# Design and Technology Policy



## 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:

- to develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making;
- to enable children to talk about how things work, and to draw and model their ideas;
- to encourage children 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 Style**

The school uses a variety of teaching and learning styles and aims to teach the skills of design technology in a cross curricular way.

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; setting tasks of increasing difficulty where not all children complete all tasks; 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 uses its own 'framework' which allows the teachers to adapt plans to suit our creative curriculum and the children to develop skills through a variety of different experiences and use of materials. Our long term planning ensures in depth coverage of all foundation subjects by changing the focus subjects for each term. Our medium-term plans then 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 skills and experiences across each term. We plan the activities in design and technology that link with our over arching topic teachers also ensure that children 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.

#### 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 for 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.

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.

### **Evidence** Collecting

- Teachers plan learning opportunities which will provide evidence for subject leaders through:
- Annotated photographic evidence uploaded on 2simple which indicates the skills being taught
- Written work within the Ranelagh Curriculum Books and sketches in Art books
- Classroom and Hall Displays
- All children's Ranelagh work is subject to the school's presentation and marking policy. (see Marking Policy)
- All Design and Technology planning is stored on the school system (Google drive) and is regularly monitored by the subject leader for D&T and LMT.

#### Resources

Our school has a wide range of resources to support the teaching of design and technology across the school including construction kits, textile resources, resistant materials, tools and kitchen utensils and appliances.

The Design technology subject leaders review resource needs on a termly basis and, in conjunction with other subject leaders, order as necessary. We value experiences and people as assets, and use them as resources as frequently as possible.

#### Health and safety

All activities, both on and off site are planned with due regard to health and safety. Teachers have access to risk assessments for range of different tools and appliances. They are expected to review these before teaching a lesson where children will be using said tools and appliances. Children are taught to use tools and equipment under close supervision, including

saws, drills and knives. Any visits involving children leaving the school site will be subject to a risk assessment.

#### Assessment

- Children are given opportunities to self assess their learning at regular intervals especially when evaluating their prototypes and final products
- Each class teacher will maintain a record of the skills taught by highlighting the skills when consolidated with her class
- Class teachers will annotate lesson plans with names of individual children who may need further support in coming lessons
- We assess children's understanding through using statements based on the National curriculum objectives as well as our own skills grid– recording individual children's attainment and progress on spreadsheets which can accessed by all subject leaders.
- Subject leader for D&T monitor planning which is set around the topic of the term. Children's work is evidenced, highlighted and celebrated through finished products on display and from photographs of children in learning on 2Simple. This is overseen by the Leadership and Management Team.
- Parents and carers are kept informed of developments, through termly curriculum newsletters, open evenings, end of year reports, and the school newsletter and website.

### **Monitoring and Review**

The D&T Leader and Subject Leaders are responsible for monitoring and reviewing. This process is reflected in the Subject Leaders action plans and the School Development Plan, and is achieved through:

- regular scrutiny of sketch books and Ranealgh Curriculum books.
- Regular planning monitoring
- pupil conferencing
- monitoring of data and discussion around any children or groups of children that might need further support
- analysing skills to find possible gaps in teaching and leaning to identify ways they can be closed
- termly feedback to all teachers based on books, pupil conferences, planning and skills grid
- analysis of data saved on shared drive
- Collecting evidence gained through extra curricular learning clubs.

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 and happens through methods listed above. The subject leader supports colleagues in the teaching of design and technology, being informed about current developments in the subject through Best Practice Forums and providing a strategic lead and direction for the subject in the school.