



# Design and Technology Policy

## Intent

At Highfield Primary, we aim to provide all children with an ambitious DT education that is equitable, inspiring, rigorous and practical and relevant in our rapidly changing world. We recognise that DT helps to shape the citizens of the future, therefore we aim to build an awareness of the impact of design technology on our lives and encourage children to become resourceful, enterprising citizens who will have the skills to contribute to future design advancements.

We empower our children to use creativity and imagination and 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.

Our scheme of work encourages the children to take risks, be innovative and creative and independent thinkers who have an appreciation for the product design cycle through ideation, creation and evaluation. This is in addition to enabling them to acquire a procedural and technical understanding. In short, throughout our curriculum, DT projects provide children with opportunities to research, represent their ideas, explore and investigate, develop their ideas, make a product and evaluate their work.

We intend for all children to acquire appropriate subject knowledge, skills and understanding as set out in the National Curriculum. Our curriculum is planned and sequenced so that new knowledge and skills are built upon previous learning with recognised and clearly defined end points.

It is our aim to promote strong cross curricular links with other subjects, such as Mathematics, Science, Computing and Art. We want Design and Technology to prepare our children, to give them the opportunities, responsibilities and experiences they need to be successful in later life.

## Implementation

The design technology national curriculum outlines three main stages of the design process: design, make and evaluate. Each stage of the design process is underpinned by technical knowledge which encompasses the contextual, historical and technical understanding required for each strand. Cooking and nutrition has a separate section, with a focus on specific principles, skills and techniques in food, including where food comes from, diet and seasonality. Across each year group, Highfield's coherently planned scheme of work has a clear progression of skills and knowledge within these five strands: Design, Make, Evaluate, Technical knowledge and Cooking and Nutrition. Our DT Curriculum Map and Knowledge Sequence documents provides a clear progression of skills and knowledge, within these five strands, across each year group.

Highfield's DT scheme of work enables children to respond to design briefs and scenarios that require the needs to others, developing their skills in five key areas:

- Mechanisms
- Structures
- Textiles
- Cooking and nutrition
- Electrical systems (KS2)

Each of these areas follows the design process (design, make and evaluate). The nature of the curriculum at Highfield allows these areas to be revisited again and again with increasing complexity, allowing pupils to build on their knowledge and apply that knowledge as skills. In addition, a range of skills is taught ensuring that children are aware of health and safety issues related to the tasks undertaken.

Design and Technology is a crucial part of school life and learning and it is for this reason that as a school we are dedicated to the teaching and delivery of a high-quality Design and Technology curriculum. Pupils are introduced to specific designers, chefs, nutritionists, etc. helping to engender an appreciation of human creativity and achievement and increase the cultural capital from which they can draw in the future.

Highfield recognises that the quality of the design technology curriculum is paramount, therefore the Subject Leader carries out termly monitoring, assessing against individual year group medium term plans, the school curriculum map and the National Curriculum. These are then also moderated by the Head Teacher and Curriculum Leader. In addition, to ensure that all children can access learning and activities, the Subject Leader reviews and analyses teacher intervention plans to ensure that they are achievable.

All lessons are well planned and resourced projects providing children with a hands-on and enriching experience. Lessons incorporate a range of teaching strategies from independent tasks, paired and group work including practical hands-on and inventive tasks. This variety means the lessons are engaging and appeal to those with a variety of learning styles. We ensure that lessons can be accessed by all pupils and opportunities to stretch pupils' learning are available when required. Knowledge booklets for each project are used to support pupils in building a foundation of factual knowledge by encouraging recall of key facts and vocabulary. Throughout lessons, teachers check pupils' understanding, identify misconceptions accurately and provide clear, direct feedback. For example, teachers use assessment to help pupils embed and use knowledge fluently, or to check understanding and inform teaching. This is done through verbal questioning to promote elaboration and discussion where appropriate.

At Highfield, teachers are given ownership and flexibility to plan for Design and Technology; often teaching DT as a block of lessons to allow the time needed for the children to be critical, inventive and reflective on their work.

It is recognised that strong subject knowledge is vital to be able to deliver a highly effective and robust Design Technology curriculum. The Subject Leader ensures that staff feel supported through Teacher Voice Questionnaires, CPD, Membership of the Design Technology Association (DATA) and the dissemination of resources and plans.

Early Years Foundation Stage During the EYFS pupils explore and use a variety of media and materials through a combination of child initiated and adult directed activities. They have the opportunities to learn to:

- Use different media and materials to express their own ideas
- Use what they have learnt about media and materials in original ways, thinking about form, function and purpose
- Make plans and construct with a purpose in mind using a variety of resources
- Develop skills to use simple tools and techniques appropriately, effectively and safely
- Select appropriate resources for a product and adapt their work where necessary
- Cook and prepare food adhering to good health and hygiene routines

### Impact

The impact of our Design and Technology curriculum is for the children to have a clear enjoyment and confidence in design and technology that they will then apply to other areas of the curriculum. Children will ultimately know more, remember more and understand more about Design Technology, demonstrating this knowledge when using tools or skills in other areas of the curriculum and in opportunities out of school. The skills and attributes they develop will benefit them beyond school and into adulthood: the ability to use time efficiently, work with others productively, show initiative, independence, resilience and manage risks effectively will ensure well-rounded citizens who will make a difference in the wider world. Pupil voice and teacher voice is an important part of our assessment allowing us to continually reflect upon our Design Technology curriculum. Using teacher verbal assessment, work scrutiny and data analysis, we ensure that children who are achieving well, as well as those who are in need of additional support, are identified, and additional provision and strategies are planned in and discussed with class teachers. We also ensure we have met the National Curriculum objectives and have met our curriculum guarantee.

### Equal Opportunities

Whole school policy on equal opportunities will be adhered to in Design and Technology activities. Children with special needs or physical disabilities will be differentiated for and supported appropriately, to ensure development of skills and equal access to the Design and Technology curriculum.

### Inclusion

All children will be supported through differentiation, adaptation or adult support, to enable

equal access to learning in Design and Technology.

### Role of the Subject Leader

The subject leader is responsible for:

- Raising the profile of the subject.
- Ensuring that resources are sufficient and appropriate.
- Replacing and acquiring new resources.
- Modelling teaching.
- Monitoring teaching.
- Ensuring that the progression of key skills throughout the school are planned for.
- Assisting colleagues to analyse assessment information and from this the planning and delivery of future lessons to meet needs/address gaps.

### Health & Safety

#### **All staff are responsible for:**

- Complying with the school's Health and Safety Policy
- Taking reasonable care of their own health and safety and those of others affected by their acts or omissions.
- Co-operating with their management in complying with relevant statutory provisions.
- Using all work equipment and substances in accordance with the instruction and training received, especially when preparing food (using sharp knives).
- Not intentionally misusing anything provided in the interests of health, safety and welfare.
- Following all prescribed safe working practices, and not working while unfit to do so.
- Reporting to their co-ordinator or Headteacher any health and safety problem they cannot deal with themselves, or any shortcoming they find in the health, safety and welfare arrangements.
- Ensuring behaviour is appropriate in the baking room.
- Ensuring children know how to use appliances safely in the baking room.

#### **All children will be responsible for:**

- Complying with school rules and procedures
- Taking reasonable care of themselves and others.
- Co-operating with their teachers and other school staff.
- Using equipment and substances in the manner in which they are instructed.
- Not misusing anything provided for the purposes of health and safety.

Teachers will teach the safe use of tools and equipment in accordance with health and safety requirements. They will be responsible for storage of tools and materials. Children will be taught to recognise hazards in a range of products, activities and environments and take action to control the risks to themselves and others. Teachers are ultimately responsible for safety within their classroom.

Food Hygiene and Safety – Food will be bought and used on the day it is needed. Staff will ensure that all surfaces, cooker etc are clean. Aprons will be worn by everyone working with food and hands washed before. A contribution towards costs may be requested. Letters will be sent home to ascertain possible food intolerances/allergies prior to lessons. It is the responsibility of the teacher to ensure the baking room/DT resources room are returned to a high standard of cleanliness and safety.

### RESOURCES

KS2 classrooms will have access to a Tech Truck which is stocked with appropriate resources.

Some resources will be stored in the DT cupboard and the baking room will house appropriate resources for food technology.

This policy will be renewed annually by

Policy Agreed: February 2023

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