

DESIGN AND TECHNOLOGY AT WILLAND

INTENT

At Willand School, children systematically improve their knowledge, skills and understanding in Design Technology (DT) through an enjoyable curriculum.

We aim for children to gain a practical understanding of the world around them, aware of how design and manufacture influences their lives and become resilient, independent, enterprising and creative thinkers, technically proficient at the taught content, and have a good understanding of the need for high level finish.

We intend on delivering a curriculum which:

- allows children to develop functional, appealing products that are aimed at particular individuals or groups and are fit for purpose;
- promotes analytical thinking, in identifying the features, problems and solutions in products;
- will challenge children to research information and think for themselves, give reasoned solutions, work independently, co-operatively and collaboratively, and be enterprising;
- builds on prior learning and promotes the progression of the language of technology, the knowledge of appropriate tools and techniques and the skills to use them;
- allows children to consider the views of others, evaluate their ideas and products against their own design criteria to improve their work;
- improves children's understanding of the basic concepts of design, make and evaluate alongside specific skill, knowledge and understanding in food technology, textiles, structures and electrical and mechanical systems;
- creates a fun, enjoyable and engaging environment and memorable learning experiences;
- can be adapted to link with other subject areas being taught;
- engages all children and entitles them to the same quality of teaching and learning opportunities, striving to achieve their potential, as they belong to our school community.

Through careful planning, we aim that in all projects children are enabled to become increasingly mature in their consideration of:

- User - children should have a clear idea of who they are designing and making products for, considering their needs, wants, interests or preferences. The user could be themselves, an imaginary character, another person, client, consumer or a specific target audience;
- Purpose - children should know what the products they design and make are for. Each product should perform a clearly defined task that can be evaluated in use;
- Functionality - children should understand the need for design in making products that function in some way to be successful. Products often combine aesthetic qualities with functional characteristics. In DT, it is insufficient for children to design and make products which are purely aesthetic;
- Decision-making - children should make informed decisions such as selecting materials, components and techniques and deciding what form the products will take, how they will work, what task they will perform and who they are for;

- Innovation - children should have some scope to be original with their thinking. Projects that encourage innovation lead to a range of design ideas and products being developed, characterised by engaging, open ended starting points for children's learning.

IMPLEMENTATION

Our approach to the curriculum is designed to develop children's knowledge and understanding of Design and Technology from the Early Years through to the end of Year 6.

In school, we use a variety of resources to support planning and teaching. The blocking of the subject allows children to focus their attention on developing the skills they need for producing high quality products which fully meet the design brief.

Children are taught new skills through clear modelling and focused practical tasks, having the opportunity to develop their skills and progress throughout their time in school.

Children are encouraged to explore, apply and evaluate their design and practical skills.

Throughout a unit, key vocabulary is introduced and revisited regularly to develop language acquisition, embedding as the topic progresses. Any key vocabulary will be displayed in the classroom - yellow for Tier 2 words and blue for Tier 3 words.

Where appropriate links are forged with food and nutrition, marketing, design and engineering experts, to bring the outside world into the children's classrooms and create memorable learning experiences.

Work is differentiated for children as necessary. This may be by task, through the level of support or by outcome.

Children with additional needs are included in whole class lessons and teachers provide scaffolding and relevant support as necessary. For those children who are working outside of the year group curriculum, individual learning activities are provided to ensure their progress.

Feedback is given on children's learning in line with our feedback policy. Formative assessment within every lesson helps teachers to identify the children who need more support to achieve the intended outcome and those who require greater stretch and challenge through additional activities.

At the end of a unit, the finished product allows teachers to see who has achieved the objectives and who needs further support. Summative assessments are recorded on Insight.

The Design and Technology leader has a clear role and overall responsibility for the progression skills in the subject across the school. Working with SLT, long term planning, resources and CPD requirements are analysed and regular feedback is provided to inform on progress and future actions.

IMPACT

As children progress through Willand School, they will:

- design and make a range of age-appropriate products with a good quality finish;

- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users and critique, evaluate and test their ideas and products and the work of others;
- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world;
- collaborate, learn from, understand and react to each other's perspectives and strengths;
- develop subject vocabulary and skill in choosing and using appropriate tools and techniques;
- understand and apply the principles of nutrition and learn how to cook;
- learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens.

Through the evaluation of past and present design and technology, children develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Our Design and Technology Lead is: Caroline Godfrey

Our Design and Technology Governor is: Tim Child

