



Showing our love through kindness, determination and curiosity; strengthening ourselves and our community.

Design and Technology Subject Statement

Intent

The Design and Technology curriculum at Long Wittenham CE Primary school aims to inspire and engage all students through hands-on, project-based learning. Our intent is to develop students' ability to design, make, and evaluate functional products through a series of meaningful and age-appropriate projects. We believe that Design and Technology is essential for fostering an understanding of the world and equipping students with the skills needed to navigate future technological advancements.

We aim to nurture creativity and innovation by allowing students to explore their ideas and bring them to life through practical projects and by encouraging them to take risks and learn from failure as part of the design process. We also aim to equip students with a range of practical skills and techniques including using tools and materials safely and effectively. They develop competencies in planning, designing, and making, while considering aesthetics, functionality, and sustainability. To develop teamwork and communication skills our students will work collaboratively on projects and share ideas effectively. Foster a supportive learning environment where students can provide and receive constructive feedback. In order for our students to understand the role of design and technology in the world, and the impact that it has on it, we support them to consider the ethical and environmental issues in design, promoting sustainable and responsible practices.

Implementation

By applying the "Projects on a Page" scheme from the Design and Technology Association, we provide a structured and innovative approach that encourages creativity, critical thinking, and practical skills. From this framework we have developed a coherent progression of knowledge and skills across the school and ensuring that knowledge and skills build and increase in complexity over time. Initial projects focus on fundamental skills and concepts, gradually increasing in complexity to build students' confidence and capability.

Students to engage in a diverse range of projects that cover key aspects of Design and Technology, such as:

- **Structures:** Building models and understanding architectural principles.
- **Mechanisms:** Creating moving parts and simple machines.
- **Textiles:** Exploring fabric manipulation and garment creation.
- **Food Technology:** Preparing simple meals and understanding nutrition.

Each project is designed to be completed over a term, allowing for depth of exploration and skill development. Each unit centres on a practical project that challenges students to apply their knowledge and skills in designing, making, and evaluating products. Our approach emphasises hands-on, experiential learning that encourages students to actively engage in the design and making process. Projects are designed to be open-ended, allowing students to explore their creativity and make decisions about materials, processes, and outcomes. Where possible, projects are integrated with other subjects, such as science, maths, and art, to provide a holistic learning experience. This approach helps students see the relevance and application of D&T in the real world. Projects are connected to real-world challenges and opportunities, helping students understand the impact of design and technology on society and the environment.

Collaborative Learning is placed at the heart of the learning experiences planned in Design and Technology lessons. Students work in pairs or small groups on projects, fostering teamwork and communication skills. Collaboration is encouraged through peer feedback sessions and group discussions, promoting a supportive and reflective learning environment. Teachers provide regular feedback to guide student progress and encourage self-reflection. Self-assessment is an integral part of the process, helping students develop critical evaluation skills and ownership of their learning.

Impact

By the end of Key Stage 2, students will have a strong foundation in Design and Technology, preparing them for further study and inspiring future interest in related fields. They will have developed the confidence and capability to tackle real-world problems creatively and practically, with a thoughtful approach to design and innovation.

Assessment is integrated throughout the projects, with a focus on process, creativity, and reflection. It is ongoing and formative, with a focus on the design process, creativity, and problem-solving skills rather than just the final product.