Federation of Beckwithshaw, Kettlesing and Ripley Endowed Primary Schools

Curriculum Intent

Design Technology

Design and technology is an inspiring, rigorous and practical subject. It requires 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 across the curriculum, 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.

Aims

Our 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.

Implementation

All teaching of DT should follow the design, make and evaluate cycle. The design process should be rooted in real life, relevant contexts to give meaning to learning. While making, children should be given choice and a range of tools to choose freely from. To evaluate, children should be able to evaluate their own products against a design criteria. Each of these steps should be rooted in technical knowledge and vocabulary. DT should be taught to a high standard where each of the stages should be given equal weight. There should be evidence in each of these stages which should also show clear progression across the key stages.

In EYFS this looks like…

- Having a range of materials for children to construct with.
- Encourage them to think about and discuss what they want to make.
- Discuss problems and how they might be solved as they arise.
- Reflect with children on how they have achieved their aims.
- Having different techniques for joining materials, such as how to use adhesive tape and different sorts of glue.
- Having a range of materials and tools and teach children to use them with care and precision. Promote independence, taking care not to introduce too many new things at once.
- Define colours, shapes, texture and smells in their own words.
- Handling equipment and tools effectively.
- The safe use and exploration of a variety of materials, tools and techniques.
- Experimentation with colour, design, texture and function;
- Using what they have learnt about media and materials to think about different uses and purposes and representing their own thoughts and feelings through Design Technology.

In KS1 this looks like..

Design:

- Design should be rooted in real life, relevant contexts to give meaning to the learning;
- Planned through appropriate and consistent formats: drawing, templates, talking and mock-ups;

Make:

- Children should be given a range of tools for their project to choose from;
- Children should use a wide range of materials and components: textiles, construction equipment and ingredients.

Evaluate:

- Evaluate existing products;
- Evaluate their own products against design criteria.

In KS2 this looks like:

Design:

- Rooted in real life, relevant contexts to give meaning to the learning;
- Researched deigns based on functional, appealing products with purpose;
- Planned by appropriate methods: annotated sketches, cross-sectional diagrams, prototypes, pattern pieces and computer aided design.

Make:

- Children can select from a wider range of tools than KS1;
- Children should use and select from a wider range of materials and components: textiles, construction equipment and ingredients.

Evaluate:

- Evaluations should be in comparison to existing products;
- Children should evaluate against a design criteria;
- Children should understand how key events and individuals have helped shape design and technology globally.

Impact

The Design and Technology Curriculum will:

- Provide opportunities for all children to collaborate, learn from, understand and react to each other's perspectives and strengths.
- Create an enjoyable, engaging academic outlet for children who may find traditional subjects challenging.
- Give children an insight into how physical products can be created and an understanding of basic concepts used in everyday items.
- Set a firm foundation of subject skills to create a smooth transition to KS3.
- Children will move through, and leave the school, with the confidence that they can design, make and change products and items and belief that qualifications and careers incorporating D&T are within their capability