

The Reddings Primary and Nursery School



Design and Technology Policy

Date Agreed: November 2021

Date for Review: November 2023

Intent:

Why our Design Technology curriculum looks like this:

DT should provide children with a real life context for learning. At The Reddings, we want to allow children to aspire to be more through creating opportunities for them in the wider world. Through the DT curriculum, children should be inspired by engineers, designers, chefs and architects to enable them to create a range of structures, mechanisms, textiles, electrical systems and food products with a real life purpose.

Aims and Objectives

Design and Technology prepares learners to take part in the development of tomorrow's rapidly changing world. Creative thinking encourages learners to make positive changes to their quality of life. The subject encourages learners 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 learners to become discriminating and informed consumers and potential innovators.

The aims of Design and Technology are:

- to develop imaginative thinking in learners and to enable them to talk about what they like and dislike when designing and making;
- to enable learners to talk about how things work, and to draw and model their ideas;
- to encourage learners to select appropriate tools and techniques for making a product, whilst following safe procedures;
- to explore attitudes towards the made world and how we live and work within it;
- to develop an understanding of technological processes, products, and their manufacture, and their contribution to our society;
- to foster enjoyment, satisfaction and purpose in designing and making

Teaching and Learning

The school uses a variety of teaching and learning styles in Design and Technology lessons. The principal aim is to develop learner's knowledge, skills and understanding in Design and Technology. Teachers ensure that the learners 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, learners are given the opportunity both to work on their own and to collaborate with others, listening to other learners' ideas and treating these with respect. Learners 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 learners of differing ability. We recognise this fact and provide suitable learning opportunities for all learners by matching the challenge of the task to the ability of the learner. 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 learners complete all tasks;
- grouping learners 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 learners or small groups.

Design and Technology Curriculum Planning

To achieve our aims the school plans a range of activities in Design and Technology which provide opportunities, as required by the Revised National Curriculum for Design and Technology (2014), for pupils 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.

Design and Technology is a foundation subject in the National Curriculum. At The Reddings Primary School we link Design and Technology with our curriculum theme. The theme is basis for our curriculum planning in Design and Technology and the Creative development strand in the Foundation Stage.

We carry out the curriculum planning in Design and Technology in two phases: Long Term and Session Plans. The curriculum maps show how Design Technology opportunities link with each class' current theme covered in each term during the key stage. The Design and Technology subject leader ensures coverage in conjunction with teaching colleagues and Headship Team.

We use session plans for short-term planning. These plans define what we will teach and ensure an appropriate balance and distribution of work across each term. The plans identify learning objectives and outcomes for each session. Plans are kept by the class teacher and are often discussed with the subject leader on an informal basis. The subject leader is responsible for reviewing, monitoring and providing feedback to the individual class teacher and the Senior Team.

We plan the activities in Design and Technology so that they build upon the prior learning of the learners. We give learners 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 learners are increasingly challenged as they move through the school.

Skills Progression and Continuity

Progression and continuity are ensured by reference to the whole school Skills Progression Map for Design and Technology and each class' Curriculum Map. The Skills Progression Map has been drawn up using the recommendations from the National Curriculum (September 2014). Progression is also ensured by each teacher's awareness of the activities they should be presenting to their learners and how these build on the previous experience of their learners.

Contribution of Design and Technology to teaching in other Curriculum areas

1. English

Design and Technology contributes to the teaching of Literacy in our school by providing valuable opportunities for learners to ask and answer questions. Discussion plays an important part providing opportunities for the learners to develop an understanding that people have different views about Design and Technology. The evaluation of products requires learners to articulate their ideas and to compare and contrast their views with those of other people. Through discussion learners learn to justify their own views and clarify their design ideas. Cross Curricular links are made during the planning stage of the process, linking with instruction writing in English.

2. Computing

We use ICT to support Design and Technology teaching when appropriate. Learners use a range of information sources including the Internet, ipads, books and CD-ROMs to research curriculum areas. The learners also use ICT to collect visual information to develop their ideas by using digital cameras.

3. Mathematics

Design and Technology contributes to the teaching of Mathematics in our school by giving the learners opportunities to develop their understanding of shape, space and measure, number and mathematical vocabulary.

4. Spiritual, moral, social and cultural development

The teaching of Design and Technology offers opportunities to support the social development of our learners through the way we expect them to work with each other in lessons. Our groupings allow learners to work together, and give them the chance to discuss their ideas and feelings about their own work and the work of others. The learners develop respect for the abilities of other learners and a better understanding of themselves through their collaborative and co-operative work across a range of activities and experiences in the subject. 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 through the different topics.

Assessment and recording

Learners' work in Design and Technology is assessed through observations during lessons. Teachers record the progress that learners make by assessing the learners' work against the learning objectives for their lessons. At the end of the curriculum theme/DT project, teachers make a judgement against the National Curriculum levels of attainment. Teachers then use the levels that they record to plan the future work of each child. This then enables the teacher to make an annual assessment of progress for each child, as part of the annual written report to parents. Each teacher passes this information on to the next teacher at the end of each year.

The Design and Technology subject leader monitors the progress of all learners and produces a report at the end of each academic year (July).

The Design and Technology subject leader keeps a portfolio of photographic evidence of learners' work, both displays of Design and Technology work and design technology in action. This is updated on a regular basis.

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, but more specialised equipment is kept in a central storage area.

Health and safety

The general teaching requirement for health and safety applies in this subject. We teach learners how to follow proper procedures for food safety and hygiene when using food products and cooking equipment.

Monitoring and review

The monitoring of the standards of learners' 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 provides the head teacher with an annual review of the action plan identifying what has been achieved and indicates areas for further improvement. The Design and Technology subject leader has allocated management time in order to review evidence of the learners' work and undertake lesson observations of Design and Technology teaching across the school and to gather samples of work for the Design Technology portfolio.

Inclusion

In line with the schools Equality Scheme, planning should take into account the needs, gender, race and religious beliefs, within each year group so that all learners find the work accessible, stimulating and, whenever possible, appropriate to their interests.

Teachers give every learner the opportunity to experience success in learning and to achieve as high a standard as possible.

Learners with special needs may well find it easier to express their ideas and feelings in a visual way and will benefit from 'open ended' tasks and activities.

It is also a subject not necessarily governed by academic ability and provides all learners with an opportunity to succeed. Each learner is encouraged to feel their work is respected and of equal value to the work of others. Each learner's work is celebrated and displayed – thus helping to promote self-esteem.

We aim to give all learners the opportunity to develop an appreciation of design from different cultures through topic work or when studying religions and specific festivals. Teachers present learners with work from a variety of architects, craft workers and designers – including both genders and work from artists with a variety of ethnic backgrounds.

We enable pupils to have access to the full range of activities involved in learning Design and Technology. Where learners 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.