# Design and Technology Policy

| 1 | Summary | Design and Technology Policy | | | |
|---|---|---|---|---|---|
| 2 | Responsible person | Mollie Harrison | | | |
| 3 | Accountable SLT member | Jamie Wegg | | | |
| 4 | Applies to | ☒All staff<br>☐Support staff<br>☐Teaching staff | | | |
| 5 | Who has overseen development of this policy | SLT | | | |
| 6 | Who has been consulted and recommended policy for approval | LGB | | | |
| 7 | Approved by and date | Autumn 2023 – Governing board. | | | |
| 8 | Version number | 1 | | | |
| 9 | Available on | Every | ☐Y<br>☐N | Trust website<br>Academy website<br>SharePoint | ☐Y ☒N<br>☒Y ☐N<br>☒Y ☐N |
| 10 | Related documents (if applicable) | | | | |
| 11 | Disseminated to | ☐Trustees/governors<br>☐All staff<br>☐Support staff<br>☐Teaching staff | | | |
| 12 | Date of implementation (when shared) | September 2023 | | | |
| 13 | Consulted with recognised trade unions | ☐Y ☒N | | | |

## **Contents**

## Aims and objectives

Design and Technology prepares children to take part in the development of our rapidly changing world.  The subject encourages children to become autonomous and creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas, and eventually making products and systems.

Through the study of Design and Technology they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as of functions and industrial practices. This allows them to reflect on and evaluate present and past design and technology, its uses and its impacts.

Throughout Design and Technology, pupils will always consider that they are creating something, for somebody for some purpose.

The objectives of teaching Design and Technology are:

- To develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making things.
- To enable children to talk about how things work, and to draw and model their ideas.
- To encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures.
- To explore attitudes towards the made world and how we live and work within it.
- To develop an understanding of technological processes and products, their manufacture and their contribution to our society.
- To foster enjoyment, satisfaction and purpose in designing and making things.

## Whole School Curriculum Intent

At Mountbatten Primary School we carefully design, plan and implement an ambitious curriculum to provide breadth, depth and balance for every pupil.

Our balanced approach to the curriculum is not at the expense of high standards in core subject areas and ensures that all pupils access the full curriculum.  High standards and enabling all pupils to reach their potential is of vital importance if they are to succeed at the next stage of their education, and to go on to achieve in their chosen career path.

Through careful sequencing of the curriculum, we build in many opportunities to build on prior learning of knowledge, skills, vocabulary and understanding in every subject. This ensures that pupils are able to make links between prior learning and new learning; and gradually develop a deeper understanding of the skills and processes within subject, at their own pace and in the best way possible for each individual child.

Staff have adapted and provided detailed, embedded schemes of work which provide them with an in-depth plan and a range of products they can make and this helps the children to understand the designing and creating process. These have been created to support children's knowledge and to help them build on previous experience.

Our full and rich curriculum, with its excellent range of experiences, ensures that every pupil at Mountbatten Primary School makes excellent progress academically and personally, while ensuring that every child is given the opportunity to shine and flourish.

## Subject Curriculum Intent

The Design and Technology curriculum is designed to equip pupils with the skills to design, make to solve real and relevant problems

- Understand the design process of research, plan, select, make and evaluate
- Understand how to evaluate existing products and be able to evaluate own products
- Pupils able to develop imaginative thinking which will enable them to talk about what they like and dislike when designing and making

- Pupils given the opportunity to work collaboratively to discuss how things work, and to draw and model their ideas before selecting the appropriate tools and techniques

- Give an understanding of technological processes and products, their manufacture and their contribution to our society

- Themed Design and Technology weeks take place once a term to enable all pupils to apply and refine taught skills

## **Subject Curriculum Implementation**

The implantation of the Design and Technology curriculum is through a number of elements, outlined below:

- LTP
- MTP
- Curriculum knowledge
- Subject specific skills
- Subject specific vocabulary
- Recap of prior learning
- Finishing thinkers/challenges
- Assessment
- Teacher subject knowledge
- Resources
- Schemes of work

## **Subject Curriculum Impact**

- Outcomes of pupils in each year group
- Design and create products that meet a given design criteria
- Foster enjoyment, satisfaction and purpose in designing and making things; and understanding how things work
- All pupils to have a wide range of transferable skills they can use in the world beyond primary school
- All pupils to be able to draw upon knowledge of tools, materials and techniques to make appropriate choices

**Subject provision across the school**

**EYFS**

Pupils in EYFS are encouraged to develop skills, knowledge and understanding that help them to make sense of their world. This learning forms the foundations for later work in Design and Technology. These early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products, developing making skills and handling appropriate tools and construction material safely and with increasing control.

We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion. These activities, indoors and outdoors, attract the children's interest and curiosity.

**Key Stage 1 and Key Stage 2**

The teaching of design and technology across key stage 1 and 2 follows the National Curriculum. It is implemented in the following sequence of sessions:

1) Evaluating Existing Products

2) Focused Practical Activity

3) Design

4 and 5) Make sessions

6) Evaluating their Product.

At Mountbatten Primary School we follow the National Curriculum for Design and Technology and children in Key Stage 1 and 2 will learn how to design, make, evaluate and use technical knowledge. They will be taught to use a range of materials including construction, textiles and ingredients.

In Key Stage 1, pupils will be taught how to use mechanisms in products.  In Key Stage 2, pupils will be taught how to use mechanical and electrical systems in their products and using computer programming to monitor and control products.

Planning includes thought to 6 principles:

1)     User

2)     Purpose

3)     Functionality

4)     Design Decisions

5)     Innovation

6)     Authenticity


We have developed a Progression of Skills document to inform our planning and to ensure the children develop a sound knowledge of the application of materials, tools and techniques and are able to build on previous knowledge and skills.

## Assessment for Learning

Teachers will assess children's work in Design and Technology by making teacher assessment judgements during lessons.  Evidence may be seen in books, on 2D displays and most commonly though 3D models and photographs of children's work.

Once a unit of work has been completed, a teacher assessment judgement is made about the work of each pupil, children are given more freedom to explore their design and creativity and it is the pupil, peers and teachers who evaluate the product created.

## Resources

The school has a wide range of resources to support the teaching of Design and Technology across the school. Classrooms have a range of basic resources, with the more specialised equipment being kept in the Design and Technology store.

## Health and Safety

In Design and Technology, the general teaching requirement for health and safety applies. Children are taught how to follow proper procedures when using tools and materials and for food safety and hygiene.

## Role of the Subject Leader

It is the responsibility of the subject leader to monitor the standards of children's work and the quality of teaching and learning in Design and Technology.   Monitoring may involve looking at planning, scrutinising work, lesson observations and pupil voice. Pupil voice is valued and helps to inform the vision and aims of Design and Technology across the school, pupils are interviewed to gain an insight into the subject. The subject leader produces an annual action plan for the development of Design and Technology and also reports termly to the governing body.