

The Design and Technology Curriculum

“Design is not just what it looks like and feels like. Design is how it works.”

Steve Jobs

Motcombe School



Flying high together

The Design & Technology (DT) curriculum at Motcombe has taken many of the content and principles of 'Mastery' in mathematics. We have developed a curriculum which ensures children spend longer being taught the common features and skills in order to have a more coherent DT curriculum and therefore be able to develop mastery in the subject.

INTENT

End Point

To know that Design and Technology can help us solve problems in a practical and creative way.

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The aims of DT teaching at Motcombe:

- To develop a positive attitude to DT
- To develop strong skills in measuring, cutting, designing and joining, with a variety of tools and materials
- To understand about the importance of food, including where it comes from and how to use a wide range of cookery techniques to prepare food safely
- To ensure that all children are given the opportunities to develop their DT skills regardless of gender, race, ability, culture or ethnicity
- To explore and enjoy the language, creativity and experience in DT and begin to transfer this into their vocabulary and designs including other subjects

IMPLEMENTATION

Organisation of the Curriculum

The National Curriculum forms the basis for our long-term planning; setting out the expectations in each year group. The medium-term planning organises the topics systematically term by term. Short term unit plans are prepared for daily teaching. Children are taught in mixed ability classes. The curriculum is taught through a carefully chosen progression of skills.

Teaching

Teaching of DT at Motcombe uses a whole class approach involving small steps. We have embedded an 'I do, we do, you do' approach to lessons. All concepts are introduced through carefully designed lessons for children to explore and understand. As their conceptual understanding develops, they move towards reasoning and applying the skills and concepts to real life situations. Children are not pushed to move through these stages until they have shown understanding, gained by the teacher through skilful assessment. Further intervention can also be given for those who need more intensive support for DT.

The teacher's role in lessons is to:

- demonstrate a clear model using an 'I do, We do, You do' approach using small steps
- allow time for discussion and pair work
- continually assess children's understanding using multiple hinge questions
- provide support or scaffolding when needed
- present challenge and to develop understanding through expert questioning

Teachers provide many opportunities for children to explain their understanding by writing, demonstrating or explaining what they understand. Teachers use this to uncover misconceptions, assess and then challenge children. In addition to this, teachers use 'immediate application' to embed concepts. Each lesson is delivered through a variety of vehicles/variation of materials/images and ensures children are applying instantly.

Developing a reasonable sense is a vital part of our DT curriculum. Children are always asked to explain how they know something, either verbally or in another suitable way.

During each lesson, teachers create AFL opportunities to ensure the inclusion and challenge is right for all. Marking independent work regularly, questioning and then providing additional support, no hands up, 'I do, We do, You do' are strategies embedded in the school to continual check children's understanding.

Marking

We understand that DT can be subjective and having a strict 'right or wrong' approach is not helpful or suitable when appraising many pieces of DT and freedom of expression. When appropriate, our dynamic marking takes place during lessons for all children, giving frequent assessment opportunities to monitor children's progress. When children need further support with a concept, the teacher will support them 1-1 or in a small group.

Resources

Children have a wide range of resources to help them develop their DT skills and knowledge including high quality tools and materials.

Monitoring, Evaluation and Review

Leaders will monitor the planning to ensure the objectives for each year group are planned in accordance with the mastery approach. There will be regular drop-ins of lessons, review of weekly plans and work scrutinies to ensure continuity, progression and quality marking. Data analysis will inform intervention planning for year groups, groups and individual children.

Parental Involvement

We encourage parents to be involved in their child's learning by:

- publishing information about the DT curriculum for each year group on our school website
- supporting their child at home with basic skills such as drawing, measuring, cutting, model making and opportunities to help with cooking or meal making.

DT Curriculum Map



Cooking



Design



Make



Evaluate



Technical knowledge

Puppets

Vehicles

Perfect pizzas



Y2

Moving minibeasts

Stable structures

Snack attack



Y1

Construction

Textiles



EYFS

Cooking

IMPACT

End Point

To know that Design and Technology can help us solve problems in a practical and creative way.

Conclusion

It is the aim of the school, to raise levels of achievement in DT by promoting a positive attitude and providing rich experiences. Children should view themselves as designers and makers and be able to apply knowledge, skills and understanding to everyday life, but to also enjoy and appreciate the excitement and wonder of DT.

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