

“Design and technology is a phenomenally important subject. Logical, creative and practical, it’s the only opportunity students have to apply what they learn in maths and science - directly preparing them for a career in engineering. Policy-makers must recognise design and technology’s significance for the UK economy and strive not just to preserve it – but to ensure it appeals to the brightest of young minds.” James Dyson

Intent

The teaching and learning of design and technology at Leyburn Primary School aims to provide opportunities for pupils to ‘design and make products that solve real and relevant problems within a variety of contexts, considering their own and others’ needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world.’

Our aims are to fulfil the requirements of the National Curriculum for design and technology for every child to:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook.

How are British Values taught through design and technology?

Design and technology is a subject which encourages both personal discipline and the ability to cooperate with others. As such, it provides opportunities for children to make their own individual design decisions, as well as tolerating the views and needs of others. When working within a group, all members have to show mutual respect and so, in this way, British values are integral to all design technology themes and projects.

Implementation

Leyburn Primary School has chosen to use the support of a design and technology scheme of work, ‘Projects on a Page’ from the Design and Technology Association. This scheme will support staff’s subject knowledge and confidence in planning ambitious units that progressively build on skills and knowledge, whilst enabling the children to strengthen their own design outcomes. This scheme provides a broad and balanced design and technology curriculum, incorporating and revisiting frequently skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food. All units make use of design, make, evaluate and technical knowledge aspects. They are taught in block periods and where possible make links with other curriculum areas, such as maths and science and including SMSC. The age appropriate units include a selection of both theme based and skill specific topics, which can be applied and consolidated into other units and other curriculum subjects. It is built so that children are revisiting prior learning and then building on this progressively both within their year group from unit to unit and the following year.

We aim to provide more opportunities for the children to apply, consolidate and build on their learning through local visitors, particularly Primary Futures and links with the local secondary school and other STEM partners such as the University of Teesside.

Impact

Our curriculum has been planned to increase the expectations and outcomes of all learners. If the children are assessed to be achieving the lesson aims, then they are deemed to be making good or better progress. We measure the impact of our curriculum through sketchbook scrutiny, pupil discussion and a reflection on standards achieved against the planned outcome.