Design and Technology Curriculum Statement

Intent

Through Design and Technology at St Anne’s, we aim to give children the opportunities to solve real-life design problems in practical, creative and innovative ways. Design and Technology is taught through the framework of the 2014 National Curriculum, alongside a more comprehensive scheme of work developed by the Design and Technology association. We focus on building high levels of competence in the subject specific skills including practical making skills (e.g. cutting food safely, using scales or other measuring equipment, using appropriate tools competently and safely). Design, Make, Evaluate Activities are carefully planned to provide opportunities for children to be creative, solve problems and make decisions**.**

The curriculum is designed with the children of our school at the heart of everything we do. In all units we encourage children to be curious and ask questions to develop understanding and become critical thinkers. We have carefully selected key individuals which are related to the unit they are studying that half term. These are a range of architects, designers, engineers, textile designers and chefs which we have weaved into the curriculum to inspire children and open career pathways in areas they would not have previously been exposed to.

The procedural knowledge within the curriculum builds sequentially, so that children expand upon and deepen their knowledge over time. Our curriculum is designed so that every child, including those with a disability or who have special educational needs, has the opportunity to thrive and flourish as designers. No child is taken out of studying Design and Technology. All children regardless of economic disadvantage and ability have the same knowledge-rich, high quality teaching and teachers will modify and adapt to ensure that this is accessible to all. We recognise Design and Technology is a mainly practical subject where children are often hands on and tasks are concerned with practising making skills and designing and not focused on reading or writing age/ability. This ensures that children are not held back in making progress in Design and Technology because of difficulties they may experience elsewhere in the curriculum.

Through Design and Technology at St Anne’s we increase the cultural capital of all pupils. Through identifying key individuals, we aim to broaden children’s horizons. These individuals are a mix of influential people both past and present which gives children a varied breadth of knowledge. We want to educate the children to the best of what has been thought and said by influential people in the design industry. We equip the children who leave our school with a lifelong love of learning and curiosity about the world. Throughout their Design and Technology education they are encouraged to ask questions and develop their critical thinking skills.We aim for children at St Anne’s to be innovative thinkers, problem solvers and resilient individuals.

Design concepts are revisited in every unit, providing a consistent context that allows pupils to situate new knowledge in their wider understanding of the design process. We have clear progression maps for key threshold concepts and can ensure this progression and be confident that they are leaving St Anne’s with the subject and procedural knowledge to best allow them to access and fully engage with later curriculum content, regardless of topic but through solid grounding of the design process.

The value of Design and Technology within school is championed and highlighted through its weaving in through other topics, such as English, Art, Science, Maths and Computing and making it explicit to the children where these links are. Topics are planned to ensure that children have opportunities to revise and revisit knowledge from previous years and units. There are specified endpoints at KS1, LKS2 and UKS2 for key threshold concepts in Design and Technology; mastering practical skills, design, make, evaluate and improve and taking inspiration from design throughout history. Milestones define the standards for the threshold concepts and provide clarity about what is to be learnt in each Key Stage. The same concepts are regularly revisited. This forward-backwards engineering of the curriculum ensures students return to the same concepts over and over, supporting retrieval and securing it in long term memory. At St Anne's, Design and Technology is taught in dedicated blocks throughout the year, however inter-curriculum links are regularly utilised to strengthen schemas.

As a school we teach through the framework of the 2014 National curriculum. We have identified the key knowledge of each topic that has been planned for our year groups and consideration has been given to ensure progression across topics across the school. Within each unit the amount of knowledge is carefully considered so as to not overwhelm children’s short-term memory and encourage long term retention. The units are on a fixed basis, so teachers in each year group teach the same topics each year. This enables teachers to develop their resources and expertise, as well as developing effective curriculum links.

There is a focus throughout school on the knowledge that children will learn and there is an emphasis on developing schemas relating to the key threshold concepts, which will support children in their future learning as they will have a solid base upon which to build.

At St Anne’s we see the importance of the food technology strand of D&T. We aspire to promote and improve healthy lifestyles as needed in our school context. We believe it is vital that the children have the experience of cooking and making healthy food choices. At St Anne’s children will complete one food unit in each year group. As well as this, each year group will have opportunities to have an extra allocation of time in the kitchen facilities throughout the year to complete another food preparation task. We believe it is vital that children leave school at the end of their school journey with a bank of recipes and dishes they can create outside of school which inspire them to make healthy lifestyle choices. It is important that these dishes and recipes are affordable and simple to make to ensure that they are achievable for the children to create at home. At St Anne’s we also promote positive mental wellbeing and see the value cooking can play in this. We aim to instill a love of cooking and nutrition in the children and show how it can be a positive and enjoyable experience.

Implementation

In order to help children remember, regular retrieval sessions of previous topics are done at the beginning of each lesson. The knowledge learnt and retained is then built upon each year as their understanding of the context and concepts widens. This progression is evident in their learning through the type of tasks they will encounter. This also offers the opportunity for teachers to talk to children about their previous learning and give the children opportunities to develop their oracy skills explaining their previous learning. Teachers are also able to assess any misconceptions and gaps in children’s prior learning through listening when children express their opinions and observations they may have.

Practical tasks and evidence of the children’s final designs and products are uploaded on to Seesaw and can be used as a teacher assessment tool. Children can upload pictures or videos of them completing tasks or finished products and use different tools to evaluate their own work. Completed products will be assessed by both the child and the teacher against the already agreed design criteria. This will give the teacher a basis on which to assess the children’s final product.

At the end of a unit of work, children will complete a short quiz based on the knowledge they have been taught throughout the unit. These will be based on POP style quizzes from Chris Quigley’s Curriculum Companion. This will provide information to the teacher to assess which information has been remembered and understood and which areas could be the focus of retrieval practice in the next unit of work. Previous knowledge will be tested regularly at the beginning of each DT lesson which will revisit knowledge from a range of areas.

This is to allow children the opportunity to show what they have learnt and remembered over the topic and that information is embedded and is readily available to access in the longer term. This allows teachers to assess which information has been remembered and is available for children to use when needed at a later point in time.

At the end of each year children will complete a knowledge quiz based on the “know that” statements of the topics covered that year, and this provided information to the following teacher about which areas are well remembered and understood and which areas could be the focus of retrieval practice the next year.