



Design and Technology Policy

Safeguarding Statement

West Heath Primary will continuously strive to ensure that everyone in our school is treated with respect and dignity. Each person in our school will be given fair and equal opportunity to develop their full potential with positive regard to gender, ethnicity, cultural and religious background, sexuality or disability. West Heath Primary School is committed to safeguarding and promoting the welfare of children and young people, and expects all staff to share this commitment. Please also refer to the

No Platform, Visiting Speaker Policy.

Owner – D/T Coordinator

Date for review – September 2024

West Heath Primary School's Policy for Design and Technology.

Aim.

The purpose of this policy is to describe our practice in Design and Technology and the principles upon which this is based. It is set out to ensure consistency in the teaching and learning within Design and Technology across the school in order to ensure pupils are equipped with the ability to design, make and evaluate. These first-hand experiences will enable them to understand more about the world they live in with experiences that will be appropriate, relevant, challenging and satisfy the children's curiosity.

Curriculum Intent Statement.

Design and Technology lays at the forefront of creativity. The subject allows for children to bring their ideas and designs to life using their ever-developing skills of creativity and problem solving and they are encouraged to work not just individually but as part of a team. Throughout the topic, the children are exposed to the wider world, seeing how products have been developed over time and the importance designers and inventors have on influencing new products in today's society. Children are given access to a range of materials and equipment that becomes more advanced throughout their journey at school. The gradual development of materials and equipment throughout each year allows the children to acquire an understanding of health and safety, responsibility and quality control. Design and technology provides endless possibilities for the children to apply English, maths, science and computing in an alternative manner throughout each of the products they create. Design and technology thrives on allowing children a means to express their creativity, children of all abilities to express themselves and bring the unique ideas of the individuals to life.

Implementation.

The teaching of DT should follow the design, make and evaluate cycle. Each stage should be rooted in technical knowledge. The design process should be rooted in real life with 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 appraise their own products against a design criteria as well as products of their peers. Each of these steps should be rooted in technical knowledge and vocabulary. The curriculum is mapped so as to ensure that the National Curriculum is covered thoroughly.

Impact.

Within design and technology, we strive to prepare children to be successful in the world they are entering. Our curriculum is high quality, well thought out and planned to demonstrate progression of knowledge and skills. Children's excitement and curiosity of the wider world is encouraged and promoted and, by taking the time to analyse and evaluate the development of products, children can truly understand that their imagination has no boundaries. The children are encouraged to strive for ambition when creating products of their own and their knowledge and experiences become more enriching during each step of their design and technology journey. By exposing the children to new concepts, tools and techniques, each year their horizons are broadened and they acquire skill sets and talents that they will use throughout their lives.

Organisation.

EYFS

During the Early Years Foundation Stage, the essential building blocks of children's design and technology capability are established. There are many opportunities for carrying out DT related activities in all areas of learning in the EYFS.

By the end of the EYFS, most children should be able to:

- Construct with a purpose in mind, using a variety of resources
- Use simple tools and techniques competently and appropriately
- Build and construct with a wide range of objects, selecting appropriate resources and adapting their work when necessary
- Select the tools and techniques they need to shape, assemble and join materials they are using.

D&T-related activities in the EYFS should be appropriate to the developmental stage of the children. Activities should look quite different from those carried out in KS1.

KS1

When designing and making, KS1 pupils will 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.
- Children use their understanding of significant people in a given area to aid their own designs.

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 and the work of significant designers.
- 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.

Cooking and nutrition

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

KS2

When designing and making, KS2 pupils will 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.
- Children will draw on design concepts used by significant designers to aid their own designs.

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

- 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.

Assessment.

Work in Design and Technology may be assessed through:

- Some judgements of recorded work
- Practical application and language development involving discussion, description and explanation skills

- Evidence may be seen in design books, practical models, photographs and through Twitter posts
- Teachers will continuously assess during lessons to address misconceptions and any difficulties children may be facing.
- Additional time should be provided to cover the skills that pupils need, and support given where needed
- Formative assessment will ensure that children are following the design, make and evaluate process using technical knowledge and vocabulary.

Inclusion.

“Schools have a responsibility to provide a broad and balanced curriculum for all pupils.”
National Curriculum, QCA, 2008.

The curriculum is there to be changed, where necessary, to include all pupils. The statutory ‘inclusion statement’ in the National Curriculum sets out a framework for modifying the curriculum to include all pupils. Teachers should:

- set suitable learning challenges
- respond to pupils’ diverse learning needs
- overcome potential barriers to learning and assessment for particular individuals and groups of pupils
- choose objectives for pupils with SEN and/or disabilities that are different from those of the rest of the group
- modify the curriculum to remove barriers so all pupils meet the same objectives

Planning for pupils with SEN and/or disabilities should be part of the planning that is done for all pupils, rather than a separate activity. It should include the approaches that will be used to remove barriers for pupils with SEN and/or disabilities and any smaller steps needed to achieve the learning goal as well as provision of additional resources. Some pupils with SEN and/or disabilities will show they understand in different ways from their peers, so teachers should look at a range of opportunities for pupils to demonstrate what they know and can do.

Role of the subject coordinator.

Monitoring of the standards of children’s work and of the quality of teaching in design and technology is the responsibility of the Design and Technology Coordinator. The work of the coordinator also involves supporting colleagues in the teaching of design and technology, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. The subject coordinator will also:

- Ensure that the subject is regularly discussed, reviewed and monitored within the school
- Keep resources up to date and relevant, particularly in preparation for each unit of work
- Promote design and technology good practice throughout the school
- Set a good example of design and technology practice
- Support long term planning for the whole school
- Monitor and evaluate design technology through the school
- Promote design and technology’s high profile in the school

Review.

Policy reviewed: February 2022.

Review date: September 2022.