Design Technology Policy

2021/22

1. Curriculum Statement

Intent

Design and Technology is an inspiring, rigorous and practical subject. Design and Technology encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team.

At St. Bede's, we encourage children to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. We aim to, wherever possible, link work to other disciplines such as mathematics, science, engineering, computing and art. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become innovators and risk-takers.

Implementation

Through a variety of creative and practical activities, we teach the knowledge, understanding and skills needed to engage in an iterative process of designing and making. The children work in a range of relevant contexts (for example home, school, leisure, culture, enterprise, industry and the wider environment).

When designing and making, the children are 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 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
- understand and use electrical systems in their products
- apply their understanding of computing to program, monitor and control their products

Key skills and key knowledge for Design and Technology have been mapped across the school to ensure progression between year groups. This also ensures that there is a context for the children's work in Design and Technology; that they learn about real life structures and the purpose of specific examples, as well as developing their skills throughout the programme of study.

Design and technology lessons are also taught as a block so that children's learning is focused throughout each unit of work.

Impact

We ensure the children
- 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 and 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

Children will design and make a range of products. A good quality finish will be expected in all design and activities made appropriate to the age and ability of the child Children 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. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

2. Teaching and Learning

Design and Technology will engage the children in a broad range of designing and making activities which involve a variety of methods of communication; speaking, designing, drawing, assembling, making, writing and using computer technology. Projects are taught in blocks which allows for more effective learning in which teachers can focus on teaching and developing DT skills, allowing children to develop their ideas and techniques. Units of work have been selected and planned to ensure a balance of materials, skills, knowledge and understanding throughout each Key Stage. Units of work are planned to include designing and making assignments supported by focused practical tasks or skills teaching and work involving reviewing existing products. All children should have a breadth and balance of experience.

3. Assessment

Children's skills will be assessed and developed by the teacher during lessons and through critical discussion at the end of each unit. No formal assessment is recorded. Displays within the classroom and hall areas will reflect a range of work across key stages, to celebrate and exhibit the work of children, of all abilities.

4. Planning and Resources

DT plans and resources, produced by the Design and Technology Association, are available to staff. Teachers also design schemes of work to support specific bespoke projects in line with their current topic. Teachers will either select materials needed to complete a DT project from the DT Resource area, purchase any materials needed for the design, construction and evaluation of a project or decide to use recycled materials or junk modelling to help complete a project. Children are taught to use tools and equipment in a sensible, safe and efficient manner.

5. Organisation

Design and Technology units of work are planned to include a balance of designing and making assignments, teaching key skills and work involving reviewing existing products. Links with other subject areas are made where appropriate.

6. EYFS

The staff team will plan for children to experience creative opportunities and develop key skills and techniques within the EYFS curriculum. There will be a focus on developing fine motor skills and learning how to plan, design and produce the finished project. Reception will be, where appropriate, included in whole school projects, workshops, events and competitions associated with Design and Technology.

7. KS1 and KS2

Teachers will plan for lessons so that children will learn to design purposeful, functional, appealing products for themselves and others based on design criteria and to communicate their ideas through talking and drawing. They learn to select from and use a range of tools and equipment to perform practical tasks and to choose from a wide range of materials and components. They also learn to explore and evaluate their design and product.

8. Equal Opportunities

Whole school policy on equal opportunities will be adhered to in Design and Technology activities. Teachers ensure that children have access to the range of Design and Technology activities. Children are encouraged and supported to develop their Design and Technology capability using a range of materials. Children with special needs or disabilities will be differentiated for and supported appropriately, to ensure development of skills and equal access to the Design and Technology curriculum.

9. Inclusion

All children will be supported through differentiation, adaptation or adult support, to enable equal access to learning in Design and Technology.

10. Role of the Subject Leader

 The subject leader will monitor the teaching and learning of Design and Technology across the school; ensuring a high quality, broad and stimulating curriculum. They will also maintain a range of good-quality materials and tools, enabling teachers to resource and teach effectively.

11. Parents

We encourage all parents and carers to support and assist with whole school events and Design and Technology projects.

This policy will be reviewed annually by the Governing body

Policy Agreed: Spring 2022 (No changes)

Policy Review: Spring 2023