



## **Design and Technology Policy**

At Lyncrest Primary School, we recognise that children are living in a highly developed technological society. They are constantly using and controlling a wide range of technology whether it be the use of a light-switch, calculator, computer system or photocopier. This is all part of their experience of life and one which they will use in the classroom. Design and Technology is about practical problem solving and using materials available to them to solve problems in a person-made environment. At primary school level, we can instil attitudes towards Design and Technology in which the children can realise that in technology there is never just one correct solution. The process of identifying a need, designing a solution, building an artefact and testing and evaluating it can be most satisfying to the child, particularly if it works and has some relevant function or application. Through the teaching and learning of Design and Technology, we seek to develop these key characteristics of designers and engineers and those who work in the field of design and technology:

- Significant levels of originality and the willingness to take creative risks to produce innovative ideas and prototypes.
- An excellent attitude to learning and independent working.
- The ability to use time efficiently and work constructively and productively with others.
- The ability to carry out thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs.
- The ability to act as responsible designers and makers, working ethically, using finite materials carefully and working safely.
- A thorough knowledge of which tools, equipment and materials to use to make their products.
- The ability to apply mathematical knowledge.
- The ability to manage risks exceptionally well to manufacture products safely and hygienically.
- A passion for the subject and knowledge of, up-to-date technological innovations in materials, products and systems.

### **Teaching and Learning for Design and Technology**

Classes undertake a sequence of Art and Design lessons once every other half term (alternating between Art and Design for the other half of the term). Teachers follow the teaching and learning policy when delivering art and design lessons. Lyncrest Primary 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 the subject. Teachers ensure that children apply their knowledge and understanding when developing ideas, during planning and making products and when evaluating them. This is done through a mixture of whole-class teaching and individual or group activities. Within lessons, children are given 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.

## **Design and Technology Curriculum Planning**

The National Curriculum is used as the basis of curriculum planning, with specific guidance provided by Chris Quigley Essentials to plan Design and Technology lessons that work towards threshold concepts and their relative milestones. These concepts and milestones form the intention for the children's learning and planning is based around meeting these intentions.

These intentions are:

- To master practical skills (when working with food, materials, textiles, electricals, computing, electronics, construction and mechanics).
- To design, make, evaluate and improve.
- To take inspiration from design throughout history.

Design and Technology across the school builds upon prior learning and as such intentions are repeated across year groups; however, a progression is found within the milestones we wish for the children to achieve across each year group. This progression can be found within the long term Design and Technology plan within the Chris Quigley essentials scheme.

## **Design and Technology in EYFS**

During the Early Years Foundation Stage, the essential building blocks of children's design and technology capability are established. There are many opportunities for carrying out D&T-related activities in all areas of learning in the EYFS but often the activities they undertake will link with their topic or theme (for example space). Within these activities they will also be working towards their first milestones from the learning intentions listed above. 'Designing and Making' is identified as a strand within Knowledge and Understanding of the World. As such, by the end of the EYFS, most children should be able to:

- Construct with a purpose in mind, using a variety of resources.
- Use simple tools and techniques competently and appropriately.
- Build and construct with a wide range of objects, selecting appropriate resources and adapting their work when necessary.
- Select the tools and techniques they need to shape, assemble and join materials they are using.

D&T-related activities in the EYFS should be appropriate to the developmental stage of the children. Activities should look quite different from those carried out in KS1 and KS2. Effective practice in the EYFS has the following characteristics:

- Designing does not necessarily entail drawing.
- Designing can mean using hand gestures, arranging and re-arranging materials and components, talking and listening.
- Designing is usually intuitive.
- The designing and making process is fluid.
- Sometimes practical skills are taught directly
- Children have frequent opportunities to develop practical skills with a range of materials.
- Children have frequent opportunities to explore construction kits.
- Children have frequent opportunities to explore existing products.
- Activities are appropriate to children's prior experiences.
- Context is sometimes set by teacher, sometimes by the children.

## **Health and Safety**

At Lyncrest Primary School we teach children how to follow proper procedures for food safety and hygiene. In this subject the general teaching requirement for health and safety applies. 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.

### **Assessment Practice for Design and Technology**

We use general assessment practices in this subject as outlined at the start of Teaching and Learning Policy under the heading 'Meeting children's learning needs through assessment practice'. Children's progress is recorded in their individual Learning Logs.