# Our CLEAR Curriculum Drivers:

### **DT Curriculum Statement**



#### **Curriculum Intentions:**

At Foxhills we aim for our children to grow as individuals and develop the knowledge and skills required to make positive contributions to the communities in which they belong. Our DT curriculum aims for all children to become proficient in understanding the crucial knowledge, understanding and skills required to engage in an iterative process of designing and making. This is so that they can take advantage of opportunities open to them throughout life. Crucial knowledge refers to the knowledge the school has identified as being the most crucial content that all children must acquire to ensure they meet the milestones for the end of Early Years Foundation Stage and Key Stage One in DT.

# Our DT concepts are:

- Inspiration and Exploration
- Problem Solving and Innovation
- Creativity and Imagination

#### At Foxhills, the characteristics of a child who has acquired the crucial knowledge in DT are:

- An ability to explore and evaluate existing products
- An ability to problem solve
- An ability to generate ideas that are their own and differ from those around them
- An understanding of design criteria to fulfil a purpose
- Well-developed technical skills and an ability to use tools and equipment safely
- An ability to be creative and imaginative
- An ability to be reflective and evaluate their own work, making changes to improve outcomes

#### **Curriculum Implementation:**

#### How is the DT curriculum organised?

Our DT curriculum begins with the concept of 'Inspiration and Exploration'. This takes place during the Autumn Term for each year group because, children are naturally curious and need to explore existing products, prior to designing and creating their own. These hands-on experiences give the children something tangible to hang new knowledge on, building on an existing schema before using what they know in different contexts. The EYFS environment in particular facilitates learning within this initial concept, because both indoor and outdoor provision is specifically designed to enable children to explore the world around them. Therefore, the developmental stage of these children, together with their natural curiosity and developing understanding of the world, provides a key starting point for learning within the DT curriculum.

The concept 'Problem Solving and Innovation' is positioned after 'Inspiration and Exploration'. The concepts have been sequenced in this way because once children understand existing products and how they are made, it is essential that they begin to develop a more secure awareness of purpose and function, so that children can use their knowledge to problem solve, design and create. By the Spring Term, the children are gaining confidence in understanding and safely using tools and equipment and they typically become more independent in generating their own design ideas, drawing on their previous knowledge and experiences.

Once the children have a secure understanding of the processes involved in design and technology, they learn within the concept 'Creativity and Imagination'. This is because their knowledge and technical skills have developed to a level where they can apply what they know to create and evaluate their own products. Children apply their knowledge, skills and understanding in new contexts, with more opportunities for creativity, innovation, choice and pupil ownership.

### How does learning progress in the DT curriculum?

In EYFS the initial concept 'Inspiration and Exploration' begins with children investigating their indoor and outdoor environment, specifically; the investigation station, natural resources, small world play, construction area and role play area. They use their initial observations and discussions with adults to explore materials and how things have been put together. Children learn about the appearance, colour, form and texture of a range of materials and objects. In Year One, this concept develops as children explore existing products within their environment and begin to understand how structures are made. As learning within this concept progresses into Year Two, children not only explore mechanisms, but they also learn to critically evaluate different existing products based on: their effectivness to fulfil a given purpose, their asthetic and their function.

Learning progresses within the concept 'Problem Solving and Innovation' as children in EYFS learn use tools and equipment safely and independently, experimenting with their own techniques, as their gross and fine motor skills improve and the accuracy of their mark making develops. Children in Key Stage 1 begin designing and making, using

specific design criteria to fulfil a given purpose. They learn to design and make products for themselves and others. By the end of Key Stage 1 children have developed the ability to be innovative and children in Year Two, use mock-ups and ICT to generate ideas and create templates when designing products.

The final concept 'Creativity and Imagination' begins in EYFS with children experimenting with colour, texture, design, form and function. Children learn to use their imagination, share their creations with others and explain the processes used. As this concept progresses, children in Key Stage 1 apply their knowledge and skills to creatively make and evaluate their own products. In Year One children create their own structures and food products and as their skills progress, children in Year Two make their own mechanisms and textiles.

#### How are DT tasks designed?

Teachers plan DT lessons through learning journeys, providing opportunities for children to learn, practise, apply and revisit crucial knowledge, while learning to use their knowledge as skills. These carefully planned sequences of learning mean that new knowledge builds on prior learning and can therefore strengthen an existing schema. Children are provided with engaging, real life situations to contextualise their learning and enable them to have a genuine purpose for design and creativity. Children are then provided with creative, practical opportunities to show what they know and can do.

Typically, tasks in DT take the form of:

- Exploring and investigating products
- Deconstructing existing products to see how they are made
- Evaluating existing products
- Designing their own products for themselves and others, based on a real-life problems and design criteria
- Opportunities to learn to use tools to cut, shape, join and finish
- Opportunities to work with peers to communicate design ideas and evaluate their own products
- Making things using construction materials, textiles and ingredients
- Building and testing the strength and stability of structures

# What does DT look like across the curriculum and which skills or knowledge can children not access the rest of the curriculum without?

A high quality DT curriculum not only compliments a range of other subjects, such as; art, science, English, maths and geography, but it also facilitates children's learning in other curriculum areas. Children can use the characteristics of effective learning in DT to improve their outcomes by becoming more creative, innovative and imaginative learners. The DT curriculum also equips children with problem solving skills and technical skills, which can be applied across the wider curriculum.

## Provision for SEND and Greater Depth

The teaching team at Foxhills is determined to ensure that our DT curriculum is accessible for all children and therefore bespoke provision can be provided for those pupils who require additional intervention or adaptions from planning to access the crucial knowledge.

At Foxhills typical barriers to accessing our DT curriculum include:

• Fine motor skill development

- Communication barriers
- Lack of experiences beyond school

We aim to remove these barriers to learning by:

- Ensuring a good understanding of every child, their family and their background in order to pre-teach
- Providing fine motor interventions
- Providing speech and language interventions
- Using role play and stories to improve children's confidence and creativity
- Using pictures and differentiated knowledge organisers to aid understanding of concepts

# Challenge is provided by:

- Giving children more ownership over the purpose and form of their products
- Increasing the cognitive load through more complex problem solving opportunities

## **Curriculum Impact**

A child who has acquired the crucial knowledge and developed proficiency within the DT curriculum on offer at Foxhills will be fully equipped to take advantage of all opportunities open to them throughout their schooling and beyond. They will be confident in their ability to problem solve, create, explore and analyse the world around them and will make creative contributions to communities in which they belong.

I am a reflective learner and I can critically evaluate my work I can use what I know to solve problems.

I can explore and evaluate existing products.

I have mastered the DT curriculum when...

I can think of my own creative ideas that are different to those around me.

I can use my imagination when designing and making products.

I understand design criteria and can use what I know to fulfil a specific purpose.

I can use tools and equipment safely by myself.