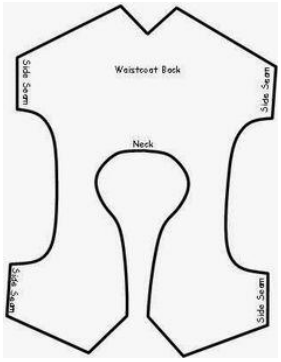
Moorside Primary School
Design and Technology



Intent, Implementation, Impact

Intent

At Moorside Primary School we are committed to providing a curriculum with breadth and depth that allows all of our children to learn, understand and apply a range of knowledge and skills with confidence and security.

We value design and technology as an important part of children's entitlement to a broad, balanced and enriching programme of study. We strive for engagement from and achievement for all children by providing an inspiring skill based, creative and progressive curriculum that enables curiosity and innovative thinking and learning. Ultimately, this will lead to the retention of knowledge and skills with the ability to make connections, develop a personal style and gain achievement that all children can feel proud of.

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. Design Technology is an inspiring, rigorous and practical subject. It can be found in many of the object's children use each day and is a part of children's immediate experiences. Design Technology encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team and help develop their perseverance and resilience.

Our Design Technology curriculum combines skills and knowledge to enable children to tackle real life problems. We aim to, wherever possible, create cross curricular links to other subjects such as mathematics, science, engineering and art. The children are encouraged to become innovators and risk-takers and to develop their problem solving and team work skills.

Learning within Design and Technology stimulates creativity and imagination. We ensure a range of visual, tactile and sensory experiences allow opportunities for all children to explore techniques used by others and to develop their own skills. This ensures the children have a means of understanding and responding to the world in which they live and that in the past.

The high-quality Design and Technology education that we provide has been developed with an aim to inspire, engage and challenge all children from our youngest learners in playgroup to those in Year Six in preparation for their next stage of education. Through a variety of creative and practical activities, pupils are taught the knowledge, understanding and skills needed to engage in an interactive process of designing, making and evaluating. They apply skills and understanding linked to a range of relevant contexts for example, the home, school, leisure, culture, enterprise, industry and the wider environment.

Our curriculum aims to develop children's critical thinking skills. It also provides them with opportunities to develop life skills that enable them to achieve their full potential as individuals in society.

The curriculum design ensures that the needs of individual and small groups of children can be met within the environment of high quality teaching, supported by targeted, proven interventions where appropriate. In this way, it can be seen to impact positively on children's outcomes. Enjoyment of the curriculum promotes achievement, confidence and positive behaviour for learning.

Implementation

To ensure high standards of teaching and learning in Design and Technology we implement a curriculum that is progressive throughout the whole school. We ensure Design and Technology is given the same importance as all other areas of the curriculum with an equal value. We believe this is important in enabling all children to gain 'real life' experiences and master a variety of skills and approaches.

All teaching of Design and Technology follows the design, make and evaluate cycle. The design process should be rooted in real life, relevant contexts to give meaning to learning. They are given the opportunity to research current designers, how their products are manufactured, understand tools and techniques used in different industries and how to apply cooking skills in all cooking.

While designing, children are given the opportunity to explore existing products and use these to inform their designs. They will explore different materials and mechanisms to develop their own ideas within a given criteria. While making, children are given choice and a range of tools to choose freely from. To evaluate, children are able to evaluate their own products against a design criterion. Each of these steps should be rooted in technical knowledge and vocabulary.

Within long term plans, the statutory outcomes, from the Early Years Framework, Development Matters (alongside Birth to Five Matters) documents and the National Curriculum are the fundamental basis on which ambitious medium-term plans are developed.

Such outcomes are evident in the half termly and medium-term overview plans, providing a consistent approach and direction on which to take short term to long term memory. This enables the children to be able to embed their knowledge, skills and understanding of the subject in greater depth.

Children are taught the meaning of and encouraged to use subject specific vocabulary in all lessons, this may be in writing or verbally.

Speaking and listening opportunities are within each lesson in order to develop the children's confidence in being a critical friend. They are able to share their opinions and make informed observations about what may improve their own work and that of others. Cross-curricular links are built upon where appropriate in order to make learning meaningful.

Lessons build on prior knowledge and skills with the aim of each child progressing successfully throughout their development as a product designer.

Connections and links across the curriculum and in the wider world that they experience deepen their level of understanding. These links may include from a variety of historical, scientific, geographical and cultural contexts. Children may also draw on knowledge from the mathematics and science curriculum.

Effective Continuous Professional Development (CPD) is provided both in-house and through wider connections and with the use of other professionals. This is built upon throughout the delivery of the curriculum in the group teaching approach.

All professional development is used to support the ambitious curriculum and to be able to challenge all children in order for them to succeed. Targeted support enables them to develop at their own pace and to learn in a style that best suits their individual needs. Key strategies are designed to support children with Special Educational Needs and Disability (SEND) to access their learning well.

EYFS follows the 'Development Matters in the EYFS' guidance which aims for all children in reception to 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

Children will have 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 progression of skills, knowledge and understanding when using tools or skills in other areas of the curriculum and in opportunities out of school.
- The majority of children in each year group will be working at or above age related expectations.
- As designers, children will develop skills and attributes they can use beyond school and into adulthood.

The impact of the school's curriculum is measured through several means:

- Clear and reliable baselines for all children across all subjects.
- Outcomes for children at the end of every academic year.
- Progress and attainment data for all year groups throughout the academic year.
- Formative and summative assessment data.
- Levels of engagement in enrichment activities.
- Children's voices and views.
- Parent/carer meetings.
- Ongoing observations and monitoring.
- Ongoing CPD for teaching and support staff.
- Timely reviews of the impact of interventions.
- Design and technology book and planning scrutiny.
- Evaluations in design and technology books and in-depth discussion about skills and knowledge learned in lessons.