

School vision and values

Vision

We want ourselves and the children in our care to be successful, resilient and inquisitive learners who are happy and well-equipped to participate positively in the community and wider society.

Values

Our school values (kindness, respect, responsibility and aspiration) are an essential point of reference on all of our journeys. British values (democracy, rule of law, liberty and respect) play an equally important role.

Definition of Design and Technology

Design and Technology in primary schools 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. (DT Association 2020).

Intent in Design and Technology

Throughout their time spent at St Margaret's Academy we aspire to provide children with the opportunities to develop skills in researching, designing, making and evaluating a variety of purposeful products including food. We want them to be able to relate their own ideas to the wider world supporting them to make informed decisions about future choices. Nurturing their creativity is central to this vision alongside striving to develop the inquisitive mind through enquiry based learning.

How the whole school 'curriculum statement' intents will be threaded through Design and Technology.

1. Underpinning everything is our work on attachment, and social and emotional learning which are integral to all that we do – *In DT we consider the purpose of our products and how they will meet the needs of the intended user. We work collaboratively to share our ideas and give and receive constructive criticism. We are resilient when things go wrong and demonstrate our Core Value of Aspiration to ensure our products fully meet our design criteria.*
2. Early reading and language development across the school are core aspects woven through the curriculum – *In DT we explore new subject specific vocabulary and ensure that this is correctly applied – these words are featured on our Wow Word walls. During our collaborative work we share vocabulary with our peers across all abilities.*
3. Teachers plan lessons that inspire and engage, and promote enquiry and imagination so that pupils at all abilities can achieve. We develop curiosity about the world beyond the bay. Progressive subject knowledge and skills are planned to take advantage of local opportunities such as the beach and local artists, as well as national events. We provide opportunities to contribute in the local and global community. –*In DT we explore existing products from around the world and ask questions about how they have been made. We use our imaginations to design our products and use the work of others throughout history to inspire us. We encourage visits from outdoor establishments to inspire pupils in their future life choices. We take part in the BNF cook-a-long each year in KS1. During the Summer Term crops from our Orchard are used in cookery throughout the school.*
4. We support our pupils to develop the skills they need in order to learn for themselves and to enjoy this learning –*Pupils are encouraged to work independently taking responsibility for their own learning. Prototypes are an essential step in the design process in which children can explore and develop the skills they may need. By developing their own ideas, rather than those solely directed by a teacher, they have more enjoyment in their learning.*
5. We support our families and staff with their well-being –*Staff are provided with Projects on a Page which supports them in developing their planning and reducing workload. Collectables are sent home to parents to support their understanding of what their children are learning at school. Curriculum blogs are accessible on website to all.*

Headline rationale for Design and Technology

Overview

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. Pupils leave Primary School able to understand and apply the principles of nutrition and have basic cookery skills. They are able to talk about what constitutes a healthy diet and can refer to the 'Eat well' plate.

The following descriptors are used to explain to children why we teach DT across the school

Why do we teach DT in:

Foundation Stage

To help you build models and create the things you have in your imaginations using lots of different tools and equipment. We want you to find out the best way to do things and experiment with as many different things as possible helping you to have stronger hands.

Year 1/2

To help you to research, design, make and evaluate a range of products that have a purpose. These could be things that you build, construct or cook. It will help you think about how you can improve the things you make and get better results each time. You will begin to think about where your food comes from and what you have to do to make a healthy meal.

Year 3/4

To help you design, make, and evaluate a range of products that have a particular purpose. These could be things that you build, construct or cook. You will look at existing products in the wider world and evaluate their effectiveness. When designing you will think about how you can record your ideas, this could be on paper or by using technology to create an image. Choosing the correct tools to create your product will develop your thinking skills and accuracy. During cookery sessions you will use a variety of cooking techniques and understand the importance of a healthy diet for the human body. You will learn about where food comes from and how the seasons affect the food we have available to us.

Year 5/6

To help you design, make, and evaluate a range of products that have a particular purpose. These could be things that you build, construct or cook. You will look at existing products in the wider world and evaluate their effectiveness. When designing you may use annotated sketches, exploded diagrams or cross sectional drawings to communicate your ideas. You will think critically about the suitability of a material to make your end product and give reasons for your choices. Mechanics and computer programming will be utilised to enhance product design. The views of others will be taken into consideration when evaluating your final product. During cookery sessions you will use a variety of cooking techniques and measure accurately using ratios to scale up and down recipes. You will learn about where food comes from and how the seasons affect the food we have available to us.

Best practice in teaching and learning

Teachers ensure that the National Curriculum 2014 is taught encompassing; food, materials, electrics, textiles, mechanics, structures and computing. Teachers use the Skills Progression document to ensure children are building on preceding teaching. Through professional dialogue with colleagues teachers strive to design projects that reflect a cohort's interests. The design cycle is followed in all teacher led DT projects: **Research, Design, Make and Evaluate**. Prototypes are used to pinpoint any flaws in design with the opportunity to re evaluate and improve. All children are able to achieve in DT. There is no limit on what a child can produce when provided with the tools and resources they need to realise their design. Children are given the time needed to practise and learn through

their mistakes – these are celebrated. In KS2 children are encouraged to take inspiration from design throughout history. Children are encouraged to critically evaluate their final products and in KS2, peer reviews form an essential part of this process.

Assessment

Assessment in DT focuses on the essential knowledge, understanding and skills that all pupils should learn by the end of their Key Stage. A clear understanding of at what level each child left the previous year group must be sought via ongoing dialogue between year groups. The progression of skills and knowledge documents supports teachers in making their judgement. All assessments are derived through a holistic approach taking into consideration the application of skills, understanding of processes and critical evaluation of products created. Verbal interactions, video recordings or photographic evidence should be recorded and used as part of this judgement – no child should be penalised due to their writing ability.

Progression of skills

Please see the DT skill progression documents for:

Link here: staff shared – curriculum leadership – DT – progression maps

<https://drive.google.com/drive/folders/1TGAwfh9ISPtTY1EwDJSceR-ngwpaT4IL?usp=sharing>

Design and Technology Curriculum Map

Please see the DT long term plan here (working document)

staff shared – curriculum leadership – DT – long term overviews

Planning

Please see Foundation and KS1 long term planning here:

https://drive.google.com/drive/folders/1O3JP-TCsLd6u0bppP0QCyEmtE6F1_vmJ?usp=sharing

Please see KS2 long term planning here:

https://drive.google.com/drive/folders/1h_eWCJZEiuA3rKo7MFv6EHs0pgQsA5iu?usp=sharing

Please see Foundation and KS1 medium term planning here:

<https://drive.google.com/drive/folders/1WzYNqYYR7tQmBlyOdAk6JQrO8qp5-fmE?usp=sharing>

Please see KS2 medium term planning here:

<https://drive.google.com/drive/folders/1L9jtwxi7LQ2bE0lh8G2e8oWBbK79Sc5b?usp=sharing>

Please see an example of an area plan here:

https://drive.google.com/drive/folders/1y3h9hatfs6cJ4sgxjA_HkDcw9eHK07Cm