

Design and Technology Curriculum Policy

Intent

Design and Technology is a valued aspect of our curriculum, exposing children to opportunities to develop their gross and fine motor skills, use equipment appropriately and let their imagination mature as they learn to design a wide range of products throughout their school career. At New Invention, we aim to inspire each child's imagination and allow them to create and make useful products. We aim to inspire the future designers and architects of the wider society.

Throughout the school, Design and Technology is at the heart of the curriculum. We ensure that children are exposed to a wide range of skills from the moment they begin their school life. Our Design and Technology curriculum encompasses a variety of skills that can be transferred into their everyday life. Our quality curriculum ensures that children leave our provision with a basic skills set embedded, to enable them to build upon these skills throughout their school career and into their adult life. We ensure that our curriculum aims to advance children's fine and gross motor skills through building and making products. These skills can then be transferred across the curriculum, improving handwriting, use of tools and children's physical development. Alongside this, we strive to improve children's knowledge and understanding of a variety of tools and equipment, how to handle them appropriately and how to use them for different purposes. Through our curriculum, we aim to guarantee our children develop logical thinking skills, allowing them to problem solve in other areas of the curriculum and in other aspects of their daily lives. We also aim to develop children's critical thinking, enabling them to select and use equipment appropriately for their products and develop their evaluative skills, giving constructive criticisms. We also aim to instil a healthy life style through developing knowledge and understanding about a healthy diet, whilst encouraging children to prepare a variety of healthy meals themselves.

Implementation

Our curriculum for Design and Technology is a progressive build-up of skills throughout the Key Stages. We offer equal opportunities for children to investigate, design, make and assess a wide variety of products, aiming to inspire them.

In the foundation stage, we expose the children to a wide range of both formal and informal learning opportunities that allow them to explore and investigate existing products. We encourage them to say what they can see in these existing products and to feel confident in saying what they like and dislike about them. After exploring existing products, children are then encouraged to begin the design process of their own products. For early years, this begins with drawing a picture and talking about what it is. As children move through to Reception, they are encouraged to design multiple outcomes and begin to be able to choose their favourite design. Before making their products, learning is based upon the appropriate

and safe use of a select choice of equipment and tools. They learn how to use tools such as scissors appropriately and how effectively, and how they can use the appropriate tools to manipulate different materials. For example, how scissors can be used to cut paper. Over a course of taught sessions, children are given the opportunity to practise these skills in a variety of contexts. Then, when they are asked to begin to make their final product, they are encouraged to draw upon these taught skills. Whilst children are making their product, they are encouraged to articulate their ideas and begin to explain what they are doing and what tools they are using. Upon completion of their product, children are taught how to talk about their product and explain what they have done.

Alongside these taught sessions, children are encouraged to build upon taught skills and explore new skills through focussed continuous provision planning. Children are exposed to construction activities such as Lego and junk modelling, allowing them to design, create and talk about what they have built. They are also given opportunities to manipulate materials such as playdough, both strengthening their fine motor skills and allowing them to use their imagination to create. We also ensure that children can transfer these skills into large scale construction throughout both indoor and outdoor provision. They are taught how to engage in purposeful role play, where they then learn subject specific vocabulary that will later be transferred into their taught Design and Technology sessions throughout their school life.

Moving through to Key Stage 1, our lessons continue in a more structured pattern. Children will first research examples of their product. They will investigate how the product works, what materials it uses and how it all fixes together. Throughout this stage, children are encouraged to share opinions on the pre-existing products, and take forward the aspects that they liked about the products. Once the children have a sound knowledge of the expected product and have researched a number of existing types, they are then taught to develop their design skills and fit to a design brief. Children are constantly encouraged to explain and justify their designs, whilst improving on their ideas. After a short series of focussed lessons teaching the subject specific skills and integrated independent activities to practice these skills, the children are then encouraged to draw upon this knowledge to select the appropriate skills and equipment for their product. As the children move through to Year 2, they are encouraged to be more independent during the ‘making’ aspect and to give more detailed justifications.

To excite and inspire the children, we often look for ways to give purpose to our learning, and Design and Technology is no exception to that. We use real, existing products to inspire our children and are constantly looking for ways to get children passionate about Design and Technology.

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Design and Technology is an inclusive and engaging subject for children on all abilities. It is an immersive and practical subject that every child can access, and given extra support when

needed. All children are encouraged to use their own ideas and achieve their goals by using range of materials.

Parental Involvement

As with all learning, parental involvement plays an integral part in children's development in every aspect of Design and Technology. We actively encourage parents to get involved and help their children to develop their subject specific skills, imagination and explanations of their products.

We encourage parents to allow opportunities at home for children to create and build products from blocks, crafts and natural objects. It is important that parents place an expectation on the children to discuss their processes and explain their ideas whilst they are creating. We encourage parents to allow for their child to partake in 'trial and error' activities and model their internal thoughts to improve their products. Using family activities such as baking and preparing meals is also beneficial to children's development in Design and Technology. Again, we encourage parents to model using key vocabulary and explaining their actions, allowing children to develop their skills.