



The Design and Technology curriculum at Rossington St Michael's has been crafted and designed to ensure that pupils progressively develop investigative and evaluative skills to design, make and evaluate their own functional products for a purpose. All pupils have one project each term focussing on a different area of D&T to enable all children to gain 'real-life' experiences. The Design and Technology curriculum at St Michael's is based upon the Primary National Curriculum in England, which provides a broad framework and outlines the knowledge and skills taught in each Key Stage. We use the Design and Technology Association (DATA) Progression framework to create a personalised skills progression for our school.

The fundamentals for D&T understanding begin in our Foundation Stage. During FS1 and FS2, pupils explore meaningful activities which aid their development in Design and Technology. Using resources from the Design and Technology Association, children are encouraged to explore and investigate products in the 'Let's Look At' series, e.g. Let's Look at Vehicles, Let's Look at Hats. The projects from DATA begin to develop the children's design and making skills in projects such as building chairs for Baby Bear and making a fruit dish for a teddy bear's picnic. The children in our Foundation Stage learn to safely use and explore a variety of materials, tools and techniques, handle equipment and tools effectively, including pencils for writing. They are also encouraged to verbalise their learning using design and technological vocabulary.

In Key Stages 1 and 2 teachers use 'Projects on a Page', which is a national scheme of work for the primary design and technology subject, from the Design and Technology Association. The National Curriculum programme of study state what should be taught in KS1 and 2, but do not provide detail on how it should be taught. Building on current good practice, each Project Planner includes three types of activity:

- Investigative and Evaluative Activities (IEAs) where children learn from a range of existing products and find out about D&T in the wider world;
- Focused Tasks (FTs) where children are taught specific technical knowledge, designing skills and making skills;
- Design, Make and Evaluate Assignment (DMEA) where children create functional products with users and purposes in mind.

The basis for this scheme of work is a series of 21 A3 size 'project planners' that give scope for teachers to use their creativity and professional judgment, whilst ensuring the quality, integrity and rigour of children's learning. Each planner is accompanied by useful sketches and diagrams in a help sheet format to support teachers when they are delivering the project in the classroom. Also included are suggestions on class organisation, teaching tips and techniques, links to resources and a glossary of technical terminology related to the project. It has a cumulative progression so it develops skills, knowledge and understanding as it builds through key stages. It gives enough guidance but teachers can also adapt to plan and teach to their class's needs. It ensures that children design, make and evaluate functional projects with users and purposes in mind.

Projects on a Page is based on the six essentials of good practice in D&T. These are in place in teachers' planning to ensure children's learning is genuinely design and technological in nature. They are consistent with the National Curriculum requirements and are applied whenever children are designing and making products:

USER – children have a clear idea of who they are designing and making products for, considering their needs, wants, interests or preferences. The user could be themselves, an imaginary character, another person, client, consumer or a specific target audience.

PURPOSE – children know what the products they design and make are for. Each product performs a clearly defined task that can be evaluated in use.

FUNCTIONALITY– children design and make products that function in some way to be successful. Products often combine aesthetic qualities with functional characteristics. In D&T, it is insufficient for children to design and make products which are purely aesthetic.

DESIGN DECISIONS – when designing and making, children have opportunities to make informed decisions such as selecting materials, components and techniques and deciding what form the products will take, how they will work, what task they will perform and who they are for.

INNOVATION – when designing and making, children have scope to be original with their thinking. Projects that encourage innovation lead to a range of design ideas and products being developed, characterised by engaging, open-ended starting points for children's learning.

AUTHENTICITY – children design and make products that are believable, real and meaningful to themselves i.e. not replicas or reproductions or models which do not provide opportunities for children to make design decisions with clear users and purposes in mind.

We believe at St Michael's that all pupils are potential designers and we ensure that they have opportunities to develop their capability, combining their designing and making skills with knowledge and understanding in order to create quality products. Design and Technology in our school develops young children's skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food. Design and Technology encourages children's creativity and encourages them to think about important issues.