## Blanford Mere Nursery & Primary School



# Design & Technology Policy

Date adopted by governors

April 2021

To be reviewed

April 2024

### **DESIGN AND TECHNOLOGY POLICY**

**Article 24:** You have the right to the best health care possible, safe water to drink, nutritious food, a clean and safe environment, and information to help you stay well

#### Aims and objectives

Design and technology prepares children to take part in the development of tomorrow's rapidly changing world. Creative thinking encourages children to make positive changes to their quality of life. The subject encourages children to become autonomous and creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas and eventually making products and systems. Through the study of design and technology they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industrial practices. This allows them to reflect on and evaluate present and past design and technology, its uses and its impacts. Design and technology helps all children to become discriminating and informed consumers and potential innovators.

#### The aims of design and technology are:

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.

#### Teaching and learning style

The school uses a variety of teaching and learning styles in design and technology lessons. The principal aim is to develop children's knowledge, skills and understanding in design and technology. Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning and making products and then evaluating them. We do this through a mixture of whole-class teaching and individual/group activities. Within lessons, we give children the opportunity both to work on their own and to collaborate with others, listening to other children's ideas and treating these with respect. Children critically evaluate existing products, their own work and that of others. They have the opportunity to use a wide range of materials and resources, including ICT.

In all classes there are children of differing ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies:

- Setting common tasks that are open-ended and can have a variety of results.
- Teachers use a variety of questioning strategies to develop children's understanding of Design Technology.
- Setting tasks of increasing difficulty where not all children complete all tasks;
- Grouping children by ability and setting different tasks for each group;
- Providing a range of challenges through the provision of different resources.
- Using additional adults to support the work of individual children or small groups.

#### Design and technology curriculum planning

Design and technology is a foundation subject in the National Curriculum. Our school will use the national scheme of work as the basis for its curriculum planning in design and technology. We have adapted the national scheme to the local circumstances of our school in that we use the local environment and our topic plan as the starting point for certain aspects of our work.

We carry out the curriculum planning in design and technology in three phases: long-term, mediumterm and short-term. The long-term plan maps out the units covered in each term during the key stage.

Class teachers plan for individual design and technology sessions as part of weekly planning. The weekly plan lists the specific learning objectives for each lesson and detail how the lessons are to be taught. The class teacher keeps these individual plans, and the class teacher and subject leader often discuss them on an informal basis.

We plan the activities in design and technology so that they build upon the prior learning of the children. We give children of all abilities the opportunity to develop their skills, knowledge and understanding and we also build planned progression into the scheme of work, so that the children are increasingly challenged as they move through the school.

#### Remote Learning

Remote learning for Design & Technology will be shared with families when they are absent due to the Covid related reasons.

Remote learning will not be available to those who are ill with a non-Covid related illness and would not normally attend school, or to those children whose parents choose to keep them at home when they have not been advised to do so. This is because children need to be in school and, in line with Government guidance, the school will strongly promote face-to-face contact through school attendance.

Work will NOT be set on the first day of isolation to allow staff time to prepare. Work will be sent from the second day onwards. Staff will prepare work the day before it is set and will ensure that it is published the following morning.

- A child who has a member of their household, who has tested positive for Covid-19 and are not permitted to attend school because they have been in close contact and have been advised to self-isolate;
- A child's whole bubble or identified pupils who is not permitted to attend school because they, or another member of their bubble, have tested positive for Covid-19.
- A child unable to attend school due to a local or national lockdown.

Due to Government guidance and Covid restrictions, as a school we have made a decision not to participate in the cooking curriculum and textiles, due to trying to limit the use of resources being shared between groups of pupils and adults within the school community.

#### The Foundation Stage

We encourage the development of skills, knowledge and understanding that help reception children make sense of their world as an integral part of the school's work. We relate the development of the children's knowledge and understanding of the world to the objectives set out in the Early Learning Goals. These underpin the curriculum planning for children aged three to five. This learning forms the foundations for later work in design and technology. These early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products, developing making skills and handling appropriate tools and construction material safely and with increasing control.

We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion. These activities, indoors and outdoors, attract the children's interest and curiosity.

#### Contribution of design and technology to teaching in other curriculum areas

#### English

Design and technology contributes to the teaching of English in our school by providing valuable opportunities to reinforce what the children have been doing during their English lessons. 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.

#### Computing (ICT)

We use computing to support design and technology teaching when appropriate. Children use software to enhance their skills in designing and making, and use draw-and-paint programs to model ideas. The children also use computing to collect information and to present their designs through draw-and-paint programs.

#### PSHE

Personal, social and health education (PSHE) and citizenship

Design and technology contributes to the teaching of personal, social and health education and citizenship. We encourage the 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 be responsible and to set targets to meet deadlines, and they also learn through their understanding of personal hygiene, how to prevent disease from spreading when working with food.

Spiritual, moral, social and cultural development;

The teaching of design and technology offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons. Our groupings allow children to work together, and give them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and co-operative work across a range of activities and experiences in design and technology, the children develop respect for the abilities of other children and a better understanding of themselves. They also develop a respect for the environment, for their own health and safety and for that of others. They develop their cultural awareness and understanding, and they learn to appreciate the value of differences and similarities. A variety of experiences teaches them to appreciate that all people are equally important, and that the needs of individuals are not the same as the needs of groups.

#### Teaching design and technology to children with special educational needs

At our school we teach design and technology to all children, whatever their ability. Design and technology forms part of the school curriculum policy to provide 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 do this by setting suitable learning challenges and responding to each child's different needs. Assessment against the National Curriculum allows us to consider each child's attainment and progress against expected levels.

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. This ensures that our teaching is matched to the child's needs.

Intervention will lead to the creation of an Individual Education Plan (IEP) for children with special educational needs. The IEP may include, as appropriate, specific targets relating to design and technology.

We enable pupils to have access to the full range of activities involved in learning design and technology. Where children are to participate in activities outside the classroom, for example, a museum or factory trip, we carry out a risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

#### Assessment and recording

Teachers assess children's work in design and technology by making assessments as they observe them working during lessons. They record the progress that children make by assessing the children's work against the learning objectives for their lessons. At the end of a unit of work, teachers then use the assessments that they record to plan the future work of each child and to make an annual assessment of progress for each child, as part of the annual report to parents.

The design and technology subject leader keeps evidence of the children's work in a portfolio.

#### Resources

Our school has a wide range of resources to support the teaching of design and technology across the school. Classrooms have a range of basic resources, with the more specialised equipment being kept in the design and technology store. This room is accessible to adults only.

#### Health and safety

The general teaching requirement for health and safety applies in this subject. We teach children how to follow proper procedures for food safety and hygiene.

#### Monitoring and review

The monitoring of the standards of children's work and of the quality of teaching in design and technology is the responsibility of the design and technology subject leader. The work of the subject leader also involves supporting colleagues in the teaching of design and technology, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. The design and technology subject leader reports to the Head-teacher.

Approved by the Governors: April 2021 Date for review: April 2024