ST. BEDE'S CATHOLIC JUNIOR SCHOOL

celebrates life and learning

DESIGN TECHNOLOGY POLICY

AUTHOR:	**MISS GILL**
APPROVED BY:	**HEADTEACHER**
APPROVAL DATE:	**JANUARY 2025**
REVIEWED:	**BIENNUIALLY**
NEXT REVIEW:	**JANUARY 2027**

ST. BEDE'S CATHOLIC JUNIOR SCHOOL

celebrates life and learning

DESIGN TECHNOLOGY POLICY

MISSION STATEMENT

St. Bede, patron of our school, wrote:

"It was always my delight to learn and to teach".

We are a celebrating community, living the Gospel Values, committed to educating children in the light of the Catholic Faith.

We journey together so that we

"Might have life - life in all its fullness".

John 10:10

RATIONALE

Design Technology (DT) makes a distinctive contribution to the Primary Curriculum. All children at St. Bede's Catholic Junior School study design technology through practical, creative and challenging activities embedded within the school's bespoke curriculum. Design Technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present Design Technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality DT education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

(National Curriculum 2014)

We promote and foster a positive attitude towards learning and place considerable emphasis on the quality of the children's work. Pupils work to the best of their ability when they are interested and motivated. Therefore, at St Bede's, we make every effort to ensure that DT activities are enjoyable, realistic and achievable; we ensure that the children understand the context of Design Technology and understand its contribution in the real world.

CURRICULUM INTENTIONS

Design Technology is a foundation subject in the National Curriculum. The fundamental skills, knowledge and concepts of the subject are set out in the programme of study which identifies key aspects in which the pupils make progress.

Our aims in teaching Design Technology are:

- To present design technology as a creative and intriguing process in which the children are encouraged to use their own initiative, imagination, reasoning and critical thinking skills within their independent learning;
- Children are able to appreciate the relevance of design technology within our society and regard it as an essential subject in teaching them to design, make and evaluate products of their own;
- Children receive equal opportunity to develop, plan and communicate their ideas, working both independently and collaboratively;
- Children have the opportunity to develop their practical skills to work with a wide range of materials and components, in a safe and secure environment;
- To develop their understanding of electrical components, control systems, mechanisms and structures while understanding and applying the fundamental principles of design, make and evaluate as a process.

Through the promotion and delivery of design technology, children will be able to develop other core skills, such as;

- speaking and listening opportunities through exchanging ideas, recording and evaluating their work and working collaboratively with their peers;
- application of number, through measuring, collecting data and recording;
- use of ICT through researching, preparing and making of their products as children work on the development ideas;
- improving learning performance, through carrying out focused practical tasks and evaluating the design and making process;
- problem solving, through dealing with conflicting requirements and considering alternatives.

TEACHING AND LEARNING IMPLEMENTATION

Visible Learning in school emphasises the importance of making learning explicit and measurable in every curriculum subject. By focusing on evidence-based teaching strategies, Visible Learning encourages staff to highlight learning intentions, set clear success criteria, and regularly assess student progress. This approach helps pupils become more aware of their own learning journey, fosters a deeper understanding of the content, and empowers them to take ownership of their learning. Through Visible Learning in DT both teachers and students can track growth and identify areas for improvement, ultimately enhancing outcomes in the subject.

By the end of Key Stage 2 pupils will be able to:

Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

- select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in Design Technology have helped shape the world

There is a whole school approach to planning for all National Curriculum subjects, including Design Technology. The teaching of Design Technology is incorporated into the school's bespoke curriculum. In design technology, as with all subjects, in order to develop the continuity and progression of teaching and learning, a balance between whole classes, individual and group work will be planned throughout the school. Staff confidence and expertise in the curriculum has been developed through the use of schemes of work which provide training videos and CPD opportunities.

St Bede's has adopted the Kapow Primary units of work for design technology. These units cover all of the objectives within the national curriculum and provide teachers with clear planning and guidance on the delivery of the curriculum. There is a clear progression of skills throughout the school so that pupils may revisit one technical knowledge objective each year, building on their understanding and skills as they progress through the school.

Teachers are free to use these units to manage their own delivery of each unit, ensuring the core design, make and evaluate objectives are reached within each one. Each class teacher strives to complete two units each term. Teachers identify links with other areas of the curriculum wherever possible so that previously gained skills can be reinforced and applied in new contexts, as well as supporting learning in other areas.

IMPACT

Assessment is an integral part of teaching and learning. We use the National Curriculum age related expectations as a basis for teacher assessment. The assessment enables learners to be wholly involved in the process and to discuss their understanding and learning with the teacher. By using assessment, the teacher and learner can obtain a better picture of what the learner knows, understands and can do and what they need to do in order to progress further. At St Bede's we also place importance on effective questioning as a means of clarifying understanding and we use a range of Assessment for Learning strategies to further involve the children in their own learning. Attainment and progression is reported to children and parents/carers bi-annually through meetings and annually through a written report.

Teachers are also asked to highlight any children significantly above or below attainment levels and to discuss these with the Subject Adviser.

PROGRESSION

We expect all children at St Bede's to progress in Design Technology in a number of areas.

These will include, progressively:

- using Design Technology vocabulary more accurately;
- advancing from unstructured exploration to increasingly systematic investigation; working as part of a team;
- making more informed choices about tools and materials to use;
- developing simple drawings to using diagrams with clear labels and explanatory notes.

HEALTH AND SAFETY

We consider safety to be an integral part of all our teaching activities in Design Technology. When working with tools, equipment and materials, in practical activities and in different environments, including those that are unfamiliar, pupils are taught:

- about hazards, risks and risk control;
- 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 progressively;
- to manage their environment to ensure the health and safety of themselves and others;
- to explain the steps they take to control risks.

RESOURCES

Resources for Design Technology are centrally located in the upper resource area of the school and also distributed by the Subject Adviser to individual class teachers. They include:-

- electrical and mechanical components;
- construction kits;
- paper, card and other modelling and decorative materials;
- cool melt glue guns.

Facilities for cooking are also available in the staff room (oven, grill and hob) together with utensils.

ADAPTATION

In our teaching of Design Technology we shall use adaptation:

- by outcome
- by task
- by resource
- by support.

It is suggested that differentiation by outcome is made more use of than differentiation by task. Children will undertake similar activities; teachers assess the outcome and then adapt aspects of teaching activities which follow. Teachers at St Bede's make a professional decision about which of these they employ during their lesson.

INCLUSION AND EQUAL OPPORTUNITIES

Design Technology is for everyone and is taught in-line with the school's Equality Statement and Inclusion Policy. Design Technology education accounts for children's different abilities, gender, culture religion so that it celebrates similarity and difference; ensures access and presents positive images.

Some children, however, might find access to the subject challenging due to specific sensory impairment, motor control, cognitive limitations, limited personal experiences, language or behavioural difficulties or a combination of these. Teachers refer to the school's SENCO if necessary.

BILINGUALISM OR MULTILINGUALISM

Bilingualism or multilingualism is valued as an achievement at St Bede's. As primary teachers of Design Technology we ensure that such children are not impeded by any lack of familiarity with vocabulary or contexts. Teachers make certain that their expectations are not affected by the child's use of language. Teachers, in this case, provide differentiated support.

REMOTE LEARNING PROVISION

Due to any school closures, most pupils have not accessed Design Technology in the way initially planned in the curriculum overviews. The Subject Leader has worked with all members of staff to continue to provide engaging DT lessons or tasks remotely throughout the school's closure. We have worked together to provide activities that meet the needs of the curriculum whilst being accessible for all learners. This has not been possible in all units due to the requirement of tools or equipment, these have been adapted as much as possible to make this achievable outside of the school environment.

POLICY REVIEW

The Design Technology Policy will be reviewed by the Subject Leader in the light of guidance, training, changes in legislation or at the request of a member of the school community. Any amendments will be agreed by the staff and Governing Body.