DESIGN AND TECHNOLOGY AT HOLY FAMILY CATHOLIC PRIMARY SCHOOL

WHAT IS DESIGN AND TECHNOLOGY ?

Design and Technology is a creative human activity which brings about desired changes by making things, controlling things and making them work better by careful designing and making, using relevant knowledge and resources. At Holy Family School we have implemented the International Primary Curriculum delivering design technology using a cross-curricular approach.

THE AIMS OF TEACHING DESIGN AND TECHNOLOGY

At Holy Family the aims for design and technology are to develop:

♦ lively, imaginative, enquiring minds with the ability to question, argue rationally and apply themselves to tasks;
♦ capabilities to understand and contribute to the aesthetic, spiritual, social and moral aspects of life;
♦ positive self-esteem and self-awareness within the context of a reasoned set of attitudes, values and beliefs appropriate to a democratic society;
♦ respect for those with different religions, beliefs and ways of life and the acquisition of attitudes opposed to discrimination against any person or group;
♦ an understanding of the challenges and opportunities offered by the technological, scientific and industrial world in which they live;
♦ an understanding of the interdependence of individuals, groups, nations and the environment;
♦ an application of human achievements and aspirations;
♦ interests and skills which will enable them to enjoy and make the best use of leisure time;
♦ an ability to participate in and be responsible contributors to society;
♦ the capacity to become independent learners;
♦ the highest possible achievements within their own talents and abilities.

In planning for design and technology at Holy Family through the International Primary Curriculum we will provide a course which:

♦ establishes and then builds on previous learning;
♦ is meaningful and relevant to the pupils it serves;
♦ is relevant to the demands of the adult world;
♦ supports the needs and potential of the individual;
♦ caters for and challenges the full ability spectrum;
♦ ensures equality of access;
♦ is progressive in nature;
♦ draws on and develops knowledge and understanding in other subjects, notably maths, science, ICT and art and design;
♦ uses and extends the application of ICT systems;
♦ enhances the use of the key skills in numeracy and literacy;
♦ develops partnership with commerce and industry where appropriate;

♦ prepares for life and work in the 21st century.

Design and technology is a dynamic activity, which must not be seen as a linear programme delivering a set of stages, but as identifiable activities which are interactive and dependent on each other:

♦ investigating a need or opportunity;
♦ developing and modifying design proposals in the light of evaluation;
♦ planning for making;
♦ making;
♦ evaluating the effectiveness of the process and the product.

Pupils should be given opportunities to develop projects through activities, which are motivating, relevant and challenging, give enjoyment, satisfaction and purpose. They should also allow for the development of value judgements in respect of the aesthetic, economic, moral, scientific and technological world.

STRATEGIES FOR TEACHING DESIGN AND TECHNOLOGY

PLANNING AND ORGANISATION

The successful delivery of design and technology depends on successful plans in which breadth and balance, continuity and progression clearly define coverage of the essential elements of the programmes of study. We use the International Primary Curriculum to deliver Design and Technology using a cross-curricular approach to teaching the subject.

The breadth of the subject requires a high regard for balance in a pupil's experience. In each Key Stage, balance is required against:

♦ the range of materials – construction, graphics, food, textiles and systems;
♦ the range of contexts – home, school, community;
♦ the type of design challenge given to pupils – closed, focused or open.

When planning for design and technology we consider:

♦ pupils taking responsibility for their own learning;
♦ complexity of tasks being tackled;
♦ movement to more open-ended tasks;
♦ range and depth of task;
♦ acquisition and application of skills and processes ;
♦ the range of materials being handled;
♦ the use of drawing and modelling to explore ideas;
♦ predictive thinking, the ability to plan ahead and to understand implications;
♦ the ability to work as part of a team.
Appropriate strategies for differentiation might be to:

♦ organise pupils in particular groups to better match their needs;
♦ break the work into smaller steps;

- adapt design sheets to make more demands of a particular group of pupils;
- ask pupils to record in the most appropriate way;
- provide resources to extend particular pupils' understanding;
- plan extension activities;
- provide additional adult support to the individuals or group's needs.

The teaching of design and technology should include opportunities for:

- demonstrations;
- discussion between teacher and pupils and between pupils themselves;
- individual teacher pupil interaction;
- consolidation and practice of skills and techniques;
- exploration with new materials;
- didactic teaching;
- research opportunities;
- quality evaluation;
- using up-to-date technological equipment;
- the use of a range of ICT packages.

ASSESSMENT, RECORDING AND REPORTING

(Refer to Holy Family Assessment Policy)

Pupils will be regularly assessed against learning objectives to inform planning and to ensure appropriate teaching and learning opportunities. Staff will also use Assessment for Learning from the International Primary Curriculum. This assesses children against given criteria of beginning, developing and mastering.

SPIRITUAL, MORAL, SOCIAL AND CULTURAL ASPECTS

The International Primary Curriculum provides excellent opportunities to promote, appreciate and develop pupils' spiritual, moral, social and cultural awareness and understanding. These opportunities are explored through a rich variety of topics.

LITERACY, NUMERACY AND ICT

Opportunities exist within design and technology for the enhancement and development of key skills and concepts in literacy and numeracy. Teachers use every opportunity to develop these crucial skills in real, practical application of these skills.

A very special relationship exists between design and technology and information and communication technology (ICT). At Holy Family we recognise the importance of taking the opportunity to include ICT in design and technology activities.

SPECIAL EDUCATIONAL NEEDS AND EQUAL OPPORTUNITIES

(Refer to Holy Family Special Educational Needs Policy)

It is our intention to provide every individual with a broad, balanced and relevant curriculum in design and technology at an appropriate level regardless of ability, gender, religion, race, social circumstances or first language. Clear procedures for the early identification of pupils experiencing difficulty are in place. Early intervention, which may include the provision of appropriate learning support, is a priority and will help ensure that pupils are given every opportunity to succeed.

USE OF RESOURCES

The resourcing of design and technology in our school is a major consideration. We have a wide range of materials and tools available for staff to use with the children in order to support the learning objectives of each unit.