Westhouses Primary School Design and Technology policy



Revision History

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Approval History

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Westhouses Primary School Design and Technology Policy

Aims and Objectives

Design and Technology is essentially a practical subject that allows children to think imaginatively and creatively and to become more autonomous and effective problem solvers, both as individuals and as part of a team. Our aim is to provide children with a rich and enjoyable experience of design and technology, in which they can acquire and develop their own designing and making skills in line with our school's identified within topic based work.

The aims of Design & Technology at Westhouses Primary are:

- to develop children's designing and making skills,
- to teach children's the knowledge and understanding, within each child's ability that will be required to complete the making of their product,
- to teach children the safe and effective use of a range of tools, materials and components,
- to develop children's understanding of the ways in which people have designed products in the past and present to meet their needs,
- to develop children's creativity and innovation through designing and making,
- to develop children's understanding of technological processes, their management and their contribution to society.

The national curriculum for Design and Technology aims to ensure that all pupils:

- 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.

Children will design and make a range of products. A good quality finish will be expected in all design and make activities appropriate to the age and ability of the pupil.

The work covered in each year group ensures a balance of:

- Investigating, researching and evaluating,
- Focused skills development,
- Designing and making assignments,
- Evaluating and Assessment for Learning.

Teaching and Learning Style

Teachers ensure that children apply their knowledge and understanding by following a clear structure of lessons: investigate, plan, make and evaluate. Children critically evaluate existing products in order to plan their own. They have the opportunity to use materials to develop their skills before using a wide range of materials and resources, including ICT, to make their 'product'. Students will evaluate their product based on key success criteria from their planning phase.

Design and Technology Curriculum Planning

Design and Technology is a foundation subject in the National Curriculum and our planning is taken and adapted from the Kapow scheme of learning and often linked to the topics that we use. KS1 and KS2 follow a two year topic cycle which will incorporate 6 D&T projects cross each cycle. EYFS follow a 1 year cycle and also incorporate 6 D&T projects in that year. (See D & T scheme of learning)

Long Term Planning encompasses the key learning objectives that should be met over a two year cycle and is outlined in the D & T scheme of learning. This covers key objectives listed in the National Curriculum as well as key skills development found within the subject.

Each unit will be taught in the following order: design brief, deconstruct and investigate, skills development, design, make, evaluate, celebrate!

Design Brief - Pupils will receive a design brief outlining the skills and key vocabulary they will be using to create a product.

Deconstruct and investigate - Pupils will investigate a product by deconstructing an existing product, researching similar products in order to find out how this product has been made. Part of this investigation will also be researching an Architect or Designer involved in making this sort of product.

Skills Development - Pupils will develop the skills that they will need in order to make their product. They may spend time recapping prior skills and learning before moving onto learning new skills.

Design - Pupils will design their own product making explicit reference to skills and vocabulary learned so far.

Make - Pupils will make their product using the skills developed.

Evaluate - Pupils will be encouraged to evaluate their product throughout the making process so that they may improve their product, and/or solve problems that occur. At the end of the making process, pupils will evaluate their final product making use of key D&T vocabulary.

Celebrate - Wherever possible, D&T products are celebrated and shared with others by placing them on display, placing pictures on the school website, or school newsletters!

Activities in Design and Technology are planned so that they build on prior learning. Children of all abilities are given the opportunity to develop their skills, knowledge and

understanding, and we also build planned progression into the themes so that the children are increasingly challenged as they move through the school. Moreover, pupils are encouraged to use sticky learning starters to recap prior learning at the beginning of each lesson.

Cross-Curricular Links

Literacy - Design and Technology contributes to the teaching of Literacy by providing valuable opportunities to reinforce prior learning. Discussion, drama and role-play are important ways for the children to develop an understanding that people have different views about design and technology. The evaluation of products requires children to articulate their ideas and to compare and contrast their views with those of other people. Through discussion, children learn to justify their own views and clarify their design ideas. We have also incorporated a Talk4writing project into each classes two yearly cycle which will focus on building a project taking inspiration from a piece of writing.

Numeracy - In Design and Technology, children learn to measure and use equipment correctly, generate nets of shapes in order to create packaging and weigh and measure accurately. They will also learn about size and shape and make "real" use of their mathematical knowledge in order to be creative and practical in their designs and modelling.

Science - Science helps in design and technology, looking at and drawing electrical circuits. It also helps children to think about using materials to create structures which can withstand a force.

ICT - Information and Communication Technology (ICT) enhances the teaching of design and technology, wherever appropriate, in all key stages. Children may use software to enhance their skills in designing and making things. Younger children are able to use simple software to enhance their learning. Older children use an ICT control program to control mechanisms and to get them to move in different ways, either in a virtual world or via an infrared connection to working models. The children also use ICT to collect information and to present their designs through a range of design and presentation software.

Personal, Social and Emotional Education (PSHE) - Design and Technology contributes to the teaching of PSHE, encouraging children to develop a sense of responsibility in following safe procedures when making things. They also learn about health and healthy diets. Their work encourages them to set targets and meet deadlines. They will also learn how to prevent disease from spreading and about personal hygiene when working with food.

Design and Technology and Inclusion

At our school we teach Design and Technology to all children, whatever their ability and individual needs. Design and Technology implements the school curriculum policy of providing a broad and balanced education to all children. Through our Design and Technology teaching we provide learning opportunities that enable all pupils to make progress. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents, and those learning English as an additional language, and we take all reasonable steps to achieve this. For further details see our separate SEN policy.

When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors - classroom organisation, teaching materials, teaching style and differentiation - so that we can take some additional or different action to enable the child to learn more effectively. Regular assessment allows us to consider each child's attainment and progress against expected levels. This helps ensure that our teaching is matched to the child's needs.

Assessment for Learning

Teachers assess children's work in Design and Technology by making assessments as they observe them working during lessons, allowing for different learning styles. They record the progress that children make by assessing the children's work against the learning objectives for the lessons and against the progression documents. Children are encouraged to make judgements on ways in which their work can be improved. The subject leader keeps evidence of the children's work in a portfolio.

Health and Safety

In this subject the general teaching requirement for health and safety applies. We teach children how to follow proper procedures for food safety and hygiene. It is the responsibility of the subject leader to pass on any relevant Health and Safety information to staff. It is the individual member of staff's responsibility to ensure that they have read, understood and act on this information.

Monitoring and Review

The DT Subject Leader monitors the quality of teaching/learning in DT across the school. These areas are monitored using: pupil questionnaires, pupil interviews, lesson observations, staff meetings and auditing resources. The subject leader keeps a portfolio of evidence and reviews Design and Technology when there is a priority highlighted on the School Development Plan.

This policy will be reviewed every three years.