DT Curriculum Intent Statement

At Westacre Middle School, we aim to foster a life-long love of learning, through adopting a practical, cross-curricular and engaging approach. Our creative curriculum aims to deliver an effective education that will equip our children with the skills required to be independent, innovative and responsible citizens. The curriculum matches our whole school vision: “Inspire. Challenge. Achieve”

Why do we teach DT?

The aim of Design & Technology at Westacre is to set children on the path to becoming the designers and engineers of the future. Children learn about how key events and individuals in design and technology have shaped the world.

In KS2, children begin by learning new skills in woodwork, textiles and food technology. In woodwork, children learn how to safely use different equipment such as the pillar drill and other unfamiliar tools. In textiles, children learn how to use the sewing machine and sewing techniques. In cooking, children begin to learn how to safely use the utensils and ovens. They also learn about food hygiene and how to keep their body healthy, through looking at nutrition.

In KS3, children apply the skills they have learnt in KS2 to work independently with the equipment across all areas of design and technology. They also development their critical eye to analyse the product they create.

Key Concepts in DT

Key concepts tie together the subject topics into meaningful schema within our skills progression maps. The same concepts are explored in a wide breadth of topics across all year groups. Through this ‘forwards-and-backwards engineering’ of the curriculum, students return to the same concepts over and over and gradually build understanding of them. In DT, the key concepts are:

- Developing, planning and communicating
- Working competently with tools, equipment and materials
- Evaluating processes and products
- Food preparation and nutrition

Knowledge Categories in DT

Knowledge categories in each subject give students a way of expressing their understanding of the key concepts and linking their learning across the year groups. In DT, the knowledge categories are: prototype design, selecting processes, choosing materials / media, inspirational designers, accurate measurement, health and safety, tool technique, product testing and evaluation, careers, food health awareness, sensory evaluation, prepare/ cook a range of dishes and demonstrate cooking skills and techniques.

SMSC Links

Design and Technology provides a platform for children to develop their creative skills and develop their life skills for the future. At Westacre Middle school, we aim to develop the whole child and DT opens up avenues of learning to children through making and creating a finished product. Design and Technology gives a context to their learning as they can apply their core subject skills into a physical use of those skills. Examples of this can be seen through applying mathematical skills to measure accurately the length of wood needed or applying their knowledge of angles to set a lid in the correct place. In cooking, measuring accurately how many grams of flour they will need to make a loaf of bread. In doing so, we help develop their sense of self-worth as they produce a final product that they can be proud to take home and display.

Spiritual: Children can explore their spiritual decisions of design and technology and that we have choices to make on how to explore our own creativity through our own spiritual guidance and have opportunity to explore this. Spirituality helps pupils consider the value of learning and how they can apply key core skills into creative areas of learning.

Moral: Children consider aspects of morality by using knowledge, skills and understanding of ethics, enabling them to make responsible and informed judgements about moral issues such as sustainable use of materials. They also considering the morality of what we choose to eat.

Social: Children will have the opportunity to discuss their thoughts on how design impacts products and how this influences us within our daily life –for example the choices designers make in packaging. Children can also explore why designs have changed in society for example why we now use paper straws instead of plastics or why the packaging of a chocolate bar changes every few years and how society influences this –art, music etc.

Cultural: Children will develop their understanding of the cultural contexts within which they and others live. For example, foods eaten by different religions and cultures, especially at different times of the year and why. Children will also explore food types and methods of cooking that originate from different cultures around the world. Children will realise what a diverse food culture we are lucky to be immersed in within Great Britain. The diversity of faith has also influences the design of artefacts such as statues, jewellery and clothing. Children will recognise these designs and use them to influence their own designs.

Curriculum Drivers

How we promote Aspirations in DT: Aspirations are promoted through the exploration of different careers within Design and Technology. This is achieved through significant designers being explored in lessons and presented on our knowledge webs, and exploring their work – this provides an opportunity for students to see different career paths that may be available to them. Further to this, careers are explored more generally through the different Design and Technology topics: the work of chefs are discussed in food technology lessons; marketing jobs are explored in year 7's Blood, Sweat and T-Shirts project; and jobs involving computer aided design are explored during planning lessons, showing that careers in this field are diverse. Presenting careers in DT is vital in offering students a passport out of their comfort zone and finding many opportunities that they can explore in the future.

How we promote Diversity in DT: Diversity is explored through the range of careers and significant designers that are also associated with our Aspirations driver. Further to this, there is a diversity in what is provided in the Design and Technology curriculum, from cooking skills, to computer aided design, creating CAMs toys and working on collaborative projects to help raise money for charities. Through the structure of

the curriculum, diversity is also offered through the links with other topics that explore different cultures and communities, for example, using cooking lessons to create food products from Greece.

How we promote Communication in DT: Communication is a key aspect of the Design and Technology curriculum. Throughout all lessons, students are asked to share ideas, feedback on designs, provide peer evaluations and discuss planning. This is emphasised further when students are asked to work collaboratively on projects, utilising communication to ensure that their final outcomes are of high quality and meet the specifications required.