



D&T Policy

INTENT

Rationale

At Lyng Primary School, our Design and Technology curriculum aims to inspire creativity, resourcefulness, and innovation in all our pupils, equipping them with the skills, knowledge, and understanding to become thoughtful designers and problem-solvers. We believe in fostering an environment where children feel confident to explore and experiment, developing their technical skills through hands-on, practical learning. By engaging with a range of design processes and materials, children are encouraged to think critically and develop solutions that reflect the diverse world around them. Our curriculum helps to nurture the whole child, empowering them to become resilient, reflective, and capable in both individual and collaborative settings.

Purpose of study

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they 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.

Aims

The national curriculum for design and technology aims to ensure that all pupils:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- 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
- 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.

(National curriculum, 2013).



Lily our D&T expert

Following the National Curriculum and Chris Quigley objectives enables teachers to recognise the key characteristics of designers in their lessons. These are then presented through Lyng Learning Animals to allow the children to access these in a fun and engaging manner. As chosen by the School Council, Lily the caterpillar is our expert designer in school.

Our D&T Curriculum is designed to allow pupils to develop the following key characteristics for a designer:

KS1	KS2
<p>As a designer I will aim to:</p> <ul style="list-style-type: none"> Be creative Show an understanding of user's needs Problem solve Work safely and hygienically with tools and select appropriate equipment to work with. Apply my maths knowledge Evaluate designs and products Work as part of a team and independently Challenge myself 	<p>In Design Technology I will aim to:</p> <ul style="list-style-type: none"> Work effectively and productively Carry out thorough research to develop a detailed knowledge of users needs Demonstrate a thorough knowledge of which tools, equipment and materials to use Apply my maths knowledge to a greater degree of accuracy Critically evaluate my design and creation Demonstrate a passion for designing and an awareness of technological innovations

IMPLEMENTATION

Planning

D&T planning is part of each topic's Medium Term Plan; teachers use the Chris Quigley milestones which are taken from attainment targets from the D&T programme of study for KS1 and KS2 in the National Curriculum.

Teachers then select these milestones to create a sequence of D&T learning, these are recorded in the yearly overview and Medium Term Plan. As D&T is a foundation subject, which can be applied across most areas of the curriculum, teachers aim to incorporate other curriculum areas such as history, writing, math and science wherever possible, as well as use their D&T projects as a WOW starter or stimulus in other curriculum areas.

To aid with the planning of D&T, teachers also have access to Young Chef, Twinkl and KAPOW that allows teachers to use their creativity and professional judgement, whilst ensuring the quality, integrity, and rigor of children's learning within D&T. Teachers also have access to STEM apps to enable every year group to teach and explore a STEM project.

LOTC (Learning outside the classroom) opportunities are planned for, alongside visits and visitors into school and these are identified on the Medium Term Plan and also the trip planner pro-forma.



Early Years Foundation Stage (EYFS)

In the Foundation Stage, Design and Technology makes a significant contribution to developing a child's understanding of the world through activities such as design, imagination, creativity and fine-motor skills. In early years, D&T is taught through daily conversations and adult-led/child-led activities. The children are encouraged to utilise materials that are readily available both inside and outside the classroom to design and create pieces of work that are either based on previous mini-teaching sessions or their own imagination. Children are encouraged to ask questions and explore how things work, investigate and use a variety of construction kits, materials, tools and products, develop making skills and handle appropriate tools and construction materials safely and with increasing control.

KS1

Key stage 1

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

When designing and making, pupils should be taught to:

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge


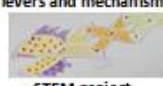

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

EYFS:

Year 1:

<u>Textiles</u> How do you make a puppet? 	<u>Construction</u> How do you build a house? 	<u>Food</u> How do you make a healthy smoothie? 
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Year 2:

<u>Textiles</u> How can I join materials together? 	<u>Moving monsters</u> How do levers and mechanisms work?  <u>STEM project</u> What does a car need to be eco-friendly?	<u>Food technology</u> How should I make a healthy wrap? 
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KS2

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

When designing and making, pupils should be taught to:

Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities






Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world

Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products.

Year 3:

DT	Construction	Food	STEM project	Textiles
	How did early humans construct their shelters? 	How can we prepare a healthy lunch? 	How can we improve houses in our community? 	How could a Roman soldier carry their treasured possessions? 




Year 4:

Construction	Materials	Food	Textiles	Electricity
How can we make our structure stronger? 	How can I make my card pop-up? 	How can we improve our biscuit recipe? 	How can I make my blanket unique? 	How does a bulb light up? 

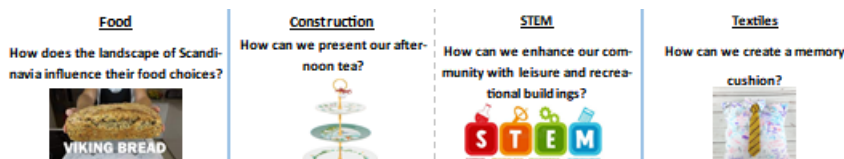
Year 5:

Forces and space: Imbalanced forces
How do forces impact objects?



Textiles	Woodwork	Food
How can I use sewing skills effectively to create a stocking? 	How can I construct a simple labyrinth using wood? 	How can recipes be adapted? 

Year 6:



CPD

Where appropriate, members of staff, usually the coordinator, are sent on relevant courses. The content of these courses is then shared with the rest of the teaching staff. The impact of this training is then monitored and recorded through the subject leader's leadership log. KAPOW and Twinkl also provide teacher videos to support with the teaching of D&T.

Marking and feedback

D&T lessons are marked in accordance with the marking policy (see marking policy).

Resources

Lyng Primary School is committed to providing a sufficient range of resources to enhance the successful teaching of D&T. The D&T coordinator liaises with all staff to ensure that any resources they require to deliver a creative, exciting D&T curriculum are available. These resources are stored in a central location for all staff to access and are regularly replenished.

Monitoring

D&T is part of the foundation subject monitoring cycle, as part of this cycle lessons and books are monitored. Pupil voice is captured through regular discussions and meetings with the school council representatives. Staff voice is also valued through discussions in staff meetings and the completion of questionnaires to identify strengths and areas for future development.

SEND

At Lyng Primary we ensure that all pupils have access to a broad and balanced curriculum. All SEND pupils take part in D&T lessons, however reasonable adjustments may be made to ensure their individual needs are met. This may be through differentiated tasks, extra teacher support, or having access to alternative tools/materials better suited to their needs. Where possible visits and trips are organised to provide pupils with hands on experiences and opportunities to explore how things work.

Higher attainers

Children who have a keen interest in D&T or show a good D&T skills in lessons are challenged using 'Think like a designer' questions as well as through adaptive teaching. Higher attaining children are also EXPERTS during lessons and help their peers.

IMPACT

Assessment and Moderation

Children's progress in D&T is assessed through success criteria in lessons with the progress against these informing the formative, verbal feedback. In addition to this at the end of every term the class teacher is expected to upload judgements of their progress and attainment to SIMS Tracker system. Progress and retention of knowledge is monitored through quizzing and revisiting vocabulary through the word wallets in every classroom.

Children are assessed as one of the following:

Celebration of learning through celebration assemblies and exhibitions

Impact is measured through the learning journey in books and by pupil voice. The journey in books should reflect both the progress in skills and knowledge.

At the end of every topic in school a celebration assembly is held, where the skills, engagement and progress is showcased to the rest of the key stage. This is an opportunity for children to share their D&T projects with their peers. Children's retention of key vocabulary and knowledge is also celebrated through the Giant Knowledge Quizzes where expert pupils are rewarded with certificates.

Starting in Summer 2025, Lyng Primary School will host an annual Art, Design and Technology Exhibition in which children's Art and D&T work will be specifically celebrated. Each class will visit the exhibition to appreciate the work of their peers across school and the parents/carers of children who have work displayed will be invited to view their child's project and share in their success.

What Lyng pupils think about Design and Technology:

Year 1: "Making things in DT is fun. I like cutting and sticking, it makes me proud."

Year 2: "DT is... exciting! I get to build things and use cool tools. It makes me feel clever!"

Year 3: "I love DT because I can make things work! Building things that move is fun, and I feel like a real inventor."

Year 4: "DT is all about solving problems. It helps me think hard and create something new that I'm proud of."

Year 5: "DT lets me take my ideas and turn them into real things. I like making things that people can actually use."

Year 6: "DT is my favourite subject because I can design and make things from scratch. It feels good to see my ideas come to life!"