Technology at Litcham School

INTENT

1. To deliver the Technology National Curriculum.
2. To deliver a diverse curriculum, where knowledge and skills are taught and consolidated.
3. To deliver a broad Technology curriculum that includes Timbers, Textiles and Food Technology from Year 1 to Year 9 which will give pupils the foundations to continue with Design and Technology or Food technology (or both) at GCSE level and beyond.
4. To promote high expectations and aspirations and give pupils a thorough experience of the 'design, make, evaluate' approach.
5. To deliver an engaging and enjoyable Technology curriculum that both develops practical skills and is knowledge rich. Pupils will be well prepared to pursue Technology and related subjects such as Engineering after leaving school.

IMPLEMENTATION

<u>Curriculum Delivery</u>

- Pupils in Early Years Foundation Stage (EYFS) have experiences with materials such as wood and plasticine and also develop their find motor skills through drawing and cutting. They are able to learn about the importance of a healthy diet and the importance of good hygiene.
- Pupils in Year 1 to Year 6 follow the Design and Technology National Curriculum using as bespoke scheme of learning that is linked to the current topic they are studying. A specialist technology teacher delivers these lessons for several year groups. Throughout the primary phase, there are cross curricular links with Art.
- Pupils in Year 7 to Year 9 follow the Design and Technology and the Food Technology National Curriculum using bespoke schemes of learning. Pupils have 2 lessons a fortnight with a specialist Technology teacher on a rotation system that means they have equal amounts of time in each subject area (Timbers, Textiles and Food Technology).
- The Technologies are popular choices for GCSE options. Pupils follow the OCR Design and Technology curriculum for Timbers and Textiles and the AQA Food Technology curriculum for Food Technology.

<u>Teaching and Learning</u> (including pedagogical approach and research)

The teachers in EYFS follow the interests of the children and so the topics covered vary each year. In Autumn 2019, the topics were 'Nursery rhymes', 'Ourselves', 'Dinosaurs' and 'Christmas'. The pupils designed and made models of a palace for a Snow Queen and gadgets for superheroes.

Pupils in Year 1-6 have timetabled Technology lessons either taught by their normal classroom teacher or by a subject specialist from the secondary phase. Teachers plan each lesson to suit their own class based on objectives from the National Curriculum. Lessons include planning their model, making it and evaluating it. There is a high element of practical work and lessons are also complemented by use of the 'kit boxes' from the Teacher Scientist Network (TSN) which are based at Litcham School. For example, the electricity box has been used within primary Textiles lessons to show how lights can be used effectively in clothing design. This will be revisited during the secondary phase when pupils design fabric sugar skull decorations.

Pupils in Key Stages 3 and 4 continue to have a mixture of theory and practical work so that knowledge and skills continue to be taught and developed. Pupils will use increasingly sophisticated techniques and equipment so Year 7 pupils are able to design a product using sketching and CAD and year 10 pupils will demonstrate competence with iterative prototypes (including considering wastage, addition, deforming and re-forming, finishing) across a range of materials. The Technology department uses 'Rosenshine's Principles of instruction' to underpin all teaching and learning activities within the 'design, make, evaluate' methodology including

- Provide models
- Scaffolds for difficult tasks
- New material in small steps

Practical work has a high priority in Litcham School Technology lessons and gives pupils the opportunity to work with a wide range of materials from wood and plasticine in the primary phase to electronics at the secondary phase. In Food Technology, pupils learn about heathy eating at the primary phase and food provenance at Key Stage 4.

The Technology department is carrying out a Lesson Study on 'improving the extended writing skills of Year 11 boys using scaffolding and modelling', which we are hopeful with a positive impact on outcomes for this key group.

Extra-Curricular

The Technology department offers a number of clubs and activities including Textiles club and GCSE drop in. We have planned to work with recent graduates from Art and Design to teach new techniques to pupils as enrichment.

IMPACT

At the primary phase, pupils have each project RAG rated against the learning objectives from the National Curriculum. Pupils' design ideas are recorded in their sketch books and they are encouraged to reflect on their work and suggest improvements. Most pupils achieve the expected levels of progress by the end of the primary phase. At key stage 3, pupil work is summatively assessed at the end of each project during their rotation and formative assessment is given through the development of their projects. At GCSE, pupil outcomes are close to national averages in Textiles and Food Technology and below national averages in Timbers although outcomes have been improving. There is an action plan to improve outcomes further in this subject area, including early identification of pupils at risk of not achieving their target grade and intervention to help them get back on track.