



ST. JOSEPH'S CATHOLIC PRIMARY SCHOOL ALDERSHOT A VOLUNTARY ACADEMY IN THE DIOCESE OF PORTSMOUTH CURRICULUM POLICY FOR DESIGN TECHNOLOGY (September 2019 - 2022)

The school aims to provide for the spiritual welfare, academic progress, physical development, aesthetic awareness and pastoral care of every child, within a secure, stable and stimulating atmosphere conducive to effective learning that reflects St Joseph's strong Catholic ethos.

Teaching and Learning at St Joseph's

Structure and the belief that all children can achieve is key to all learning at St Joseph's. In all subjects, **recalling pre-knowledge and skills** is fundamental to our rationale for all curriculum areas. This means that essential linked knowledge/ skills are **revised** and links made with children's current learning in all subjects. Key concepts/ end points for each topic are highlighted and **over-learning** of these areas occurs through **repetition, modelling and scaffolding of learning**. Through our subject-specific Schemes of Work, we make sure that learning for all is progressive and sequential. In addition, reading and vocabulary are emphasised in all subjects. Thus, key concepts become embedded in the **long-term memory**.

Vision Statement

As a Catholic family we welcome all and value Christ in everyone, whilst seeking the highest possible achievements.

As such, we plan and resource pupils' learning, in line with the school curriculum policy. The School's Vision and Mission Statements underpin all aspects of our planning, our chosen pedagogy and our delivery to enable all pupils to make good and sustained progress in design and technology. We believe that all have the ability to achieve their best and our curriculum and varied choice of pedagogy enables all children to do this. This includes those with special educational needs and disability and those identified as most able.

Intent of the Design and Technology Curriculum

The design and technology curriculum is designed by the curriculum co-ordinator, management team and governors to allow pupils to transfer key knowledge to their long-term memory. Design and technology is the purposeful use of inventive thinking and creative activity, leading to the production of an artefact or system which best satisfies a perceived need. This results in building new skills and knowledge based upon what has been taught before, allowing all pupils to **work towards clearly defined end points**.

We develop children's experiences and understanding of design and technology by enabling all children to be creative and imaginative to design and make a product that solves real and

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relevant problems within a variety of contexts, considering their own and others' needs wants and values through encompassing **memorable learning opportunities** for example, creating a healthy sandwich, making a sunhat or designing and making a moving toy. The school provides a coherently planned curriculum, sequenced towards cumulatively sufficient knowledge, skills and cultural capital through informative teaching and learning activities and enhancement experiences. At St Joseph's, we recognise that design and technology is an effective motivational tool for children of all ability, as it helps promote children's self-esteem through the production of quality outcomes, perseverance in their approach to work and independence by enabling them to take greater responsibility for their learning.

We therefore intend that all pupils will:

- Understand about how everyday objects, mechanisms and products work, from food and packaging to buildings, toys, clothes and vehicles.
- Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes based on these products for a wide range of users.
- Develop active learners by promoting investigation, experimentation and evaluation skills.
- Learn to productively critique and evaluate their ideas and products, and the work of others, providing them with the opportunity to test them out.
- Develop interpersonal learning skills, such as speaking and listening, collaboration and compromise, and to experience taking different but equally valuable roles in group work.
- Design and make a variety of different products for different purposes.
- Be provided with a range of activities to develop the children's capability and confidence in their own ideas by learning how to take risks, becoming resourceful, innovative, enterprising and capable citizens.
- Develop children's confidence and skills in safely selecting and using a range of tools, and in using and selecting a range of materials
- Develop a mastery over certain generic skills through repeated exposure to them.
- Focus, build-upon and learn key vocabulary to develop understanding of concepts and design and technology knowledge.
- Read a variety of different books to promote over-learning and the development of pre-skills. Alongside this, children are encouraged to look at a variety of existing products both past and present to develop a critical understanding of its impact on daily life and the wider world to embed learning in the **long-term memory**.
- Enrich and support other areas of the curriculum.
- Build in memorable experiences to promote deep learning.

We use a range of **pedagogical practices** in the teaching of design and technology to ensure that we are successful with our Intent. This can range from small group tasks, individual tasks, whole class tasks. We focus a lot on teacher modelling, expert questioning, giving children memorable experiences and over-learning to ensure that key knowledge is transferred to children's **long-term memory**.

Implementation of Design and Technology Curriculum

Subject Leadership:

Design and technology has a **progressive and sequential Scheme of Work** which has been written by the subject leader to meet the needs of all pupils at St Joseph's.

The subject leader is responsible for:

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- The design, review and implementation of the Scheme of Work (overseen by Phase Leaders, the Headteacher and the Governors).
- The budget in their subject they are accountable to governors in relation to this.
- Observing and giving feedback to teachers on lessons across the key stages.
- Conducting pupil interviews to gain an idea of the pupil's thoughts and feelings about the design and technology topics they have studied and feed these into design and technology moderation ensuring that all children make at least good progress.

The implementation of this design and technology policy is the responsibility of all staff engaged in the learning and teaching of design and technology. A topic is taught for two terms of the year and it is at the teacher's discretion as to when to complete the topic e.g. either all in one half-term or spread over the two half terms.

Subject Knowledge (breadth and depth of design and technology Scheme of Work):

- The subject leaders ensure that teachers have good subject knowledge and the subject leader is appropriately trained to provide support, sharing and informing knowledge.
- The Scheme of Work provides a **focused learning environment and clear learning objectives to embed learning in the long-term memory through encompassing memorable learning experiences.**
- Our design and technology curriculum covers the skills outlined in the National Curriculum through broad, challenging and inspiring topics. A topic-based approach is used to deliver the content within a **meaningful context and wherever possible cross-curricular links are exploited** particularly links with history, British Values, School Values, computing, English and Maths.
- **Pre-knowledge and skills are retrieved and built upon** at the beginning of each topic as outline on the Scheme of Work.
- At a classroom level, **key concepts are presented clearly so that they are embedded in the long-term memory and over-learning is prevalent**, this is also monitored by the subject leader.
- Individual lessons are planned to inspire, engage and challenge pupils in response to their needs.
- Children are given a wide variety of experiences both in the classroom and out. Pupils to undertake **memorable learning opportunities** by attending school visits and having visitors into school to enable the children to gain first-hand experiences to support their learning and influence further learning such as the 'St Joseph's Bake off.'
- Reading and design and technology vocabulary are emphasised and taught to embed these skills in the pupils long-term memory.
- Set books are borrowed on a termly basis from the school library to support topic work. Children are able to borrow books to enrich their learning and understanding at home as well as at school. **This develops home school links, cultural capital and reading.**
- Teachers will remind the children how their school and home environments are valuable resources. The children have the opportunity to bring in products from home for display and discussions.

At Key Stage 1: Children are taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making a variety of different products. They design products for a range of relevant contexts for example, school when designing a playground structure, the home when creating dips, yogurts, fridge magnets and puppets and the local community when designing bunting. The topics are chosen carefully to ensure pupils learn about individuals of both genders and diverse backgrounds enhancing their cultural capital. When

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designing and making, pupils are taught to design, make, evaluate, develop technical knowledge and understand basic cooking and nutrition. Each child will cover six design and technology topics throughout their learning over a two year period.

At Key Stage 2: Children are taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making a variety of different products. They design products for a range of relevant contexts for example, school when designing a Anglo-Saxon church, the home when designing and making sun hats, pictures frames and pop-up books and the local community when designing and making a fairground attraction. The topics are chosen carefully to ensure pupils learn about individuals of both genders and diverse backgrounds enhancing their cultural capital. When designing and making, pupils develop their pre-skills taught at KS1 by embedding skills taught in the **long-term memory through over-learning repetition** by specifically focusing on developing the skills of designing, making, evaluating, developing technical knowledge and developing a deeper understanding of cooking and nutrition. At St Joseph's a Scheme of Work has been devised with carefully constructed units of work covering the full range of skills, it is place in order to achieve this.

Three topics of design and technology are taught within each year group to ensure coverage of both the required knowledge and subject-specific skills.

The teaching of design and technology across all year groups, offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons. Groupings allow children to work together and gives them the opportunity to discuss their ideas and feelings about their own work and the work of others. Their work in general helps them to develop a respect for the abilities of other children and encourages them to collaborate and co-operate across a range of activities and experiences. The children learn to respect and work with each other and with adults, thus developing a better understanding of themselves. Through the contexts of their design briefs, and choice they make throughout the design process, the children develop an understanding of different cultural issues; begin to consider the social moral implications on their decision making and develop spiritually through the use of their own imagination and creativity within their learning **developing cultural capital**.

Furthermore, in Design and Technology we celebrate all children's achievements through displaying work to parents are parents evening, having baking competitions such as the school bake off and awards in assembly.

New purpose-built design and technology facility has been created to encourage all pupils to be creative and to expand their experience and knowledge. The room has all the materials and equipment to allow for the preparation and construction of the projects to be completed in each year group.

Equitable Delivery

- The new design and technology facility will provide opportunities for pupils to develop their capability, combining their designing and making skills with knowledge and understanding in order to create quality products in a safe environment.
- Design and technology is taught through a variety of individual, group and whole class activities.

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- Active participation is encouraged through questioning and answering, critical analysis through looking at existing product and through designing and making a new innovative product.
- Children are encouraged to communicate their findings in a variety of ways e.g. diagrams,
- The subject leader is accountable for their own annual budget to purchase a variety of resources, training and school visits/visitors to improve outcomes for pupils.
- Enrichment days are organised in relation to particular topics covered across the key stages.

Assessment

- It will comply with the school's assessment policy. Design and technology will be assessed through summative and formative methods at the end topic. The class teacher will assess the child's achievement against the overall main learning outcome and end points and comment in the pupil's book. The teacher will assess every child as working below, developing, working securely, working above or at mastery level. This description indicates the child's performance against the learning expectations being recorded.
- Each child will be given the opportunity to appraise his / her work and progress through discussion with the teacher, either individually, or in small groups in the context of a practical task being investigated.
- Collect examples of children's work for evidence of progress throughout the school year.

Impact of Design and Technology Curriculum

- Our thorough tracking and assessment system enables teachers to check children's progress in relation to the curriculum and provide targeted intervention if needed.
- Design and technology is monitored by the subject leader and phase leaders in all year groups after each topic, through work scrutiny, review of assessment, pupil interviews and lesson observation to discuss learning and look at the impact. This is reported to the Headteacher and appropriate changes made.
- St Joseph's, pupils achieve highly across the curriculum in English and Maths, the sciences, humanities, art, language and physical education and the use of transferrable skills is promoted.
- Pupils use the knowledge and skills learnt to meet the challenges of the next part of their educational journey and to do so with confidence and concentration.

Health and Safety

- All out of school activities comply with the guidelines in the school health and safety and educational visit guidelines.
- Staff will always teach the safe use of age appropriate tools and insist on good practice.
- Children will be taught to work safely and to understand that their actions can affect others.
- Food safety procedures will be followed when using food during activities
- The new DT facility has been built to a high standard with the main focus of taking responsibility for the health and safety of all members of staff and of pupils.

Equal Opportunities

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All children in the school are regarded as of equal worth and importance, irrespective of his/her ability, culture, race, gender and/or disability. Each child has the opportunity to develop their Design Technology capability. The activities identified in the Scheme of Work are of equal relevance to either gender.

Pupils with special educational needs and disability (SEND) are given support with reading and writing in the classroom and work is differentiated appropriately with a varied choice of pedagogy enabling all children to achieve their full potential.

Background Documentation

This document is a statement of the aims and strategies for teaching and learning Design Technology in St. Joseph's Catholic School Aldershot. This policy was developed by Mr Steve Eagar through consultation with the staff, headteacher and Directors/Governors.

DATE OF APPROVAL:

September 2019

REVIEW DATE:

September 2022

Signed: Mrs. MacNeil
Headteacher

Dr Campbell McCafferty CBE
Chair of Directors/Governors