



# THE LIMES

## PRIMARY ACADEMY

# Design Technology Curriculum Policy

*“Growing Learners for Life”*



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<b>Ratified by:</b>	<i>G. McCurday</i> Date: 16/03/2021
<b>On behalf of:</b>	Local Governing Body

Collaboration Curiosity Responsibility Resourcefulness Resilience  
Reflectiveness



## Statement of intent

At **The Limes Primary Academy**, we believe that, through the study of design and technology, children learn to design and make purposeful, functional products.

Through this curriculum, children will consider and evaluate existing products and solutions and build upon these ideas, implementing a wide range of skills, learning to select tools, and equipment, applying techniques and processes to forge a product, through the application of practical tasks.

Our children are the lead designers in steering their own journey through the processes of designing, making, evaluating, applying techniques and the study of cooking and nutrition. This policy sets out the framework in which the design and technology curriculum will be taught.

### 1. Legal framework

1.1. This policy has due regard to all relevant legislation and statutory guidance including, but not limited to, the following:

- DfE (2014) 'National curriculum in England: design and technology programmes of study'

### 2. Roles and responsibilities

2.1. The lead designer, known as the 'Lead Designer' will be responsible for:

- Developing, resourcing and reviewing this policy.
- Planning, instigating and monitoring teaching programmes.
- Liaising with colleagues, including the SENDCO, to differentiate teaching programmes in accordance with the needs of individual pupils.
- Working with other staff to teach the subject content.
- Keeping staff informed of visits and courses.
- Facilitating the assessment of pupils' work.
- Keeping up-to-date with best practice regarding design technology
- Providing guidance, including INSET training staff, as part of their ongoing professional development.
- Celebrating and promoting the design technology curriculum and the work of pupils throughout the school.

2.2. Staff teaching design technology will be responsible for:

- Contributing to the development of this policy and teaching programmes, with the lead designer.
- Developing schemes of work and lesson plans in line with this policy and the objectives of the art curriculum.
- Facilitating the teaching of the design technology curriculum, including coordinating activities and resources within their specific areas.
- Assessing and recording pupils' progress and keeping the lead designer apprised of this.
- Providing feedback to parents on pupils' progress at parents' evenings and other meetings.
- Attending and contributing to any INSET days organised by the lead designer.
- Keeping apprised on current affairs and best practice on their design technology curriculum, and applying this to their schemes of work.

### 3. Teaching

- 3.1. The lead designer will be responsible for overseeing the planning, resourcing and monitoring of the school's design technology programme.
- 3.2. The subject matter covered in design and technology reflects the requirements of the national curriculum.
- 3.3. Focus Education Scheme of work "Design and Technology - The Learning Challenge Curriculum" provides the ideal content to meet the teaching and learning aims within this policy and supports the ethos of our school.
- 3.4. Special focus will be paid to the teaching, scaffolding and sequence of progression of skills inherent in the entire design and technology curriculum taught each school year.
- 3.4. The design and technology programme will be delivered by all staff in a range of teaching and learning situations, with respect to the needs of individual pupils.

### 4. Curriculum

- 4.1. The aims of the design and technology curriculum are to ensure pupils develop and make progress with their skills through:
  - designing, making, evaluating, developing technical knowledge, cooking and nutrition
  - taking part in Learning Challenges which develop skills in construction, mouldable materials, mechanism, textiles, cooking and nutrition, materials
  - Studying each of the Learning Challenge focus areas, every school year as a blocked sequence of learning each half term.

#### KS1

- 4.2. Pupils will 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

##### **Cooking and nutrition:**

- As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Pupils should be taught to: use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

## KS2

4.3. Pupils will be taught about:

### **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.

### **Cooking and nutrition:**

- understand and apply the principles of a healthy and varied diet
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

## 5. Assessment

5.1. Assessment in design technology will be undertaken as part of a broader evaluation of pupil progress measured against specified assessment criteria.

5.2. The **lead designer** will ensure that assessment:

- Is embedded as an essential part of teaching and learning.
- Involves sharing learning objectives and success criteria with pupils.
- Aims to help pupils to know and recognise the standards they are aiming for.
- Involves pupils in peer and self-assessment.
- Provides subject-specific feedback which leads pupils to recognising their next steps and how to take them.
- Involves both teacher and pupils reviewing and reflecting on assessment data.

## **6. Differentiation**

- 6.1. The school recognises the fact that in all design technology classes there are pupils of a variety of attainment levels, and we seek to provide suitable learning opportunities for all pupils by scaffolding for those children who need it and providing challenge through providing opportunities for deepening knowledge and understanding.

## **7. Monitoring and review**

- 7.1. The lead designer will meet with the teaching team at least once a term, to review and evaluate the design technology work within the school.
- 7.2. This policy will be reviewed annually to ensure that it complies with the latest legislation, guidance and best practice.
- 7.3. The next scheduled review date of this policy is March 2022.