

The cover page features a faded background image of a school building with a large tree in the foreground. The text is centered and reads: ST PIRAN'S SCHOOL DESIGN AND TECHNOLOGY POLICY.

ST PIRAN'S SCHOOL DESIGN AND TECHNOLOGY POLICY

Rationale

Design and Technology prepares children to take part in the development of tomorrow's rapidly changing world. The subject encourages children to become 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 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 of functions and industrial practices. This allows them to reflect on and evaluate present and past Design and Technology, its uses and its impacts.

Aims

In Design and Technology, children acquire and apply knowledge and understanding of materials and components, including food, textiles, resistant materials, mechanisms and control systems, structures, quality and health and safety.

Children develop creative designing skills, including generating and developing ideas, clarifying a task, creating design proposals, communicating ideas, planning, making and evaluating.

Objectives

Design and technology offers opportunities for children to:

- Develop their designing and making skills;
- Develop knowledge and understanding;
- Develop their capability to create products through combining the above;
- Nurture creativity and innovation through designing and making;
- Explore values about and attitudes to the made world and how we live and work within it;
- Develop an understanding of technological processes and products including their manufacture and their contribution to our society.

Assessment and record keeping

We follow the National Curriculum Assessment guidelines, which detail the Attainment Targets for each Key Stage.

- Teachers assess children's work on a continual basis through discussion and questioning, work completed and products made.
- Children are encouraged to self evaluate as a form of assessment.

Subject specific detail

Key Stage 1 and Early Years - part of Understanding of the World

Children are encouraged to think imaginatively and to talk about what they like and dislike when designing and making. They plan what has to be done and identify what works well and what can be improved in their own and other people's designs. They build on their early childhood experiences of investigating objects around them. They explore how familiar things work and talk about, draw and model their ideas. They learn how to design and make safely and start to use ICT as part of their designing and making. Children may work in pairs and small groups for some activities.

Key Stage 2

Not all of the assessment strands (Developing Ideas, Planning, Communicating, Making Quality Products and Evaluating) will be evident or assessed in every project. For example, a project may be chosen solely to focus on Ideas and Planning, however, all projects will involve making a finished item. Pupils work on their own and as part of a team on a range of designing and making activities. They think about what products are used for and the needs of the people who use them. They plan what has to be done and identify what works well and what could be improved in their own and other people's designs. They draw on knowledge and understanding from other areas of the curriculum and use computers in a range of ways.

Pupils enjoy two consecutive design and technology lessons each week (1hr 40mins). These comprise of: Resistant Materials, Textiles and Food Technology.

Provision for children with Learning Difficulties and Disabilities

Class teachers provide differentiated learning opportunities to meet the needs for all pupils. Design and technology, in particular, offers the opportunity for pupils to achieve in a practical subject, as they are encouraged to communicate in different way.

Provision for Gifted and Talented children

See appendix (1)

Use of IT

IT provides pupils with access to a wide variety of information, images, discussions and exemplars which inform all aspects of Design Technology. IT also allows for improved inclusion as less able children are able to access and record information more readily.

Health and Safety Provision

The use of materials, tools and techniques in accordance with health and safety requirements

- Appropriate storage of tools and materials.
- Teaching pupils to recognise hazards in a range of products, activities and environments and take action to control the risks to themselves and others.
- Safety in food technology and textile activities.
- To recognise hazards, assess consequent risks and take steps to control the risks to themselves and others.
- To use information to assess the immediate and cumulative risks.
- To manage their environment to ensure the health and safety of themselves and others.
- To explain the steps they take to control risks.

Environmental Awareness

- To reduce the impact on the environment by using less material.
- To understand about what materials are needed or whether the product could be made smaller (or thinner) and still do the same job.
- To understand and implement the importance of using recycled materials.

Equal Opportunities

The staff will aim to ensure children will have equal opportunity to develop their design and technology potential regardless of gender, ability, cultural or religious background.

- Please refer to whole school Equal Opportunities policy

Cross-curricular links

Design and technology provides opportunities to promote learning across the curriculum in a number of areas including;

- Spiritual development, through helping pupils to recognise their own creativity and that of others in finding solutions to problems;
- Moral development, through helping pupils reflect on how technology affects the environment, and the advantages and disadvantages of new technology and products to local, national and global communities;
- Social development, through helping pupils to recognise the need to consider the views of others when discussing design ideas;
- Cultural development, through exploring the contribution of products to the quality of life within different cultures.

Further cross- curricular opportunities exist with most subjects, whether pupils are;

- Applying their knowledge of English to write and record or to enlarge their technical vocabulary;
- Developing their Maths skills for accurate marking and measuring;
- Developing their Artistic, aesthetic and communicative skills in Graphic design;
- Extending their applied Physics skills in practical mechanisms such as levers and electronics;
- Developing their ICT project presentation or CAD/CAM skills;
- Modelling Historical or Geographical artefacts;
- Designing and making musical instruments;
- Designing and making a sports item.

Approach to Prep/Homework

- There may be occasions where children undertake research at home which are linked to school projects.

Marking policy for the Department

- Please refer to whole school Marking policy

Presentation Policy for the Department

- Please refer to whole school Presentation policy
- Children's project work is displayed in specific areas around the school, including the DT workshop, food technology kitchen and the textile classroom.

Reporting to parents

- Each child's progress in design and technology is reported to parents at parent's evenings and in the child's two annual school reports.

Appendix

- (1) GAT Policy

Reviewed: **Head of DT**
Date: **June 2016**
Next Review Date: **June 2017**