

Policy for Design and Technology

Rationale

We believe that, through their work and experiences in DT, all our pupils will develop their designing, making, evaluating and problem-solving skills. They will have a range of opportunities to ensure that our children are successful by applying these skills to practical tasks and activities.

Aims

The effective teaching of DT should enable pupils to:

- develop the creative, technical and practical expertise needed to perform every day;
- 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 (such as themselves, a family member or the local community);
- critique, evaluate and test their prototypes, their final product and the work of others (such as existing products or the work of their peers);
- understand and apply the principles of nutrition and learn how to prepare food and bake both sweet and savoury items.

Outcomes

In each unit taught, it is expected that most pupils will be increasingly-able to:

- use research and evaluation of existing products to inform the design of products with both a consumer and purpose in mind;
- generate and communicate their ideas using annotated sketches, cross-sectional and exploded diagrams, prototypes and pattern pieces;
- use a range of tools, materials and techniques to make quality products with increased precision and consideration for functional and aesthetic qualities;
- work safely and recognise hazards to themselves and others;
- evaluate their work as it progresses and suggest alternatives where appropriate.

In addition to this, certain units will allow children to:

- develop an understanding of how key events and individuals in design and technology have helped shape the world.
- learn how to prepare food, bake and apply the principles of nutrition and healthy eating.

Organisation

DT is taught across all year groups consecutively each term and is taught over a sequence of six lessons. Lessons are planned to ensure that full coverage of all aspects detailed in the National Curriculum for Design and Technology are covered.

The school has a two-year cycle where the following contexts of DT are taught:

- textiles
- structures
- mechanical systems
- electrical systems

In addition, 'cooking and nutrition' is covered by each year group. The requirement for children to 'apply their understanding of computing to program, monitor and control their products' is covered within the Computing Curriculum.

Across the Key Stage, the children are also given opportunities to develop design and technologies through applying skills, knowledge and understanding from other subjects, particularly English, Maths, Computing, Science and Art.

A variety of teaching styles are used and multiple learning experiences are offered. These include: investigating, teacher modelling, explaining, discussion (small group and whole class), independent work, group activities, self and peer assessment and cross-curricular activities.

ICT in Design and Technology

ICT is used in Design and Technology to support children:

- through research and investigation
- to support children's making
- in their use of control technology

Assessment, Recording and Reporting

Assessment of the pupils' work is often continuous. Lessons are planned according to pupils' level of understanding or attainment in a particular lesson. Additional help or extension tasks are given to individual pupils as and when required. Self-assessment is through evaluation. As self-evaluation plays a significant part in DT work, pupils become aware of their own successes and failures and develop the ability to make or suggest improvements to their own work. This is particularly effective when task objectives are made clear at the outset.

At the end of each unit, the DT lead conducts a pupil voice to gauge the children's understanding and assess if the children have learnt and applied the new skills taught. At the end of each full term, teachers also identify any children that have shown a real talent in their DT units and choose one child per class to be rewarded with the DT award to celebrate these successes. Lastly, at the end of each year, the annual written report to parents provides a grade based upon the pupils' ~~grade~~ effort and achievements in DT.

Special Needs

Consideration is given to the units taught and the resources used to allow all pupils with special educational needs to participate in all DT activities. This is achieved through the support of the teacher, TA or other pupils, through appropriately differentiated tasks/activities or by modifying tools and materials (e.g. larger needles with bigger eyelets). Where children are visually impaired or have difficulties manipulating tools, particular care is paid to both their safety and to the safety of others. As with all pupils, they should only be allowed to use equipment if they have been taught to do so and have demonstrated the ability to do so correctly and safely.

Equal Opportunities

All pupils are given access to every aspect of the DT curriculum. No child is excluded from DT activities on the basis of gender, ability, ethnic or cultural background. All pupils are given the opportunity for success and are shown that their work is of value.

Health and Safety

Risk assessments for DT have been carried out and are kept in the DT handbook. All staff are made aware of these. These will be reviewed by the subject leader on an annual basis. Prior to food work being undertaken, class teachers notify parents in order to ascertain any allergy problems or cultural differences.

Resources

Resources are ordered for each topic in advance and these are issued to each year group in a timely manner. Tools and more expensive items are kept in well-organised and labelled cupboards. Those with hazardous items are locked for Health and Safety reasons. Smaller, lighter items are kept in two other cupboards and resources are available as and when required by all staff.

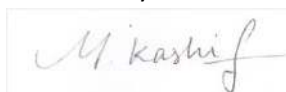
This policy will be monitored and reviewed by the D T co-ordinator on an annual basis.

Policy updated: 15th January 2024

Staff responsible: Alexandra Davies

This policy was ratified by the Governing Body on: 24th January 2024

Signed on behalf of the Governing Body:



(signature)

M. Kashif - Chair of Governors

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