# St Bernadette's Catholic Primary School

# Design and Technology Policy



"Doing our best for God"

#### 1 Rationale

- 1.1 Design and Technology is an inspiring, practical subject where children use creativity and imagination to design and make products that solve real problems. They learn how to take risks, be resourceful, co-operate and innovate with a view to become enterprising citizens. Through the evaluation of products, they learn about the impact of DT on daily life and the wider world.
- 1.2 DT is about providing opportunities for children to develop their capability, create quality products and make decisions for themselves.

#### 2. Aims

- 2.1 At St Bernadette's we aim to follow the National Curriculum to ensure that all pupils:
  - to design and make high quality prototypes.
  - to test and evaluate their ideas and products and the work of others.
  - to encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures;
  - to explore attitudes towards the increasingly technological world and how we live and work within it;
  - to learn how to cook whilst developing and applying the principles of nutrition.

## 3 Teaching and learning style

- 3.1 The school uses a variety of teaching and learning styles in design and technology lessons. Our principal aim is to develop the children's knowledge, skills and understanding in technology and design via a broad and balanced curriculum. We ensure that the act of investigating and making something includes reading high quality information texts, exploring and developing ideas, and evaluating (including pupil evaluation) and developing work. We do this best through a mixture of whole-class teaching and individual/group activities. Teachers draw attention to good examples of individual performance as models for the other children. They encourage children to evaluate their own ideas and methods, and the work of others, and say what they think and feel about them. We give children the opportunity within lessons to work on their own and collaborate with others. Children also have the opportunity to use a wide range of materials and resources.
- 3.2 Each DT topic should include a product being designed for a user for a purpose. Children are encouraged to annotate their planning to adapt and improve their designs throughout the making phase.

#### 4 Curriculum Organisation and planning

4.1 Design and technology is a foundation subject in the NC. Planning is in line with

- NC requirements for KS1 and KS2 and the foundation stage curriculum. At St Bernadette's Catholic Primary School technology and design is taught on a continuous but flexible basis to allow for blocking within our year groups.
- 4.2 KS1, LKS2 and UKS2 use the Lancashire Key Learning Grids in Design and Technology and KLIPs grids. These are used to inform more detailed planning which focus on making a product, for a given user and for a specific purpose. These have been organised into two year stages (see DT overview).
- 4.2 Planning is kept by the class teacher and informal discussions about planning takes place over the course of the year with the art co-ordinator. Plans should list the learning objectives for each lesson, give details of how to teach the lessons and include key questions and next step evaluations.
- 4.3 We plan the DT activities so that they build upon the prior learning of the children. While there are opportunities for children of all abilities to develop their skills, knowledge and understanding in each activity area, there is planned progression built into the Lancashire Key Learning Grids in Design and Technology and KLIPs grids, so that the children are increasingly challenged as they move up through the school.

## 5. Health and safety

- **5.1** Teachers should ensure that all learning takes place within a safe environment with special reference to the use of equipment, tools and artefacts. All personnel working with pupils, within the context of DT, must be aware of their responsibilities and the relevant health and safety procedures.
- **5.2** Children should be supervised at all times and any other adults working within the classroom should be familiarised with safe practices.
- **5.3** Protective clothing should be worn where appropriate.
- **5.4** Children will require specific training in safe ways to use potentially dangerous tools and equipment. The best way to achieve this is by clear, confident demonstrations and positive guidance. Only cool melt glue guns should be used.
- 5.5 We teach children how to follow proper procedures for food safety and hygiene.
- **5.6** Any faulty equipment must immediately be removed from circulation and given to the DT co-ordinator.

#### 6. The Early Years Foundation Stage

6.1 We encourage the development of skills, knowledge and understanding that help reception children make sense of their world as an integral part of the school's

work. As the reception class is part of the Early Years Foundation Stage of the National Curriculum, we relate the development of the children's knowledge and understanding of the world to the objectives set out in the Early Learning Goals. These underpin the curriculum planning for children aged three to five. This learning forms the foundations for later work in design and technology. These early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools, techniques and products, developing making skills and handling appropriate tools and construction material safely and with increasing control.

6.2 We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking, the making of props and discussion. These activities, indoors and outdoors, attract the children's interest and curiosity and help to develop fine and gross motor control.

#### 7. Cross-curricular links

- **7.1** Design and Technology contributes to the teaching and learning in other curriculum areas including English, mathematics, science, art, computing and PSHE. Cross-curricular links are made whenever they build upon the children's learning.
- **7.2** The use of key vocabulary is modelled by the teacher and is encouraged to be used by the children. It can form part of the classroom or whole school displays.
- 7.3 In DT, reading is promoted in order to research inventors and to learn about their lives, techniques, tools and materials used. The children are encouraged to read about the life and works of inventors, engineers and architects both contemporary (eg Dyson) and historical (eg Brunel).

#### 8. Teaching Design and Technology to children with special needs

8.1 At St Bernadette's we plan to provide for all pupils to achieve: boys and girls, higher achieving pupils, more able pupils, those with SEND, pupils with disabilities, pupils from all social and cultural backgrounds, children who are in care and those subject to safeguarding, pupils from different ethnic groups and those from diverse linguistic backgrounds. The school curriculum policy provides a broad and balanced education for all children by matching the challenge of the task to the ability of the child.

# 9. Assessment and recording

9.1 Teachers assess children's work in DT by making assessments against the learning objectives as they observe them working during lessons and of their final products and evaluations. At the end of each block of work, teachers highlight the key skills achieved by each ability group, using this to plan the future work and to ensure progression.

- 9.2 At the end of each year, teachers make an annual judgement of the attainment of each chid against the KLIPs statements for their year group: working towards, working at or working in greater depth. These records form part of the child's annual report to parents. The teacher passes this information on to the next teacher at the end of each year.
- 9.3 The DT subject leader keeps evidence of the children's work in a portfolio. This demonstrates the expected achievement in design and technology in each year of the school.

#### 10. Resources

- 10.1 There are a wide range of resources to support the teaching of DT across the school. We keep most of our equipment in the DT store within the hall area and these are only accessible by adults. Each classroom also contains a selection of tools, materials etc.
- 10.2 Each year the co-ordinator circulates a 'wish list' for the teachers to complete and uses this to order prioritised stock.

#### 11. Whole School Activities / Community Links

- 11.1 Our school is committed to providing all children with a range of design and technology activities. We have a school garden where we grow produce to use in our Food topics.
- 11.2 Display are used to showcase and promote the work done by children within and across the Key Stages. The use of background information about inventors and their techniques combined with key questions, encourage children to actively engage with the products that have been made.
- 11.3 We use our school's website to inform parents about our exciting DT projects and to celebrate our children's successes.

# 12. Monitoring and review

- 12.1 The monitoring of the standards of children's work and of the quality of teaching in design and technology is the responsibility of the DT subject leader. The work of the subject leader also involves supporting colleagues in the teaching of DT, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school.
- 12.2 The co-ordinator monitors the pupil assessment information and notes which children are on track as well as those who are making beyond or below expected progress. These informed the basis for discussion with the next class teacher

who is expected to plan learning opportunities for development, challenge and support.

# 13. Staff Development and Training Opportunities

13.1 Staff development needs are identified through consultation with the Headteacher or DT co-ordinator. These needs are addressed through a range of opportunities: in school support or via Lancashire's professional development programme.

Signed: DAtkinson

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