Coomb Briggs Primary Academy

DT - Intent, Implement, Impact

Intent:

Vision: At Coomb Briggs Primary Academy the vision of our Design and Technology (DT) curriculum is to build a cohort of creative, resourceful, and resilient problem-solvers who possess a critical understanding of the design process and the impact of human ingenuity on the world.

Inclusion:

Access: Learning is scaffolded and materials are adaptable. Projects are designed to allow for diverse physical and cognitive approaches.

Representation: The curriculum features a wide and inclusive range of designers (gender, ethnicity, culture, periods, disciplines) to ensure all children see themselves reflected and challenged.

Vocabulary: Key vocabulary is explicitly taught, repeated, and displayed, ensuring all pupils, particularly those with EAL or SEND, can articulate their understanding and critique.

Knowledge Focus:

Develop Practical Skills: To provide a rigorous, hands-on learning experience where pupils master a progressive range of practical techniques (e.g., cutting, joining, measuring, cooking, simple circuitry).

Foster Disciplinary Knowledge (The Process): To teach the iterative design cycle: Design, Make, Evaluate, and Improve, ensuring children understand that failure is a crucial step toward innovation.

Embed Substantive Knowledge (The Content): To build a deep understanding of 'how things work' by exploring technical vocabulary (e.g., mechanism, structure, electrical component, nutrition) and studying the work of pertinent designers, engineers, and chefs.

Promote Contextual Understanding: To ensure children design and make functional products for a specific user and purpose, solving real-world problems and appreciating the value of design in society.

Implementation:

The Design Technology curriculum is delivered through a high-quality, project-based approach, ensuring fidelity and depth of learning across all year groups.

Key Strategy	Description
Project-Based Learning	Three distinct, focused projects are delivered per year group, ensuring coverage of the statutory areas: *Structures*, *Mechanisms/Textiles*, and *Food/Electrical Systems*.
Iterative Cycle	Every project follows the D-M-E-I cycle. Children are given time to test, refine, and improve their prototypes before reaching a final outcome.
Explicit Skill Instruction	Key practical and technical skills are taught explicitly and revisited frequently across year groups to ensure mastery (e.g., measuring accurately in Y1 mechanisms and Y4 structures).
Designer Focus	Each project is anchored to a 'Pertinent Designer' (Engineer, Architect, Chef, or Product Designer). Children study their techniques and design philosophies to inform their own work, building substantive knowledge of design history.
Substantive & Disciplinary Balance	Lessons clearly differentiate between: 1) **Substantive Knowledge** (e.g., what yeast does, the function of a cam) and 2) **Disciplinary Knowledge** (e.g., how to critique a design, how to follow safety procedures).
Assessment	The Skills Ladder is used formatively during and after projects. Evidence of learning (photos, planning sheets, evaluations) is collected to track progression toward age-related expectations.

Impact:

By the time pupils leave Year 6, they will be:

Knowledgeable Designers: Able to articulate the work of key designers and apply their techniques and approaches to new challenges.

Technically Proficient: Proficient in a range of technical skills, including joining materials, creating mechanisms, and following complex recipes safely.

Critical Evaluators: Capable of testing their products against the original design criteria, identifying strengths and weaknesses, and suggesting concrete improvements.

Ready for Secondary: Equipped with the foundational knowledge and resilience necessary to succeed in secondary-level DT and associated STEM subjects.