



Statement of Practice for Design and Technology

INTENT

Place of Design and Technology in the curriculum

At St. Matthew's, Design and Technology is taught in line with the National Curriculum. Design and Technology plays an important part in embedding our school values and British values, particularly Mutual Respect. It plays a key role in enabling the children to 'love, learn and grow' through being inspired by the role design and technology plays in many of the products we use today and developing their own skills, creativity and sense of achievement in making functional products in response to their own and others needs and values.

Our Design and Technology curriculum aims to equip children with the skills and knowledge they need to design and make products in response to real life contexts helping them to understand and be inspired by the role that design and technology plays in everyday life and the wider world. Through developing and testing ideas children will develop the confidence to take risks, innovate, improve on first attempts and understand that creating is a process. Our curriculum also enables children to apply skills from mathematics, computing, science and art, further developing their understanding of how subjects can be relevant and meaningful in real life contexts. Cooking and Nutrition helps instil in children a love of cooking alongside knowledge of a balanced diet and where their food comes from, equipping them with essential life skills.

Planning

As children enter the school in Reception, their first experiences and learning of Design and Technology are through play based activities as a part of our carefully planned child initiated and adult initiated continuous provision. Design and Technology is taught as part of the specific area 'Expressive Arts & Design' through which children are encouraged to explore a variety of materials and tools and experiment with design and function.

In Key Stage 1 and 2, children develop their design skills through discrete units which focus on particular knowledge, skills and processes identified within the National Curriculum. Children complete units in Textiles, Food, Structures, Mechanisms, Mechanical systems and Electrical Systems. Electrical systems is introduced in Key Stage 2. The curriculum is designed so that children return to a particular process a number of times throughout their time at St. Matthews, allowing them to consolidate and further develop their skills in that area in response to different design tasks.

The school is a member of the DT Association and uses the national scheme of work 'Projects on a Page' as the basis for planning as there is clear progression in skills and knowledge. The long-term overview details which units each year group will cover.

The long-term overview gives details of each unit of work including the unit focus and design task. The 'Projects on a Page' unit overviews provide further detail on the objectives and key activities and tasks in the learning sequence. Medium-term plans are being developed to provide further detail on individual sessions.

IMPLEMENTATION

Timetabling/ unit planning

Design and Technology is taught in planned units by the class teacher. Each year group covers three Design and Technology units over the year and the suggested learning sequence is detailed on the medium term plan. A food unit is taught in every year group. Sessions allow for each unit to be taught in depth following the design process.

Teaching and Learning

Design and Technology units incorporate the key stages of designing, making and evaluating, alongside developing children's technical knowledge. Lessons are predominantly practical including using talking and drawing to develop and communicate ideas, teacher modelling to develop children's skills in using a range of tools and equipment correctly and importantly allowing time for children to explore materials and components and create and refine their products.

Prior to starting a topic, key knowledge and skills which the children will learn is presented in a knowledge organiser. Children have the opportunity to see the content and vocabulary before starting a unit of work. Throughout the unit children continually revisit the knowledge organiser and monitor their own progress and learning.

Recording of children's work

Our Design and Technology curriculum is focussed around children practically exploring materials, learning to use tools and equipment and creating functional products. Children need the opportunity to test and improve their work and to share their final outcomes, both with their peers and through taking products home to use. Children's work will either be recorded in their individual topic books or in the class DT floor book. Teachers will decide whether work is best suited to be recorded in individual books or the floor book. The floor book should contain evidence of the design cycle and may include examples of children's work, prototypes and photographs.

Checking for understanding to support teaching and learning

At the end of a unit of work, the teacher makes an informed judgement about the work of each pupil if they have met or are working towards the expected standard. We use this as a basis for assessing the progress of the child at the end of the year. Assessments will be informed by children's work throughout the design process including recordings and discussions of design ideas, their ability to select and use materials and tools effectively and evaluations of their own work and existing products, alongside their final outcomes. Within lessons, teachers will check children's understanding in a variety of ways including through quizzes, questioning and discussion and through children practicing and demonstrating their understanding of new skills.

Inclusion

Design and Technology is accessible for all children, regardless of SEN or disability. The importance of practical work within Design and Technology means children can share ideas and record work in a number of ways, including orally and in pictorial form, reducing literacy barriers. Where appropriate work will be adapted to meet pupils' needs and if appropriate, extra support given. Children with a particular interest or talent in Design and Technology will be given suitably challenging activities for example encouraging them to further develop and improve their products using their technical knowledge. Gender has been taken into account when identifying key inventors while also reflecting important technological advances.

Supporting Teaching Knowledge

Continuous Professional Development (CPD) is provided for staff to ensure everyone has the correct subject knowledge to deliver a quality curriculum to the children. Much of the CPD in Design and Technology is provided internally by the Design and Technology subject leader in response to staff needs and current priorities, but outside providers are sought where appropriate particularly to further expertise and broaden children's experiences in particular areas that may be new or more challenging to teach.

Resources and Budgets

Resources are reviewed annually and replaced and purchased as are needed so that children have appropriate and good quality equipment and other resources to support their learning.

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IMPACT

Assessment

Children's learning is assessed at the end of each unit in Design and Technology. Teachers will decide which children have met the expected level and who are working towards. This is recorded on INSIGHT (a web-based tracking system) which the subsequent teacher can access.