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
- Food preparation, cooking and nutrition.

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

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.

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.

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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. Whilst there is no specific mention of health, safety and hygiene in the programmes of study, 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. Summative assessment is conducted twice a year by class teachers to inform the subject leader of progress or skills and knowledge still to be embedded. This also informs part of the end of year report for children. This is recorded on an excel spreadsheet.

EYFS children's progress is tracked using Target Tracker.