

Design and Technology

Intent

At Westfields Infant School, we want children to develop the knowledge, skills and competencies to access the next stage in their learning. In addition to this we actively encourage and motivate the children to develop positive attitudes, skills and habits so that they are well equipped for the future.

Our intention for our design and technology (D&T) curriculum encourages children to develop their creative, technical and practical expertise, enabling them to perform everyday tasks with confidence. It also fosters children's enthusiasm for designing, making, modifying and inventing products which will enable them, one day, to contribute to our increasingly technological world.

Our design and technology curriculum is designed to provide children with many opportunities for learning through practical, hands-on experiences. Through relevant and meaningful projects, the children are challenged to use their problem-solving skills to find solutions to real life situations. Our goal is that our children will apply their developing knowledge and skills within construction play and their wider experiences. Through the designing process we encourage the children to consider their needs and those of others so that their learning has purpose and relevance. For the making process, this includes age appropriate joining methods and the safe use of construction and food preparation tools. As a school we promote thoughtful choices in the materials selected for construction with sustainability in mind. Our lessons encourage children to explore creative ways to achieve a goal and to see problems encountered as an opportunity for new and purposeful learning to be achieved. This resilience is the key to the children engaging fully in design and technology principles.

At Westfields Infant School, our design and technology curriculum covers key aspects of the <u>Statutory Framework for the Early Years Foundation Stage</u> where technology is used to enhance the seven areas of learning and is based on the <u>National Curriculum for Design and</u> <u>Technology</u>.

The National Curriculum for Design and Technology aims to ensure that all pupils:

- develop the creative, communication, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world;
- design purposeful, functional and appealing products for themselves and others;
- build and apply a repertoire of knowledge, understanding and skills in order to design;
- make high-quality prototypes and products for a wide range of users;
- critique, evaluate and test their ideas and products and the work of others;
- understand and apply the principles of nutrition and learn how to cook.

Implementation

Children are taught and develop designing, making and evaluating skills through a problemsolving approach with a focus on the acquisition of key technical vocabulary within a broad and balanced curriculum which features cross-curricular links where appropriate.

In Reception, a wide variety of design and technology skills are acquired through continuous and enhanced provision. Children are encouraged to be creative and innovative using construction toys and develop joining skills and fine motor skills. They are encouraged to use these skills to solve problems in their child-initiated learning. The EYFS curriculum includes elements of design and technology in the areas of learning of Physical Development and Expressive Arts and Design.

In Key Stage 1, following the KS1 National Curriculum for Design and Technology, purposeful projects with a problem to address are planned which develop children's interests and creativity. Through these projects, children learn about becoming a designer and the process of design; through exploration, planning, making and evaluating. They refine their skills and learn new ones in order to solve problems, develop resilience, enhance their work after the evaluation process.

At Westfields Infant School, children are taught to select and use appropriate tools safely and effectively to make purposeful products. They learn how to join materials in different ways and create products using a wide range of materials. The children are taught how to prepare simple food with an emphasis on cutting, slicing and peeling techniques. These skills are imperative for the children's development.

We encourage both independence and working collaboratively as a pair or team within our design and technology curriculum.

Impact

The impact of our design and technology learning can be seen within books, on classroom and whole school displays and by speaking to the children themselves. We measure the impact regularly through:

- Whole class and verbal feedback
- Recapping prior learning at the beginning of each lesson and plenary activities
- Teacher assessment, self-assessment and peer assessment of learning
- Completion of the Design and Technology Foundation Subject Assessment document at the end of each unit, identifying children not achieving expected standard and those exceeding
- Subject monitoring e.g. pupil conferencing, book monitoring and planning monitoring

By the time our children leave Westfields Infant School, they show natural curiosity and use this to discover how things work and are made. They build on this knowledge and with taught practical skills, they are able to solve problems following a set criteria and enjoy this process. Having had many opportunities to design, make and evaluate, they have increased confidence and resilience when problem solving, demonstrating the ability to articulate a project's successes and developmental points. Children can talk about eating healthily, hygiene and kitchen safety when working with food and they can use knives, peelers and graters safely to prepare food.