Richmond Avenue Primary and Nursery School Subject Rationale



Design & Technology

Ethos

Our aim is to create a rich learning environment, enabling every pupil to fulfil his or her potential. We are committed to the highest possible educational standards, with a matching concern for the personal growth and development of each pupil.

Why is Design and Technology taught as it is at Richmond?

The School motto is 'Learning and Achieving Together.' We believe that all pupils can make positive progress to achieve the relevant skills, knowledge and develop creative curiosity throughout all elements of Design and Technology. Pupils will develop confidence and proficiency in this subject, preparing for the next stage of their education. Design and Technology encourages pupil's creativity, it also helps reinforce and extend the strong links between Math and English as pupils will have opportunities to apply their learning in a practical context.

Intent

Our intent is to provide pupils with opportunities to develop skills, knowledge and understanding associated with designing and making functional products. We feel it is vital to nurture creativity and innovation through design, and by exploring the designed and made world in which we all live and work. Our intent is to achieve this by giving pupils opportunities to develop their skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food.

<u>Implementation</u>

Design and Technology is delivered across all stages of the school. Each year has well defined, progressive objectives to meet. Much of the learning undertaken is linked to the other areas of the curriculum. We aim to provide our children with a variety of DT opportunities:

- Pupils have the opportunity to pursue a range of design projects over each academic year which cover each of the media through which DT is explored and taught.
- The core principles of DT are at the heart of all learning. We follow the process of research, design, making and evaluating.
- Pupils are supported to be skilled and confident in their use of a wide range of age appropriate tools and materials.
- Pupils are supported to be confident when planning and designing projects by exploring ways of creating and making items, self-evaluating their ideas and modifying their plans accordingly.
- Teachers employ a range of assessment strategies to gather evidence of pupils' understanding and ability.
- Pupils engage with the processes via discussions with their teacher and peers to identify what they
 have achieved and what their next steps might be.
- Pupils make links between ideas (using models to explore and extend their ideas) and apply knowledge and understanding of design and technological ideas to familiar phenomena and everyday things.

Early Years

This provides an important foundation for the development of design and technology capability. It extends and broadens the child's home experience, enabling the pupil to explore a wide variety of materials and to

develop skills with simple tools. Some of these experiences will be structured whilst others will arise from their exploration of play and the pupils will be encouraged to talk about their observations and ideas with the adults working with them.

Key Stage One

Pupils will carry out more structured, enriching activities based around a cross-curriculum theme or a specific project that meets the objective requirements. They will explore and develop skills in designing, making and evaluating a product.

Key Stage Two

Pupils will build upon their knowledge and skills they developed in Key Stage One. Pupils will base their design ideas and products on a specific Key Stage Two topic/theme/specific project that meets the objective requirements. Pupils will also build upon and develop their technical knowledge in areas such as:

- Creating, researching, and developing ideas based on a specific design criteria and audience
- Generating and communicating ideas through sketches, diagrams, prototypes and IT
- Selecting appropriate tools and materials from a wide range
- Discussing and evaluating their finished products/work

Impact

The impact of the DT curriculum is that all pupils have the opportunity to develop their 'research, make, and evaluate' skills over the course of their time at Richmond, which can be applied in their future education and lives.

Through a diverse range of enriching, inspiring and challenging projects, the pupil's skills and knowledge progress alongside an awareness of how things are designed and made.

This process is embedded in many aspects of the wider curriculum so that pupils are able to see the application of Design and Technology in different contexts.