Curriculum Leadership - Subject Vision

Subject / Curriculum Area: Design and Technology

Vision

At Dovers Green we aim to provide children with a rich Design and Technology curriculum in which they have the freedom to design, create and evaluate in an inventive and supportive environment. We help the children to develop skills grounded in everyday experiences and give them the confidence and resilience to adapt and improve on their learning.

What does your subject area offer the Dovers children?

An inspiring, inventive and practical subject in which children can use their creativity and imagination to learn through first-hand experiences. They will be encouraged to explore, observe, solve problems in a variety of contexts, think critically, make decisions and talk about why they have made their decisions.

How does your subject enhance the curriculum?

It gives children the opportunity to develop their creative, technical and practical skills as well as their ability to constructively critique, evaluate and test ideas in a safe environment. This links closely to the idea of 'Marvellous Mistakes' and how we can learn from them in the future.

What use is it to children later in life?

Our children are growing-up in an ever-changing world and we aim to help prepare them for this by stimulating originality, enterprise and practical skills in designing and making but also the resilience to keep trying when things don't work out.

What are the main skills and knowledge (overarching objectives) you want teachers to focus on?

Children need to be able to:

Designing

- Understanding contexts, users and purposes
- Generating, developing, modelling and communicating ideas

Making

- Planning
- Practical skills and techniques

Evaluating

- Own ideas and products
- Existing products

Technical knowledge

• Making products work

Cooking and nutrition

- Where food comes from
- Safe and hygienic food preparation, cooking and nutrition.

| | Current Situation | Vision |
|-------------------------------------|---|--|
| Vision and Direction | LTP has been updated and implemented for DT this is working well and coverage has been good. Staff have planned and taught purposeful projects which the children have enjoyed. | I have a stronger understanding of the quality of teaching going on in every year group and where people need support. KS1 Children will have cooked with the food they have grown following hygiene rules in the kitchen. EYS children will have tasted some food they have grown. Children will all have a good understanding of where their food comes from and have had the opportunity to go on a local walk to see this where appropriate. |
| Standards, Progress and Achievement | I am aware of attainment last year and know which areas need to have more focus. These have been put on my action plan for this year. | The assessments at the end of this year will give me additional data to inform next steps and identify areas that have improved. There will also be clear evidence of children exceeding in each objective on TT. |
| Quality of Learning & Teaching | I have a much stronger understanding of the teaching of DT across the school. I have carried out planning monitoring and book looks last year. The LTP for DT has been updated and implemented across the school and this is going well and coverage last year was good. | I need to do some lesson observations and talk to children about their learning to get a better picture. This will be carried out this year. When DT for this term has been planned in yr 1 and yr2 I will look at the planning. |
| Assessment | I have looked at and reported on last year's data across each year group. Gaps have been identified and an action plan written from this. | Data analysis for this year will show that children's skills and knowledge are improving, it will also be clear how many are exceeding in each objective rather than just met. The gap will close for SEN children in year 1 achieving ARE in the statement 'ask simple questions about existing products and those that he/she has made'. |

Curriculum Leadership - Intent, Implementation and Impact

Subject/Curriculum Area: Design and Technology (D&T)

"Design is not just what it looks like and feels like. Design is how it works." Steve Jobs (Co-founder of Apple)

"Technology makes possibilities. Design makes solutions." John Maeda (Designer)

DT prepares children to deal with tomorrow's rapidly changing world. It encourages children to become independent, creative problem solvers and thinkers as individuals and part of a team. It enables them to identify needs and opportunities and to respond to them by developing a range of ideas and by making products and systems. Through the study of DT, children combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functional use. This allows them to reflect on and evaluate past and present technology, its uses and impacts.

Intent

At Dovers Green, we intend to design a D&T curriculum which develops learning and results in the acquisition of knowledge and skills. Design & Technology provides practical learning experiences and offers opportunities for children to develop and refine the skills associated with designing, making and evaluating different products. D&T allows children to actively participate and respond to the changing technological world around them; as users, consumers, designers and inventors. The children have the opportunity to apply scientific skills, mathematical skills and information technology skills.

We intend to design a D&T curriculum with appropriate subject knowledge, skills and understanding as set out in the National Curriculum Design and Technology Programmes of Study, to fulfil the duties of the National Curriculum whereby schools must provide a balanced and broad based curriculum which promotes the spiritual, moral, cultural, mental and physical development of pupils and prepares them for the opportunities and responsibilities and experiences for later life.

How does it cater for PP/SEND and higher attainers?

SEND/ PP

At Dovers Green Quality First Teaching is at the core of everything we do and when planning DT lessons teachers will be aware of barriers to learning that an individual child has and will plan accordingly to ensure that these barriers are removed so that all children have the opportunity to know, apply and understand the matters, skills and processes being taught. This may include additional TA support, pre-teaching of key skills and/or vocabulary, additional scaffolding of work including modification of any recording sheets and equipment and the use of visual prompts. Data is checked during the year to see how SEND and PP are achieving in DT and any gaps are then highlighted and action taken to close these.

COIN unit

Children in our COIN unit who are in EYFS and year 1 are taught through objectives taken from the EY curriculum as this is more appropriate for them. When the children get to year 2, if and when it is appropriate for them they are taught through objectives taken from the year 1 curriculum. They are supported through additional TA support, pre-teaching of key skills and/or vocabulary, additional

scaffolding of work including modification of any recording sheets and equipment and the use of visual prompts. Like the SEND children in mainstream.

Mastery

What is Mastery?

A child's ability to skilfully **apply** their learning in more in-depth ways is called **Mastery**. Mastery is not just knowing a fact, but it is using that fact in increasingly more complex situations to extend their learning. Mastery also enables children to work in ways which show a deeper understanding of a given task.

What is Mastery in DT?

In the DT curriculum Mastery is when a child is able to plan, design and make an item to fulfil a given criteria. A child would demonstrate enjoyment, enthusiasm and a passion for the subject. They would display a higher level of technical skill with a broad range of tools and think of innovative ways to use this knowledge to enhance the outcome of their item. When evaluating their work they are more analytical and work independently to assess and improve their project.

How would a child's Mastery of DT present itself?

Generating Ideas: Showing greater: complexity; research; observation; originality; perception; aspiration; creativity.

Making: Showing greater: technique; skill; control; complexity; mastery; quality; judgement; creativity.

Evaluating: Showing greater: judgement; autonomy; independence; perception; subtlety. **Knowledge:** Showing greater: breadth; contextual understanding; explanation; judgement.

Implementation

The teaching of D&T across the school follows the National Curriculum. In KS1 there are termly planned projects with a clear planned structure: research; design; make and evaluate. These are cross curricular and draw upon subject knowledge and skills within Mathematics, Science, History, Computing and Art, giving the children opportunities to learn life skills and apply skills to hands on situations in purposeful contexts. In EYFS children explore and use a variety of media and materials through a combination of child initiated and adult directed activities. Their learning from previous projects is revisited and developed. Children design products with a purpose in mind and an intended user of the products. Food technology is implemented across the school with children developing an understanding of where food comes from, the importance of a varied and healthy life and how to prepare this. Children are taught to ensure that they are healthy, safe and hygienic when working in this subject area.

In D&T, children may be asked to solve problems and develop their learning independently. This allows the children to have ownership over their curriculum and to lead their own learning and areas of interest. They may also be working collaboratively, as part of a team learning to help one another towards a challenging, yet rewarding goal.

The implementation of the D&T is monitored according to the monitoring cycle and includes book looks, talking to children and lesson observation. Assessment data is analysed twice a year and this informs future planning.

Impact

Assessment of children's learning in D&T is an ongoing monitoring of children's understanding, knowledge and skills. This assessment is then used to inform differentiation, support and challenge required by the children. Assessment is carried out by KS1 teachers after a block week by highlighting the statements taught on Target Tracker. Assessment is collected twice a year by subject leaders on Target Tracker to inform progress or skills and knowledge still to be embedded. An action plan for the following year is written from this. It also informs part of the yearly report for children.

EYFS assess using assessment statements put together each term, to judge whether a child is 'on track' or 'not on track' for this time in the year. This information is then put on Target Tracker as a 'Point in time assessment' (known as PITA). Subject leaders can then analyse this as part of the yearly report.

COIN unit children are assessed using Target Tracker under EYFS for EYFS and Year 1 children and when the children get to Year 2, if and when it is appropriate they are assessed under Band 1. Their data is analysed by the subject leader along with data from KS1.