

DT Policy

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Philosophy

Design technology (DT) prepares pupils to participate in tomorrow's rapidly changing technologies. They learn to think and intervene creatively to improve quality of life. The subject calls for pupils to become autonomous and creative problem solvers, as individuals and members of a team. They must look for needs, wants and opportunities and respond to them by developing a range of ideas and making products and systems. They combine practical skills with an understanding of aesthetics, social and environmental issues, function and industrial practices. As they do so, they reflect on and evaluate present and past design and technology, its uses and effects. Through design and technology, all pupils can become discriminating and informed users of products, and become innovators.

This policy reflects the school values and philosophy in relation to the teaching and learning of design and technology. It sets out a framework within which teaching and non-teaching staff can operate most effectively and gives guidance on planning, teaching and assessment.

Aims

- To give children the opportunity to apply skills, knowledge and understanding as set out in the National Curriculum 2014 within a variety of designing and making activities.
- To provide children with the opportunity to gain skills and knowledge that will help to prepare them for their future education and life.
- To give children the opportunity to use a range of materials and components, and to learn to select the most appropriate tools.
- To encourage children to develop organising and evaluating skills.
- To enable pupils to develop social skills through collaborative work.
- To develop a positive attitude towards Design Technology and appreciate its impact on everyday life.

Teaching Methods

Work undertaken by the children at Roe Green Junior School in DT is within the framework of the National Curriculum 2014. Units of work have been planned which correspond to the different Year Group projects, from which teachers can then interpret and develop to relate to the needs of their own pupils.

DT specific knowledge and skills will be taught discretely and are planned to ensure progression across the key stage. Planned DT units will be linked to topics in other areas of the curriculum where strong, meaningful cross curricular links can be made.

Learning Design Technology at Roe Green Junior School will involve pupils in:

- Practical work based around the children's own experiences using the design, make and evaluate process.
- Gaining technical knowledge of how to manipulate various materials.
- Developing pupils understanding of computing to program, monitor and control their products
- A cross-curricular topic based approach where learning will be enhanced.
- Using a wide range of research materials including examples of work from a variety of genres, styles and cultures.
- Skills which will be taught in a variety of ways: demonstrating, experimentation, problem-solving, group and individual work.
- Experimentation with different equipment and tools in order to develop skills and techniques.
- Work in two and three dimensions and use technology on a variety of different scales.
- Selecting ideas and modifying their work to develop their evaluation skills.
- Learning and using DT vocabulary in relation to designs and techniques.
- Evaluating their own and others' designs and products based around the knowledge learned.
- Visits to museums and other relevant locations to gain research material for work and physically experience visual deigns and products.
- Contact with contemporary designers.
- The opportunity to create sketch books to record their observations and use them to review and revisit ideas.
- Learning to handle and use tools and equipment safely and correctly.

Equal Opportunities

We believe every child is entitled to a full, varied and balanced DT education regardless of class, gender, race or disability. We make every effort to provide these experiences for all pupils including those with specific educational needs. To ensure this, teachers will:

- Continuously develop and edit planning so that it both meets the needs of the pupils they teach and remains relevant, up to date and stimulating.
- Ensure pupils in the same year group are provided with the same learning opportunities.
- Teach using the unit plans provided or using plans that have been developed and agreed within their year team.
- Refer to the various cultural backgrounds of the children when making cross curricular links.
- Continually research and update multicultural aspects ensuring good representation in the school.

- Give opportunities for different groupings, e.g. pairs, small groups, individual friendship and mixed gender.
- Teach skills so that children have an informed choice of tools and materials.
- Ensure equal access to all tools and materials by individuals and groups.
- Provide an environment where all children can develop their creative skills.
- Ensure that all children's opinions, evaluations and judgements are valued and seen to be equally valid.

Differentiation

Pupils will be given opportunities to work individually, in groups and as a whole class. Pupils will most often be making an individual response, so for many activities a pupil will be able to respond at their own level within a group.

Children who experience difficulties could be helped in the following ways:

- Given extra help and guidance by the teacher to reinforce the learning of skills and concepts.
- Given further opportunities to practice.
- Given extra encouragement by working in a small more focused group and with the teacher.
- Given opportunities to work on a group project with more able children to ensure them to experience success and therefore satisfaction.

Children with outstanding abilities could be encouraged by:

- Providing opportunities for them to develop their ideas further.
- Introducing new media, skills and concepts offering additional creative stimulation.
- Setting specific problems for them to resolve that require a more disciplined and complex response.

Some children may experience difficulties learning the 'language' of DT and this may hinder their ability to describe and evaluate their work. Artistic 'Vocabulary' could therefore be reinforced in other areas of the curriculum e.g. reading and spelling.

Health and Safety

Pupils at Roe Green Junior School are taught DT in a responsible and appropriate manner, although in such a practical activity such as DT it is not possible to remove all risks. It is important that pupils are well supervised when using equipment in DT and wear protective clothing where necessary. It is also vital that all tools and equipment are stored safely when not in use. There are a number of tools that are potentially hazardous, e.g. saws, drills, ovens etc, and therefore it is important that the students are well educated in how to use the

equipment correctly with care to ensure safety in the classroom. All adhesives used in school are solvent free.

The teacher is responsible for providing a safe environment for pupils to learn. Risk assessments for wood work and cooking activities need to be written by the class teacher and / or in liaison with the DT subject leader. Templates and generic risk assessments can be found on the RM Staff area.

Assessment and Record Keeping

We continually evaluative and monitor the progress of pupils in DT throughout school against the requirements of the National Curriculum. Time should be set aside in DT lessons to question and discuss with the children the learning and the evaluation of the work produced.

Each pupil will keep a sketch book which reflects evidence of the working process. Pupils work will be titled and dated whenever appropriate to aid evaluation of individual progression.

Ongoing assessments will be undertaken regularly by the pupil and the teacher to ensure the use and control of a range of materials and techniques, knowledge of the styles of designers working in different times and cultures and the ability to evaluate DT using appropriate language. Individual progression and development is included each term in the pupils' record of achievement book (ROMA).

<u>Provision and access to resources</u>

DT is taught in every year group across Key Stage Two. DT will be taught in 3 out of the 6 half terms (the other 3 being dedicated to Art).

All resources for DT teaching and learning are kept in central storage cupboards. General stock can be requested in writing or verbally from the subject leader. All equipment must be collected, allocated and returned by members of staff.