# St Margaret's Academy – DT Policy

Policy Date: 2020 (Updated May 2023)
Review date: Nov 2024

## School vision and values

A strong school vision keeps us focussed on where we are heading. Established school values alongside British values are featured in all aspects of school life and help to maintain a moral compass in all that we do. The school and British values help to provide a framework for developing the essential knowledge of being an educated citizen who can take their place in the world and make meaningful contributions (cultural capital). We use superheroes to help our pupils relate to our school values and images for the British values to help pupils understand them.

**Our 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.

**Our values:**
KINDNESS RESPECT RESPONSIBILITY ASPIRATION

## 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 worldwide 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 opportunities for trial and error.

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

1. The well-being of pupils, families and staff is always a priority. – *In DT we aim to work collaboratively to share our ideas and give and receive constructive criticism. Collaboration builds relationships both peer on peer and adult to child. We are resilient when things go wrong and demonstrate our Core Value of Aspiration to ensure our products fully meet our design criteria. Staff are provided with 'Projects on a Page' to reduce the workload of researching potential projects. Families are invited in to see final projects when appropropriate and share food that has been made to build a home school community. Collectables are sent home to parents to support their understanding of what their children are learning at school in DT..*
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 as Star words during lessons and revisited throughout the topic and revisited at the start of a new unit. . 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 – *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. Children view collaboration as a skill and share their ideas with peers across all abilities.*
4. We support all our pupils to develop the skills they need in order to learn for themselves, to enjoy this learning and to help them achieve their full potential. – *Pupils are encouraged to work independently (and collaboratively at times) 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 trial and error. By developing their own ideas, rather than those solely directed by a teacher, they have more enjoyment in their learning. Skills used in DT are explicitly taught and discussed to support children to apply these skills in other areas of the curriculum (Learning Skills).*
5. We develop curiosity about the locality and the world beyond Torbay, we provide opportunities to contribute to the local and global community - *we take inspiration for our products from world History. When creating food products where possible we will invite members of the community to share these with us (Families, Dunboyne).*

## 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. They develop resilience through trial and error and learn that things don't always go right the first time. Through collaboration with their peers they learn to share ideas and value the opinions of others. Pupils will leave St Margaret's Academy able to understand and apply the principles of nutrition and have basic cookery skills.

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

***Shorter version for all years. Select relevant pieces from Phase descriptors to enhance based upon the strand being taught.***

***Design and Technology develops skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food. It encourages creativity and encourages them to think about important issues.***

**Why do we teach DT in:**

**<u>Foundation Stage</u>**

**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 and fingers.**

**<u>Year 1/2</u>**

**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 use cookery skills to cut, peel and grate ingredients safely and hygienically and prepare healthy food products.**

**<u>Year 3/4</u>**

**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 techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking to help you prepare food in the future.**

**<u>Year 5/6</u>**

**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 learn to communicate your ideas using sketches, exploded diagrams or cross sectional drawings. You will learn to think critically about the suitability of a material to make your end product and give reasons for your choices. 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. This will help you to prepare your own food in the future.**

## <u>Best practice in teaching and learning</u>

- Teachers ensure that the National Curriculum 2014 is taught encompassing; food, materials, electrics, textiles, mechanics and structures.
- 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 and can include cross-curricular links.

- DT is explicitly described to the children at the start of each lesson using the 'Why do we teach DT? descriptors.
- Where possible links to the community/families are made by invitation into school to celebrate end projects or share food made.
- 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 in addition to reference to the end of year judgement on SIMS. The progression of skills and knowledge documents support 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.
- Teacher's share typical ARE pieces of work with the subject leader at the end of each topic for moderation and subject portfolio evidence.
- Teachers are provided with exemplification materials and specific topic assessment trackers to ensure that their judgements are fair and well informed.
- Additional end of phase exemplification resources sourced from DT association are also provided to support teacher understanding of the necessary progression and end point for that phase.

## Progression of skills

Please see the DT skill progression documents for:

Link here:

DT skills progression Final 2021.docx ***Updated SEPT 22***

## Design and Technology Curriculum Map

Please see the DT Whole School planned coverage 2022-23:
DT agreed coverage 22-23.docx
And the whole school curriculum map here:
Whole School Curriculum Overview.docx

## Planning

Whole school planning can be found here:
https://drive.google.com/drive/folders/1gpdxiY3xIRds-XtUFNNSHmgRoPc5d7sQ

## Risk Assessment

Any project that uses **junior hacksaw, hotplates** or **glue guns** will be risk assessed before it takes place. The DT subject leader will sign off these risk assessments. As any new tools are introduced to the curriculum these will be added to the 'risky resources' list.

Before any cookery commences a list of ingredients will be shared with all parents/carers and they will be able to either provide an alternative ingredient or withdraw their child from the activity. The child will complete some work similar to the activity in another area of the school.
https://drive.google.com/drive/folders/1rcU_SCsP2AEQJqdxeOEvqBkjrRoameAM?usp=share_link