collaboration, they develop confidence in expressing their thinking clearly and purposefully.

Influence Aspirations

Our Design and Technology curriculum influence aspirations by exposing children to real-world problems, careers in engineering, design, and technology, and the impact of innovation. It helps them see how their creativity and problem-solving skills can shape the future.

Nurture Curiosity

Our Design and Technology curriculum nurtures curiosity by encouraging children to ask questions, explore how things work, and experiment with materials and ideas to create solutions. It sparks interest through hands-on learning and real-life challenges.

British and Christian Values

Our Design and Technology curriculum links to British and Christian values by promoting respect, responsibility, and collaboration. Pupils learn to value others' ideas, make ethical choices in design, and reflect on how their work can serve and support their community.

Opportunities to Build on Knowledge and Skills

Our Design and Technology curriculum creates opportunities to build on knowledge and skills through a progressive curriculum, where each project reinforces prior learning and introduces new techniques, encouraging continuous development in creativity, problem-solving, and technical ability.

Wellbeing and Health

Our Design and Technology curriculum promotes health and wellbeing by teaching safe tool use, encouraging mindful working practices, and designing products that support healthy lifestyles and environments.

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Inclusive Practice in DT:

EYFS as the Bedrock of Learning:

Intended EYFS Learning

Topics are themed to link across topics in the curriculum and to help EYFS to achieve ELG.

ELG – Expressive Art and Design.
1.) Creating with materials
2.) Being imaginative and expressive

Characteristics of Effective Learning.
Finding out and exploring, playing with what they know, being willing to 'have a go', being involved and concentrating, keeping on trying, enjoying achieving what they set out to do, having their own ideas, making links, choosing ways to do things.

See EYFS knowledge planner.

Meeting the needs of all learners:

Our Design and Technology curriculum promotes metacognition and ensures that all pupils can access learning at their own level. High-quality modelling and scaffolding are central to enabling pupils to develop practical skills and design thinking. To reduce cognitive overload and secure progression, 'DT Milestones' identify essential knowledge and skills for each phase of learning, aligning with education recovery guidance. For pupils with SEND, we follow the LDST 'Quality First Teacher Toolkit' and implement the EEF's 'Adaptive Teaching' strategies, which emphasise explicit instruction, structured scaffolding, and flexible, needs-led support.

Strong Foundations:

Our DT curriculum clearly defines the knowledge, and skills children need to learn in Reception and Key Stage 1, guiding teachers in prioritising teaching and assessment.

When weaknesses are identified, such as in fine motor skills or creative expression, staff are given time and training to adapt the curriculum and teaching methods. We focus on creative fluency, ensuring children build confidence gradually without overly complex expectations.

DT is taught in one-hour lessons, allowing children to develop foundational skills in drawing and designing and fine and gross motor skills which will support the children in making their creations.

The curriculum is designed to maximise learning time while keeping content purposeful and manageable. 'Speak It' opportunities are integrated to help children discuss their artwork, reflect on their choices, and use key vocabulary.

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Wider Curriculum Considerations in DT:

Teaching Pedagogy:

Our DT Progression Plan ensures that key disciplinary knowledge is built upon and revisited over time. Central strands run throughout the DT curriculum, including mechanisms, structures, textiles, food technology, and electrical systems, with design, make, and evaluate acting as the 'golden thread' woven through every unit. These key elements are embedded within our DT curriculum milestones to ensure pupils 'know more, remember more, and can do more', enabling them to develop as confident, creative, and reflective designers with a clear understanding of real-world applications.

Developing Cultural Capital:

At Parish, we embed different opportunities for the children within out DT long term plan to enhance the children's learning and experience within school and the wider community.

Each topic highlights a 'real world link' for the skills they will be developing in the topic. This could be cross curricular links (healthy diet in science or measure in maths) or links to future careers (Engineers and electricians).

Personal Development:

At Parish, we nurture a strong Design & Technology culture through teacher-led clubs, hands-on projects, and meaningful cross-curricular links. Children in EYFS regularly engage in DT activities during Forest School, using natural materials to explore structures, simple mechanisms, and construction, which supports both creativity and motor skill development.

STEM Week provides further opportunities for pupils to immerse themselves in real-world problem-solving, design challenges, and collaborative builds, helping them see the relevance of DT in everyday life and future careers.

Staff CPD:

Our Design & Technology (DT) curriculum is carefully designed to meet the needs of our school community through a collaborative, whole-staff approach, ensuring all teachers feel confident in delivering high-quality, purposeful DT lessons. A consistent and well-structured DT knowledge planner supports staff subject knowledge and progression, enabling them to teach key skills, processes, and vocabulary with confidence.

In recent years, all teaching staff have received tailored DT CPD, including training on mechanisms, structures, textiles, and food technology, with a focus on modelling practical techniques and embedding the design-make-evaluate cycle. CPD has also included links with local secondary DT departments and STEM education leads, providing insights into progression beyond primary and the real-world relevance of the subject.

The DT subject leader is an active member of the 'LDST DT Curriculum Network', with regular updates and best practice shared with staff to ensure the curriculum remains current, engaging, and inclusive for all pupils.

Assessment:

In Design & Technology, teachers assess against statements linked to the specific DT strand being taught each term, such as mechanisms, textiles, or food technology. The design, make, and evaluate process is consistently assessed throughout the year, as it is a core element woven through every DT unit.

Assessment is primarily formative, taking place continuously during the unit to support pupils in developing both their substantive knowledge (technical skills and concepts) and disciplinary knowledge (design thinking and problem-solving).