Brinsley Primary and Nursery School

Learn today, be a star of tomorrow

School Policy for

Design and Technology

Person Responsible: F Bates

To be reviewed: Jan 2024

At Brinsley, we believe that all our children are stars and have the opportunities to shine, work as a team, achieve and respect others, whilst having a smile on their face and these values are a vital and integral part of our DT curriculum. The DT curriculum allows our children to exercise their creativity through designing and making. They are taught to combine their designing and making skills with knowledge and understanding in order to design and make a product. Skills are taught progressively to ensure that all children are able to learn and practice in order to develop as they move through the school. Evaluation is an integral part of the design process and allows children to adapt and improve their product; this is a key skill, which they need throughout their life. DT also allows children to apply the knowledge and skills learned in other subjects, particularly Maths, Science and Art.

Why do we teach DT the way we do?

When determining the DT curriculum for the children of Brinsley Primary School we ensure that it aligns with the current National curriculum and Early Learning Goals and ensure children have the opportunities to achieve the skills outlined below:

Early Leaning Goals

Physical Development: fine motor skills

- Use a range of small tools, including scissors, paintbrushes and cutlery.

Expressive Art and Design: Creating with materials

- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used.

National Curriculum

Key Stage One

When designing and making pupils should 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.

Key Stage Two

When designing and making children should be taught to:

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

Key Stage One

Pupils should be taught to:

- Use the basic principles of a healthy and varied diet to prepare dishes
- Understand where food comes from.

Key Stage Two

Pupils should be taught to:

- 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.

The DT Curriculum:

At Brinsley, we intend that children should master Design and Technology to such an extent that they can go on to have careers within Design and Technology and make use of design and technology effectively in their everyday lives.

In EYFS, opportunities are provided for children to be creative through our Expressive Arts and Design planning. Children have the opportunity to use a range of tools and materials to explore and express their creativity through both child-led and focus activities. These activities are available for the children to access in our daily classroom provision. Teachers also plan opportunities for children to develop their skills in handling and using tools such as scissors, through physical development planning.

In Key stages One and Two, we use Kapow Primary Design and Technology as a driver to ensure our children are taught Design and Technology in a way that ensures progression of skills, and follows a sequence to build on previous learning.

Our children will gain experience and skills of a wide range of formal elements of design and concepts of technology in a way that will enhance their learning opportunities, enabling them to use design and technology across a range of subjects to be creative and solve problems, ensuring they make progress.

Children's work and pictures of their work will be stored in topic books in KS1 and in art books in KS2.

We want to ensure that Design and Technology is embedded in our whole school curriculum and that opportunities for enhancing learning by using design and technology are always taken.

Staffing/Staff development:

The class teacher has the responsibility to teach the children a broad DT curriculum and assess the children's achievements within DT, against the national curriculum objectives. Class teachers are also responsible for mapping out when design and technology is delivered. This may be a scheduled weekly lesson or completed as a block over the course of one or two weeks.

All staff take part in professional development to ensure secure subject knowledge within all areas of DT. Staff should be comfortable and competent in the area of design and technology they are teaching and they should indicate where they feel they need support.

Equality:

All aspects of DT are taught in such a way as to ensure all children can access the learning. This is achieved through careful planning and assessment procedures to ensure all children can access the skills being taught.

How do we measure the impact of DT provision?

Records of assessment:

Our children enjoy and value Design and Technology and know why they are doing things, not just how. Children will understand and appreciate the value of Design and Technology in the context of their personal wellbeing and the creative and cultural industries and their many career opportunities.

Progress in Design and Technology is demonstrated through regularly reviewing and scrutinising children's work to ensure that progression of skills is taking place. Namely through:

- Looking at pupils' work, especially over time as they gain skills and knowledge
- Observing how they perform in lessons
- Talking to them about what they know.

Teachers will report a level for each child on O Track at two data points within the year- midyear (February) and at the end of the school year.

At Brinsley, there will be a range of children's work evident around school to show the impact of our DT curriculum. Classroom displays will reflect the children's sense of pride in their DT work and demonstrate creative outcomes

achieved by the children, across the wider curriculum. The school environment will also celebrate children's achievements in DT and demonstrates the subject's high status in the school, through DT projects and DT weeks. Staff will also share examples of children's work on Class Dojo, Facebook and our website.