



DT at the Wye Forest Federation

Intent

At the Wye Forest Federation, we believe that the teaching and learning of Design and Technology is essential to prepare our pupils for the modern world. Children are encouraged to develop a greater understanding and knowledge of design and technology, as well as their safe use of tools and equipment. enables children to develop their creativity and imagination as pupils design, make and evaluate products in a variety of contexts that complement, where appropriate, our bespoke curriculum. Through the teaching of Design and Technology, we will show children the best inventions both past and present, and encourage them to develop a critical understanding of the impact of such inventions. Our Federation is a safe place where we embrace and enjoy challenge; take ownership of our own learning; collaborate and support each other; whilst fostering a love of learning be in order to flourish in all areas of life now and in the future. This is especially pertinent in DT, where work is often collaborative and our pupils have the opportunity to celebrate and share each other's outcomes.

Our aims are to: fulfil the requirements of the National Curriculum for DT, provide a broad and balanced curriculum, ensure the progressive development of knowledge and skills, scaffold and adapt, where necessary, our lessons so as to enable our SEND children to succeed and provide opportunities for our children to exercise their creativity through designing and making. Our pupils are taught to combine their designing and making skills with knowledge and understanding, in order to design and make a product. Skills are taught progressively to ensure that all pupils have the opportunity to learn new skills and practice them, in order to develop as they move through the school. Evaluation is an integral part of the design process and allows children to adapt and improve their product. This is a key skill which they will need throughout their life and is supported through our Federation Vision that we are always

D&T allows children to apply the knowledge and skills learned in other subjects, particularly Maths, Science and Art, and the application of skills learnt in other subject areas is encouraged and facilitated by the teacher, through their planning and their direct teaching. Pupil's interests are captured by asking open ended questions at the beginning of each Unit taught, giving pupils motivation and context for their learning about the design process.

Implementation

At the Wye Federation, we provide a variety of opportunities for Design and Technology learning to take place inside and outside the classroom. Educational visits are another opportunity for the teachers to plan for additional Design and Technology learning outside the classroom. We teach the National Curriculum, supported by a clear skills and knowledge progression document. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children. Our Design Technology provision is divided into three core areas:

- Structures
- Food
- Mechanisms

Each term the children will study one of these aspects. They will be taught the key knowledge and skills for these. All teaching of DT should follow the design, make and evaluate cycle. Each stage should be rooted in technical knowledge. The design process should be rooted in real life and relevant contexts, to give meaning to their learning. While making, children should be given choice and a range of tools to choose freely from. Children should be able to evaluate their own products against some design criteria. Each of these steps should be rooted in technical knowledge and vocabulary. DT is taught to a high standard, where each of the stages are given equal weight. D&T is usually taught in short blocks, but is timetabled at the teacher's discretion.

At the WFF pupils experience a broad, relevant and inspiring curriculum within an environment that is both physically safe and allows mistakes to be made by all, without fear of failure. Pupils are engaged, inspired and challenged, and teachers equip them with the knowledge and skills to experiment, invent and create their own outcomes within design and technology.

The School has a detailed curriculum map based upon the 2014 Primary National Curriculum in England, which provides a broad framework and outlines the knowledge and skills taught in each Key Stage. The

map illustrates which DT topics are taught across each key stage. This is supported by a skills progression document which illustrates the skills pupils learn in each year group.

Pupils focus on three DT topics per year chosen from Structures, Food and Mechanisms. These are taught in rotation with an Art unit. As pupils progress through school, they should begin to think critically and develop a more rigorous understanding of Design and Technology. They should also know how Design and Technology both reflect and shape our history, and contribute to the culture, creativity and wealth of our nation.

In our Reception and Preschool classes, 'Expressive arts and design' are facilitated by the teachers providing a richly sourced environment, enabling children to explore and play with a wide range of media and materials, as well as providing opportunities and encouragement for sharing their thoughts, ideas and feelings through a variety of activities in art, music, movement, dance, role-play, and design and technology

Impact

We strive to instil an appreciation and enjoyment of Design and Technology, enriching the children's learning experience. Our curriculum has been carefully designed to enable every child to flourish now and in the future, preparing them to live life in the modern world.

By the time children leave the WFF they will show evidence of being able to:

- Use time efficiently and work constructively and productively with others.
- To carry out thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs.
- To act as responsible designers and makers, working ethically, using finite materials carefully and working safely.
- Show a thorough knowledge of which tools, equipment and materials to use to make their products.
- To apply mathematical knowledge and skills accurately.
- To manage risks exceptionally well to manufacture products safely and hygienically.
- Show a passion for the subject.

We have school values which help us to personalise and extend our learning opportunities beyond our classrooms: Compassion, Courage, Respect and Resilience. Through the lens of respect for our local area, we have included units that have links to the daily experiences of our pupils and those who live within our community and our locality within the Forest of Dean and the Wye Valley; we encourage pupils to think about the environmental and sustainable issues that face our planet and how, as global citizens, we need to produce technology that will combat detrimental impacts seen around the world. To instil courage and resilience, we challenge our pupils to take ownership of their own learning, by allowing them to lead, collaborate and be competitive within our ever developing world. Through the lens of compassion, we research areas where the technology being studied has real impact on those who are not as fortunate as us and ask questions about how technology can improve the lives of those who are disadvantaged.

Through our curriculum, we support children to embrace and enjoy challenge, take ownership of their own learning and collaborate and support each other whilst striving together to be the best they can be.