

**Wibsey Primary School**

**Design Technology Policy**

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| Agreed by GovernorsDate:  | Full Governors |  |
| Finance and General Purposes |  |
| Teaching and Learning | x |
| Signed on behalf of Governing Body by Chair of Committee: | Liza Danial |  |
| Approved  | 27.06.22 |  |
| Review | June 2025 |  |

**Rationale**

At Wibsey Primary School Design and Technology is an inspiring, rigorous and practical subject. High-quality design and technology makes an essential contribution to the creativity, culture, wealth and development of society: Design and Technology education develops employability and prepares children for their part in our rapidly changing world.

The subject encourages children to become independent and creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas, and making products. Throughout Design and Technology, pupils will always consider that they are creating something, for somebody for some purpose.

The objectives of teaching Design and Technology at Wibsey Primary School are to:

• Develop imaginative thinking in children and to enable them to be discriminating when designing and making things;

• Enable children to explore how things work, and to verbalise, draw and model their ideas;

• Encourage children to select appropriate materials, tools and techniques for making a product, whilst following safe procedures;

• Explore attitudes towards the ‘made’ world and how we live and work within it;

• Develop an understanding of technological processes and products, their manufacture and their contribution to our society;

• Foster enjoyment, satisfaction and purpose in designing and making things.

**Whole School Curriculum Intent**

At Wibsey Primary School, our curriculum has been carefully designed so that it is engaging, providing breadth, depth and access to the full curriculum for every pupil. The Cumulative Curriculum is structured and sequenced to enable all pupils to be able to make links between prior learning and new learning. It lays out the cumulative acquisition of the knowledge, skills and concepts that pupils need to be successful. Our curriculum is aspirational and personalised to ensure that it provides opportunities for all; so by the end of their primary education our pupils are well-equipped for the next stage of their education.

**Subject Curriculum Intent**

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering both their own and others’ needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art.

As pupils progress through Wibsey Primary School, they use their creativity and imagination to design and make products within a variety of contexts. They learn how to take risks, become resourceful and innovative and evaluate past and present designs which, in turn supports pupils in developing a critical understanding of design impact on daily life and the wider world. With high-quality design and technology education, children will be able to contribute through creativity.

The Wibsey Primary School Cumulative Curriculum for Design and Technology:

* equips pupils with the knowledge and skills to design and make;
* lays out the design process of research, plan, select, make and evaluate;
* develops pupils’ understanding of how to evaluate existing products and be able to evaluate their own products;
* develops the skills and confidence appropriate to manipulating a wide range of materials, tools and the economic management of resources;
* provides an activity-based experience for all pupils which develops imaginative thinking which, in turn, enables them to talk about what they like and dislike when designing and making;
* involves the pupils in the act of utilising a wide range of balanced, broad learning contexts, problems or starting points, materials and production processes.
* develops pupils’ technological literacy to enable them to become informed designers, makers and questioners of technology;
* encourages pupils to work both independently and collaboratively
* contributes to children’s sense of achievement and well being

**Implementation**

The Design Technology Cumulative Curriculum ensures that all pupils develop the creative, technical and practical expertise needed to perform everyday tasks and ensure that they participate successfully in an increasing technological world around them.

Children will be taught to:

* 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 materials, ideas and products;
* develop and use subject specific vocabulary;
* work collaboratively with others;
* understand and apply the principles of nutrition;
* cook

The cumulative curriculum identifies the progressive development of skills, knowledge and conceptual understanding that pupils will progressively develop across school. These skills are tailored to topics which are outlined in the Long Term Plan. Across school children are given the opportunity to revisit and develop the skills taught as well as being given the opportunity to challenge and deepen their understanding.

**Subject provision across school**

**The Foundation Stage**

Children develop their knowledge and skills of a variety of materials, tools and techniques through exploration; both independent and adult-led. These early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products, developing making skills and handling appropriate tools and construction material safely and with increasing control. These experiences attract the children’s interest and curiosity, help them to make sense of their world and form the foundations for later work in Design and Technology.

Children are encouraged to share their creations and talk about the processes and strategies they used to reach the final product.

***Key Stage 1 and Key Stage 2***

Within Key Stage 1 and 2 children will be taught, through a variety of creative and practical activities, the knowledge, understanding and skills needed in an iterative process of designing and making. Children will learn how to design, make, evaluate and use technical knowledge and vocabulary. They will be taught to use a range of materials including construction, textiles and ingredients.

In Key Stage 1, pupils will be taught how to use mechanisms in products. In Key Stage 2, pupils will be taught how to use mechanical and electrical systems in their products and use computer programming to monitor and control products.

Children should work in a range of relevant contexts, such as the home, school, gardens and the outside provisions.

***Design***

When designing and making, pupils are taught to design purposeful, functional, appealing products for themselves and other users based on design criteria which are increasingly fit for purpose and aimed at particular individuals or groups.

In Key Stage 1 children generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. In addition, at Key Stage 2 children use annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

**Make**

Across school children select from and use an increasingly wider range of tools and equipment to perform practical tasks, such as cutting, shaping, joining and finishing. Children will select, with increasing accuracy, from and use an increasingly wider range of materials and components, including construction materials, textiles and ingredients, according to their characteristics, functional properties and aesthetic qualities.

**Evaluate**

Within Key Stage 1, children will be able to explore and evaluate a range of existing products, evaluate their ideas and products against a design-criteria that they have followed and adapted themselves.

Within Key Stage 2 pupils will be working with their own design criteria and will consider the views of others to improve their work. They will also develop an understanding of how key events and individuals in design and technology have helped shape the world around them.

**Cooking and Nutrition**

As part of their work with food, children are taught how to cook and apply the principles of nutrition and a healthy and varied diet to prepare and cook dishes using a range of cooking techniques. Learning how to cook is a crucial life skill that enables them to feed themselves and others affordably and well, now and in later life.

By the end of Key stage 1 the children will have the opportunity to acquire skills to help them handle kitchen utensils safely and appropriately. The children will use suitable equipment to peel, slice and chunk a variety of different ingredients.

By the end of Key Stage 2, the children will have the skills to use a wider range of tools safely and accurately in order to meet the skills such as chopping, frying, measuring and combining. They will have the opportunity to use a wider variety of equipment such as knives, hot pans, hobs and the ovens to create a variety of different dishes following health and safety procedures. They will understand seasonality and how this affects the food available as well as how food is processed and safely transported around the world.

**Impact**

The impact of the Design and Technology curriculum is evidenced in a variety of ways including:

* the quality of pupil’s designs and finished products that meet a given design criterion;
* pupil’s skills in drawing upon their knowledge of tools, materials and techniques to select and use them appropriately;
* collecting and analysing planning;
* work scrutiny;
* pupil interviews / pupils voice, in particular relating to pupil’s enjoyment, satisfaction and purpose in designing and making things and understanding how things work;
* outcomes of pupils in each year group;
* staff interviews / feedback.
* The quality of product – pupil’s designs and finished products that meet a given design criterion;

**Health and Safety**

Activities will be conducted subject to current or specific risk assessments, involving senior leadership as appropriate. Prior to using equipment, tools and materials children are taught how to follow expected procedures focussed on safe handling. Standard food hygiene procedures are followed.

**Remote Learning**

If there is a period of remote learning online teaching and learning resources will be offered to families unable to attend school in line with the remote education policy whilst considering the availability of home support, resources and experience. If longer term periods of home learning are in place then kits may be delivered if practicable – e.g cooking ingredients, to ensure equality of access and opportunities.

**Cross-Curricular Links**

**Literacy**

Design and Technology contributes to the teaching of Literacy by providing valuable opportunities to reinforce prior learning. The evaluation of products requires children to articulate their ideas and to compare and contrast their views with those of other people. Through discussion, children learn to justify their own views and clarify their design ideas.

**Numeracy**

In design and technology, children learn to measure and use equipment correctly, generate nets of shapes in order to create packaging and weigh and measure accurately. They will also learn about size and shape and make “real” use of their mathematical knowledge in order to be creative and practical in their designs and modelling.

**Science**

Science helps in design and technology, looking at and drawing electrical circuits. It also helps children to think about using different materials and looking particularly at their properties.

**Computing**

Computing enhances the teaching of design and technology, wherever appropriate. Children may use software to enhance their skills in designing and making things. In upper Key stage 2 the use of computer aided design is used to represent and test an electrical circuit. The children also use computing to collect information and research existing products.

**WSFL**

Design and technology contributes to the teaching of WSFL, encouraging children to develop a sense of responsibility in following safe procedures when making things. They also learn about health and healthy diets. Their work encourages them to set targets and meet deadlines. They will also learn how to prevent disease from spreading and about personal hygiene when working with food.

**Inclusion**

School is committed to inclusion with all pupils having equal opportunity to access learning opportunities in Design Technology. Teachers differentiate work by task, resource or support, in order to ensure the individual learning needs of all pupils, regardless of their starting points, are met. Additionally, to create equal opportunities for all children, pupils with physical barriers to learning will be given full support from an adult when using the equipment.

The SENDCo and Subject Co-ordinator jointly advise teachers on supporting individual children with particular physical, linguistic and educational needs, including more-able pupils.

**Monitoring and Evaluation**

The monitoring of the standards of children’s work and of the quality of teaching and learning in Design Technology is the responsibility of the Design Technology Co-ordinator. This involves developing the subject knowledge of colleagues through supporting them in the teaching of Design Technology through the design, making and evaluation stages. The Co-ordinator provides a strategic lead and direction for the subject across school. The Design Technology Co-ordinator will evaluate the strengths in the subject and indicate areas for further improvement.

**Assessment and Reporting**

The cumulative curriculum allows for teachers to continually assess learning that has been taught. It identifies ‘End Points’ that the children should reach by the end of each topic/academic year. These End Points ensure that the appropriate skills and knowledge have been acquired in preparation for the next stage of learning. Gaps in learning are identified and addressed.

We ensure that:

* all cumulative curriculum end points are accurately assessed and achieved in order to ensure progression across the year groups.
* assessment for learning approaches are applied to formative assessment in order to inform future planning;
* pupils’ achievement and attainment is assessed and recorded.

**Other Policies**

Other policies to which the Design and Technology Policy links are:

Inclusion Policy

Safeguarding Statement 2021

SEND Policy 2021

Remote Education Policy

Staff Development Policy

Health and Safety Policy 202