Design Technology at St James CE Primary School

Intent

Design Technology aims to enable pupils to actively contribute to the creativity, culture, wealth and well-being of themselves and their community. It teaches children how to take risks and so they become more resourceful, innovative, enterprising and capable.

Curriculum

Knowledge/Skill development:

Significant figures from the world of Design Technology are promoted to pupils in units to give purpose to the subject and build knowledge of how the world has been moved forward from advances in Design Technology.

Pupils are exposed to relevant products to investigate and deconstruct in initial stages of each journey. This enables them to see the mechanics of product and link key vocabulary practically.

Focussed tasks provide opportunities to demonstrate techniques to pupils. It supports them to create their own mock ups to gain a better understanding of their product and function.

Pupils are actively encouraged to evaluate in each stage to critically reflect upon design and ideas to further improve outcomes.

Purposeful designs are made linked to a design brief. These showing knowledge of technical features and a planned process of construction.

Final evaluations are made against design criteria to reflect upon the success of the product fitting it's purpose.

Concept development:

They key concepts of Design Technology are reflected in each learning journey. The Design Technology process applied to all of our learning journeys enables the pupils to gain a holistic understanding of product design, purpose and critical evaluation to amend and improve outcomes.

Sequencing of content:

Prior knowledge of techniques and skills are revisited at the beginning of each journey. This ensures teachers build progressively on the specific skills of Design Technology whilst consolidating any necessary areas. Units build progressively over each year groups to enable pupils to revisit and apply previous skills as well as new ones .through the production of more technical projects.

Implementation

How is it taught?

The whole school overview of Design Technology shows all staff the topic areas covered in each year group and how the skills of each area progress through the key stages. Year group teachers are provided with an overview of the specific topics that need to be covered over the academic year for their age group and details of significant people, products and mechanics required.

Teachers have detailed unit planners to provide a clear journey of teaching. These inform them of previous knowledge to activate and the core content that needs to be taught to extend knowledge. This content includes investigation and deconstruction of products, key vocabulary, focussed tasks to demonstrate techniques, a purposeful design brief, a designing phase applying knowledge of technical features and stages of construction the process and regular reflection and evaluation at each stage.

The definitions of key vocabulary are taught through both practical experience and theory.

The design process is recorded and evaluated in Curriculum books which provides pupils with a point of referecce and reflection throughout learning journeys.

Support:

Children are facilitated to deconstruct, explore and analyse real products practically to gain knowledge through kinaesthetic learning.

Clear timelines of production are developed to give pupils a step by step organised process for producing final products.

Reflection and evaluation gives pupils to opportunity to amend their work using experiences of their own and of their peers as a support.

Visual aids are used as points of reference in such areas as the mock up, design and construction phase.

Impact

How do we know our children have learnt more and remembered more?

The design technology process enables pupils to learn new skills, practise skills and apply those skills.

Pupils are exposed to new vocabulary which they then use throughout the journey.

Within the journeys retrieval practice is carried out in different forms.

Pupils use knowledge and apply it in each part of the journey (investigate and evaluate activities, focused tasks and design, make and evaluate assignment)

Previous learning is linked to new learning.

What are we aiming for?

Pupils to develop their imagination and creativity.

Pupils to develop a range of practical skills.

Pupils to deign purposeful products with a user in mind.

Pupils to become risk takers and develop problem solving skills.

Pupils to become critical thinkers allowing them to reflect on their work and consider ways to improve upon their final product.

Pupils to draw upon skills from other subjects such as science, mathematics and computing.

Pupils to understand the importance of design technology in the context of the wider world.

Pupils to understand that all human-made products have been designed with a purpose in mind.

Older pupils to know a range of significant figures who have contributed to the world of design and technology