Design and Technology

intent, implementation, impact

intent

Academic The design and technology curriculum is ambitious and aims for every child to achieve their academic potential within it. Children have the opportunity to work through a process; research, practise, design, plan, make and evaluate. As well as subject knowledge, skills and understanding; the design and technology units of work make links to other areas of the curriculum. Links are also made to real life application to help prepare children for the ever-changing future. Creativity is celebrated and all units of work allow children to make their own journey to achieve the project outcome. Many children with special needs thrive in this subject.

Character At St. Michael's we recognise the fundamental interdependence of developing children's character and academic success. Design and technology allows children's sense of achievement to flourish as they apply skills to create a finished working product. Children celebrate their successes with one another and often the wider community too. For example, in year 4 they make a torch for someone else that meets another person's needs. In year 6 children are encouraged to reflect on World War One and create an alarm that would have warned soldiers of intruders. In year 3 children prepare and make food for the wider community at the summer fair. Within design and technology children are encouraged to evaluate their work and others' work and make thoughtful reflections thus promoting positive personal virtues.

Behaviour Keeping safe and working safely runs through the design and technology curriculum. Safe working is always paramount in lessons, this includes preparing food hygienically. Evaluating work in design and technology promotes consideration of other children's views. Children are encouraged to be honest but mindful with their feedback. Often working practically develops children's well-being and personal relationships with one another.

implementation

At St Michael's, we teach Design and Technology through practical projects that give pupils a clear purpose for what they make. Pupils consider who will use their product and what it needs to do. They explore existing products, develop and share their ideas, then choose suitable materials and tools to make their designs. They test what they have made and use what they learn to suggest improvements.

Our curriculum roadmap sets out what pupils learn from Year 3 to Year 6. Medium-term plans, informed by resources from the Design and Technology Association, help teachers build on earlier learning. As pupils move through the school, they apply what they already know to more demanding projects and make more of their own design decisions. This prepares them for Design and Technology at secondary school.

We want every pupil to take an active part in designing and making. Teachers adapt how they teach and support practical tasks to meet pupils' needs, including those with special educational needs and disabilities, while keeping the same ambitious learning goals.

impact

Assessment and impact

At St Michael's, teachers assess pupils' knowledge, understanding and practical skills throughout each Design and Technology project. They use questioning, discussion and observation to check what pupils understand and how well they can apply it. For example, a teacher might ask a pupil to explain why they chose a particular material, demonstrate how to join two parts securely or suggest an improvement after testing a product. Teachers use what they find to give feedback, revisit techniques and plan the next steps in learning.

Staff and pupils are encouraged to photograph work at different stages, from research, skills practice and initial designs through to planning, making, testing and evaluation. Photographs, alongside sketches, prototypes and pupils' explanations, help teachers see how ideas develop and how pupils respond when something does not work as expected. This gives a fuller picture of what pupils have learned throughout the project.

At the end of Year 4 and Year 6, teachers use the lower and upper Key Stage 2 assessment grids to review pupils' progress against the expectations set out in our curriculum. These reviews help teachers identify knowledge and skills that need further practice and inform planning for the next stage of learning.

The subject leader monitors Design and Technology through discussions with staff, reviews of pupils' work and photographic evidence, and short visits to lessons where possible. This helps the subject leader see how consistently the curriculum is taught, how pupils build on previous learning and how well all pupils, including those with special educational needs and disabilities (SEND), are supported to take part and develop their practical skills.