



Learning happily together

Design and Technology Subject Intent

At Lowe's Wong Infant School Design and Technology is used as a tool to develop inquiring minds. It is an inspiring, rigorous and practical subject where children learn to take risks and think independently to become resourceful, innovative, enterprising and capable citizens.

Throughout EYFS and KS1, we provide children with opportunities to use creativity and imagination to solve real and relevant problems within a variety of real-life contexts linked to the Enquiry Theme. Children are encouraged to express ideas, ask and answer questions in order to create and make inspiring designs and purposeful, functional products following design briefs. They will learn how to communicate effectively and explain their ideas through discussion and drawing. This will help to cultivate inquiring minds and create positive attitudes to learning which will in turn, build the children's confidence and resilience. Children will learn making skills by learning how to cut accurately, join items and use a variety of media to create functional products. They will have opportunities to create products using mechanisms such as wheels and axles, sliders and levers.

During their time at Lowe's Wong Infant School, children will have regular opportunities to learn and develop their skills in Food and Nutrition. They will learn about the Eatwell Plate and the importance of a healthy diet and lifestyle. Learning to prepare food is a crucial life skill that will enable children to feed themselves in later life so children will learn how to cut and chop safely and prepare foods in a safe environment.

Subject Implementation Plan

Timetabling

At Lowe's Wong Infant School, Design and Technology is timetabled on each year group's long-term plans.

In EYFS, opportunities are continually provided during 'Explore and Investigate' activities (child-initiated time). Children use their imaginations to create models and explore materials. Children also have opportunities throughout the year to make foods with adult supervision.

In KS1, Design and Technology is taught in one-hour slots throughout the year as blocks of learning.

How Design and Technology is taught

In EYFS, Design and Technology is delivered through planned, purposeful play and through a mix of adult-led and child-initiated activities following the Early Learning Goals.

In KS1, the National Curriculum is followed through well-structured sequences of learning in blocks of teaching that are linked to the Enquiry Themes.

Time should be built into each lesson so that children can routinely tidy and clean their workspace, putting equipment away and disposing of waste. This is a useful tool for building resilience and encouraging independence.

Resources

Resources are kept in the storeroom in the Sunshine Room, behind the curtain in Gold Room and in Indigo Room. Recycled materials should be used as often as possible.

Marking, feedback and assessment

Designs and written evaluations are marked with the RAG rated system and where appropriate a written comment can be given that remarks upon the vocabulary used or develops knowledge.

Verbal feedback that is constructive and meaningful should be given for practical work, during and after the build. Photographs should be taken of practical makes and stuck into the English & Topic books with an appropriate learning objective, RAG rated and acknowledged with a tick, stamp or smiley face. Written comments should be used when needed.

The same applies to Food and Nutrition activities.

Recording work

A clear learning objective should be shown on design and evaluation work, along with the short date. A photograph should be taken of the final product and stuck in the English and Topic book along side an objective.

Learning Environment

Health and Safety should be of paramount importance when completing practical activities. Children should be taught how to carry and use scissors – a risk assessment has been completed and held in the Design and Technology H&S file in Orange Room. When other tools are used teachers should be aware of the risks, e.g., if children use a hacksaw, then they should be supervised. Risk assessments for use of tools and apparatus are kept in the H&S file in Orange Room.

Equality and Diversity

All children have access to a diverse DT curriculum with extra adult support where necessary. All PowerPoints and resources should represent people from a variety of backgrounds and cultures and all children should be given equal and equitable opportunities.

Curriculum Enrichment

All Design and Technology activities should be meaningful, relevant and linked to the Enquiry Theme. Links should also be made to other parts of the curriculum where appropriate.

SEND

Design and Technology opportunities are open to all the children regardless of learning or physical needs. Support should be given through adaptive teaching which benefits all learners, not solely the children with additional needs.

To do this:

Allow sufficient time for the children to talk through and share their ideas (with an adult when available or through talk-partners)

Discuss and display key vocabulary together with its meaning in the classroom - practise saying it together and refer to it regularly during the lessons.

Use visual aids where appropriate to help learners to identify equipment, materials and products. Introduce each piece of equipment – name it, explain what it does, and model how it can be used or applied.

Take time to model and demonstrate each element of a process to allow learners to develop their understanding through a step-by-step approach. Repetition of the process is required to maximise the capacity to build up conceptual understanding.

Allow for movement breaks for those who have additional sensory needs or struggle with attention to give them time to self-regulate. These learners could be given jobs such as handing out resources. All learners should routinely clean and tidy away the equipment that they have used as this can help manage transitions as well as encourage independence and resilience.

Behaviour

During learning inputs and instruction, children should demonstrate good sitting by keeping still on their chair or on the carpet (as appropriate) and not touching the equipment. Children should demonstrate good looking by looking at the member of staff or the whiteboard. They should demonstrate good listening by being quiet, listening to instructions and exposition as well as joining in with class discussions and noting what their peers say. Depending on the Design and Technology activity, teachers will use the visual prompt cards – Talking Turtles, Whispering Whales and Silent Snails to determine the level of noise for a particular activity. Good behaviour will be rewarded in line with the school's behaviour policy.

It is expected that teachers will respond to any misbehaviour promptly during Design and Technology lessons by following the school's agreed behaviour policy of warnings, time for reflection and time outs.