Clarice Cliff Guide to DT

Intent - The Why

Our curriculum has been created to combine the two essential elements of Design and Technology education - learning about the designed and made world and how things work, and learning to design and make functional products for particular purposes and users. Across the school, our pupils are given extensive opportunities to explore the full creative design process, from investigating how existing products work to creating and evaluating their own products to fulfil specific design criteria. Each of our Design and Technology topics is carefully planned to inspire our pupil's curiosity with an open-ended enquiry question that encourages them to explore the design and making process through building their range of skills before applying these to a problem solving context. In order to make meaningful connections across pupils' learning, each Design and Technology topic is linked closely to an area of the curriculum they are exploring.

Through a balance of different topics, pupils develop practical skills and deeper levels of knowledge in design, structures, mechanisms, electrical control and a range of materials, including food and textiles. As part of this balanced curriculum, our pupils study the successes and creations of famous inventors, celebrating the achievements of a diverse range of people.

Implementation – The How *(*including how/when we assess)*

What do we use to support our curriculum delivery?

To support our curriculum delivery, we use the Project on a Page guides to aid in planning our units. We also work with the curriculum director to produce detailed plans to support staff in their planning and resourcing of the units. Subject leaders also assist in creating adaptive resources that match the investigate, design, make and evaluate process.

Daily

Although DT is not taught every day, some practical skills are practised throughout the week.

<u>EYFS</u>

- EYFS practise scissor skills in other lesson areas.
- Continuous provision often has DT links, such as junk modelling, building or creating.

<u>Whole School</u>

- Across the school, practical classroom skills (cutting, sticking, measuring) are practised throughout the week in other lessons.

Weekly

DT is taught every second half term. During the half term it is taught:

- Weekly in whole class lessons
- Think back questions from previous units/years to engage the long term memory.
- Each lesson ends with a recap to assess children's understanding of the lesson.
- Assessment for learning is used to identify pupils who require additional support.
- AfL is also used to inform additions to the plans for the following week.

Aside from this, DT related tasks and skills are often chosen across the school for Golden Time activities, such as building, designing and creating activities. Throughout the year, DT club is also available.

Half termly/Termly

- Pupils complete the full cycle of the D and T process: investigate, design, make and evaluate.
- Subject leader completes book study, assessing whether lessons have been taught to the MTP and whether work has matched the L.O.
- Pupil voice is carried out to find out children's retention of knowledge and use of key vocabulary.

Assessment for Learning

- Staff are expected to use AFL in every lesson.
- Think back questions are used at the start of every lesson to assess retention of learning on prior lessons and topics.
- At the end of every lesson, children are orally asked a Check For Understanding exit question to assess their understanding of the lesson.
- Staff use a range of strategies including in our teaching and learning framework to check for understanding and for any misconceptions. This includes active observation, show me boards and cold calling.

What this looks like in Early Years

- The areas of the EYFS Framework/Early Learning Goals most relevant to DT are Physical Development and Expressive Arts and Design.
- Children have daily opportunities to make their own creations using a wide range of different materials, fixings and tools which are freely available in continuous provision.
- They are taught how to use tools such as scissors, hole punch, string, sellotape, cutters etc.
- They are encouraged to talk about what they would like to make, how they will do it and what they think about it when it is finished.
- Children in Reception are encouraged to design their creation before they make it.
- They are encouraged to evaluate what they have made and make changes as appropriate.
- Other enhancements based on children's interests or a planned theme provide further opportunities for children to embed, develop and use their DT skills.
- Evidence is recorded in topic floor books.
- Topic lessons include links with DT (through EAD) and some tasks will be adult-led to support development of particular creative skills.

Where will you see and find evidence of our learning?

- Every child has a blue DT book.
- Children will record in books during the investigative, designing and evaluation stages of the unit.
- Photos of children during practical lessons (focused tasks and making their final product) are included in their books alongside a learning objective. Photos will show the pupils 'in action' making their final product as well as the final result.
- Photos can also be shared with parents on Class Dojo.
- Every classroom has a DT working wall where examples of pupil's work are displayed from the most recent topic

What is our approach to SEND and Greater Depth?

<u>SEND</u>

Our provision for pupils with SEND in DT involves adapting the implementation of the curriculum and classroom environment to ensure equal access and engagement for all, using a range of strategies such as visual aids, repetition of key words and concepts, multi-sensory activities and adaptive teaching strategies. Using the provision mapped out below, our DT teaching ensures pupils with SEND access the same high quality, ambitious curriculum as their peers. Effective scaffolds and adaptations enable all children to access the rich challenges and deeper thinking opportunities sequenced within the curriculum offer.

Subject challenges for SEND	Provision for SEND
Interpretation of artists' work	Use stem sentences to provide subject specific language in a particular format – this will enable children to accurately communicate their thoughts and opinions. Real objects relating to the particular aspect of art are used (where appropriate) so pupils can see, touch, feel and smell and use this to support interpretations
Sequencing of physical D and T task (knowing which steps to complete first).	Digital images/recordings can be used to capture/ display step-by-step processes which pupils can refer back to during the lesson. Visual scaffolding, reminders and prompts are used to show pupils with processing difficulties how to safely use art and design equipment. Additional scaffolding can be given to support processing of techniques, e.g. hand over hand to support fine motor skills. Pupils are given additional time to explore materials, tools and resources in order to process their purpose and use Utilise 'shared tasks' by pairing children with a learning buddy. One partner verbally explains the process of making something whilst the other asks questions. Partners swap roles and repeat the task. This will reinforce sequencing.
Understanding of subject specific vocabulary.	Subject specific vocabulary and definitions are covered at the beginning of every lesson. Dual coded word banks used to demonstrate the meaning of a word in a D and T context.
Expressing themselves and sharing their thoughts and opinions orally.	Use stem sentences to provide subject specific language in a particular format, enabling children to accurately communicate their thoughts and opinions. Use alternative recording devices e.g. whiteboards/iPads/talking tins to allow children the option of sharing thoughts and opinions in an alternative way. Allow children processing time when asking them a direct question - stop and jot to pose a question and pause for thinking time, write down ideas then share.
EAL pupils may find it difficult to access resources/learning.	Use a reduced number of simple instructions which are supported by visuals. Appropriate modelling to aid understanding. Dual coded word banks and resources to support understanding.
Producing independent pieces of D and T work	Real objects are used to develop their sense of choice and independence. D and T books are used to enable pupils to refer back to their prior learning. Pupils D and T work are displayed to enhance pupil's sense of achievement. Reference back to EYFS fine motor skills progression document to support this area.
Fine motor skills/physical	Teachers to be proactive in identifying appropriate resources

difficulties.	and manipulatives for each individual child's need. For example, some children may require double holed scissors, enlarged sewing needles etc. Pre-teach can be used to ensure that children are confident using D&T equipment before the lesson.

Greater Depth

Our curriculum design ensures that pupils' knowledge and skills are mapped progressively to become more refined as children progress throughout the curriculum. End points for each year group are clear within progression documentation. As pupils' understanding of fundamental skills becomes secure, they can begin to make personalised adaptations, improvements and recommendations of their final piece/performance/product and apply these independently. Through progressive evaluation pupils are equipped with the knowledge and language to support their ability to evaluate based on design criteria or genre as appropriate.

Impact – The So What

At the end of their Design and Technology learning journey, pupils will have built a wide variety of knowledge and skills across all elements of design and have the confidence to apply these skills to a final piece of work that provides a solution to a real-world context. They will explore famous inventors from different cultures and have an understanding of the achievements these figures have accomplished and the journey that led to their success. Our pupils will be able to reflect upon their responses to each topic question, explaining how their range of skills can be combined with practical construction techniques to create a final piece of work. Through conversations around their work, pupils' will communicate their knowledge and understanding about the design process they have worked through to produce a final piece and will be able to evaluate their designs, suggesting future improvements to their own and others' work.

Cultural Capital and Enrichment

In DT lessons, there are high expectations for all pupils to engage and achieve. We look at diverse voices across the school, such as Vikas Khanna and Marie Van Brittan. The DT curriculum has cross curricular links with topics on Computer Aided Design and Control within certain DT topics. Where appropriate, the curriculum also links to History and Geography topics to strengthen learning.
There are also enrichment opportunities through after school clubs - there are two DT clubs (KS1 and KS2), as well as other clubs (such as lego club) that practise DT skills.