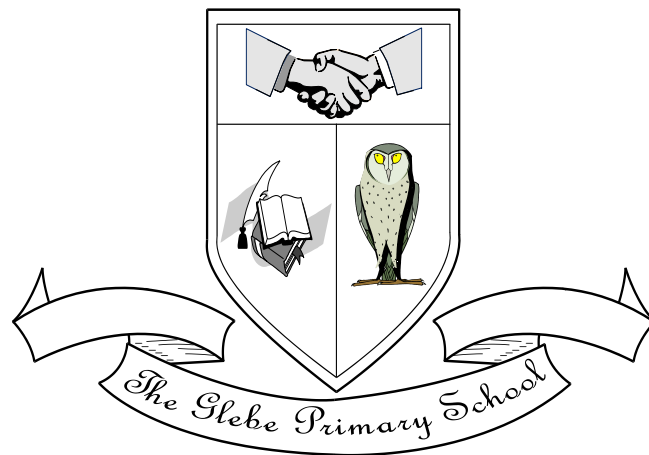


THE GLEBE PRIMARY SCHOOL

Design & Technology Policy



The Glebe Primary
Design and Technology Policy

1 Rational

- 1.1 At The Glebe Primary School we believe Design and Technology is essential to prepare pupils to participate in tomorrow's rapidly changing world.

2 Aims and objectives

- 2.1 Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils 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. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

- 2.2 The objectives of teaching design and technology are:

- To develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technical world.
- To 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.
- To critique, evaluate and test their ideas and products and the work of others.
- To understand and apply the principles of nutrition and learn how to cook.

3 Teaching and learning style

- 3.1 The Glebe Primary 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 or 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.

- 3.2 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;
- 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.

4 Design and technology curriculum planning

- 4.1** Design and technology is a foundation subject in the National Curriculum. Our school plans D.T. activities as part of our cross curricular topic work.
- 4.2** We carry out the curriculum planning in design and technology in two phases: long-term, medium-term. The long-term plan maps out the areas covered in each term during the two year cycle. The subject leader works this out in conjunction with teaching colleagues in each year group.
- 4.3** Our medium-term plans are incorporated within cross curricular topic planning. They give details of each unit of work for each term. They identify learning objectives and outcomes for each unit, and ensure an appropriate balance and distribution of work across each term.
- 4.4** Plans list the specific learning objectives, skills and expected outcomes 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 discuss them on an informal basis.
- 4.5** We plan the activities in design and technology so that they build on 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.

5 The Foundation Stage

- 5.1** At The Glebe Primary 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. As the reception class is part of the Foundation Stage of the National Curriculum, 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.

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

6.1 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. Discussion, drama and role-play are important ways that we employ for the children to develop an understanding of the fact 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.

6.2 Mathematics

In design and technology there are many opportunities for children to apply their mathematical skills through choosing and using appropriate ways of calculating measurements and distances. They learn how to check the results of calculations for reasonableness, and learn how to use an appropriate degree of accuracy for different contexts. Children learn to measure and use equipment correctly. They apply their knowledge of fractions and percentages to describe quantities and calculate proportions. The children will carry out investigations, and in doing so they will learn to read and interpret scales, collect and present data, and draw their own conclusions. They will learn about size and shape, and make practical use of their mathematical knowledge, in order to be creative and practical in their designs and modelling.

6.3 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.

6.4 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 cooperative 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 allows them to appreciate that all people are equally important, and that the needs of individuals are not the same as the needs of groups.

7 Design and technology and ICT

7.1 Information and communication technology enhances the teaching of design and technology, wherever appropriate, in all key stages.

8 Design and technology and inclusion

8.1 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 good 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.

- 8.2 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. Assessment against the National Curriculum 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.
- 8.3 Intervention through School Action and School Action Plus will lead to the creation of an Individual Education Plan (IEP) for children with special educational needs.
- 8.4 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 in a museum or on a factory trip, we carry out a risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

9 Assessment for learning

- 9.1 The learning outcomes in each unit show how children might demonstrate what they have learnt. Pupils should be involved in actively evaluating their work and thinking about possible improvements.
- 9.2 Teachers assess children's work in design and technology by making assessments as they observe them working during lessons. They are encouraged to record the progress that children make by assessing the children's work against the learning outcomes for the lesson. At the end of the academic year teachers make judgements as to whether children are working at expected, below or beyond age related expectations. Teachers then use ongoing assessments and end of year judgements to report the progress of each child as part of the annual report to parents. Each teacher passes this information on to the next teacher at the end of each year.
- 9.2 The subject leader keeps evidence of the children's work in a portfolio. This demonstrates the expected level of achievement in design and technology in each year across the whole school.

10 Resources

- 10.1 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.

11 Health and safety

- 11.1 In this subject the general teaching requirement for health and safety applies. Teachers will carry out a risk assessment before each activity, considering their tools, materials and equipment being used. Before undertaking practical tasks, children should be taught: to follow proper procedures for food safety and hygiene; and to use tools correctly in order to ensure safety.

12 Monitoring and review

- 12.1** At The Glebe Primary, the monitoring of the standards of children's work, and of the quality and breath of teaching, is the responsibility of the design and technology subject leader. The work of the subject leader also involves supporting colleagues in their teaching, 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 gives the Headteacher an annual report in which s/he evaluates the strengths and weaknesses in the subject and indicates areas for further improvement. The subject leader has release time in order to review medium term plans, monitor children's work and observe teaching of design and technology across the school.

THE GLEBE PRIMARY SCHOOL

Design and Technology Policy

This Policy has been approved by the
Governing Body of the Glebe Primary
School

To be reviewed: Summer 2020