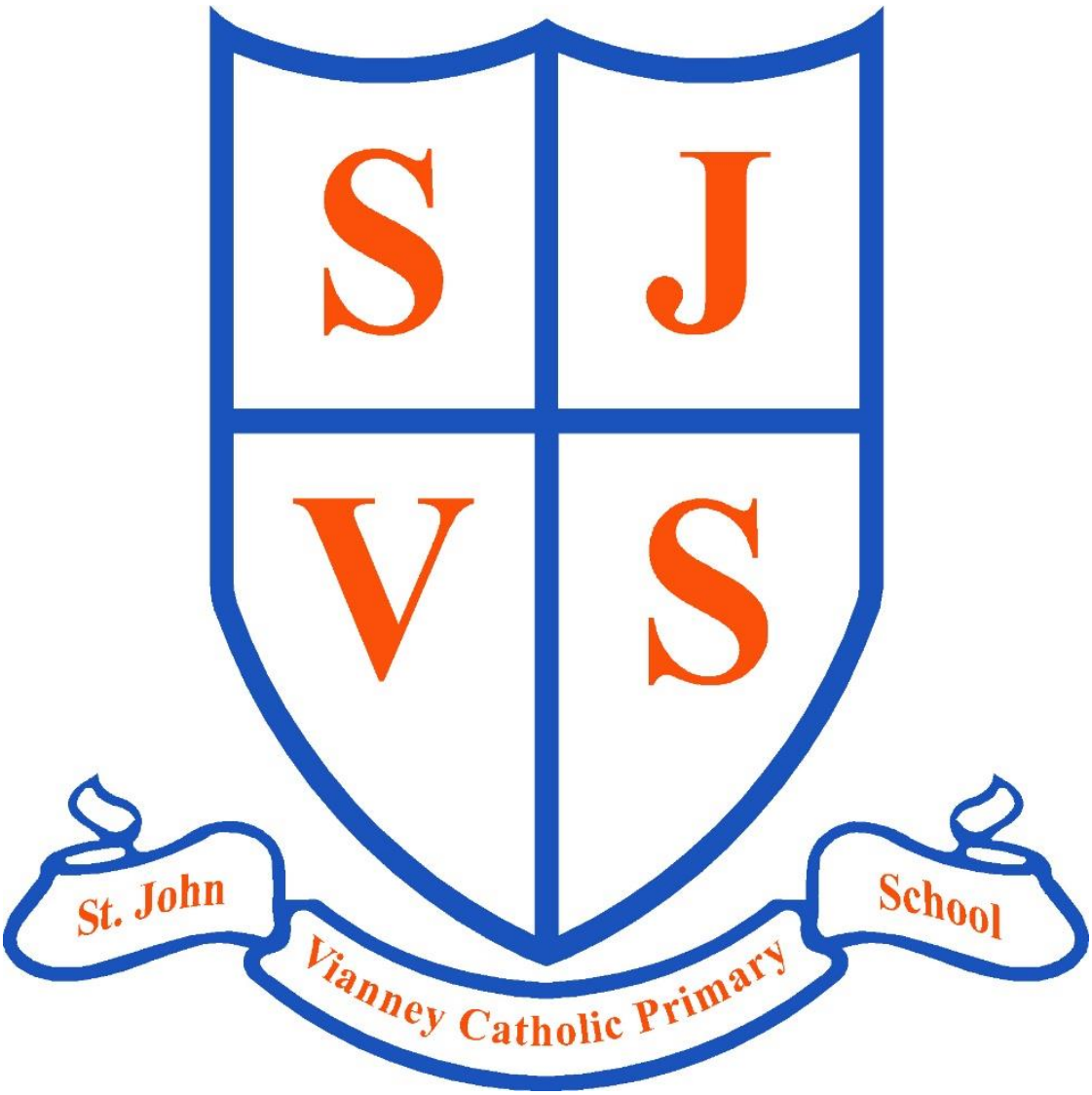
Design Technology Policy- St. John Vianney 2020.



1. Legal framework

1.1. This policy has due regard to statutory legislation, including, but not limited to, the following:

1.2 DfE 'Statutory framework for the early years foundation stage' 2017

1.3 DfE 'Design technology programmes of study: key stages 1 and 2' 2013

2. Early years foundation stage (EYFS)

2.1. All pupils in the EYFS are taught design technology as an integral part of the topic work covered during the academic year.

2.2. All design technology objectives within the EYFS are underpinned by the three prime areas outlined in the 'Statutory framework for the early years foundation stage':

- Communication and language
- Physical development
- Personal, social and emotional development

2.3. There are four specific areas through which the three prime areas are strengthened and applied – these are as follows:

- Literacy
- Mathematics
- Understanding the world
- Expressive arts and design

2.4. The design technology curriculum in the EYFS has a particular focus on the specific areas of expressive arts and design and understanding the world.

2.5. In the EYFS, pupils will be taught to:

- Recognise that a range of technology is used in places such as at home and in schools.
- Select and use technology for particular purposes.
- Safely use and explore a varity of materials, tools and techniques, experimenting with colour, design, texture, form and function.
- Represent their own ideas, thoughts and feelings through D&T, art, music, dance, role-play and storytelling.

3. KS1 - D&T

3.1. By the end of KS1, pupils will be taught to develop the abilities outlined in this section.

3.2. **Design**

- To design purposeful, functional and appealing products for themselves and other users based on design criteria.
- To generate, develop, model and communicate their ideas through talking, drawing, templates and mock-ups and, where appropriate, information and communication technology.

3.3. **Make**

- To select from and use a range of tools and equipment to perform practical tasks, e.g. cutting, shaping, joining and finishing.
- To select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.

3.4. **Evaluate**

- To explore and evaluate a range of existing products.
- To evaluate their ideas and products against design criteria.

3.5. **Technical knowledge**

- To build structures, exploring how they can be made stronger, stiffer and more stable.
- To explore and use mechanisms, e.g. levers, sliders, wheels and axles, in their products.

3.6. Through a variety of creative and practical activities, pupils will be taught the knowledge, understanding and skills needed to progress to KS2.

3.7. Pupils will work in a range of relevant contexts, e.g. the home, school, leisure, enterprise, industry and the wider environment.

4. KS2 – D&T

4.1. By the end of KS2, pupils will be taught to develop the abilities outlined in this section.

4.2. **Design**

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

4.3. **Make**

- To select from and use a wider range of tools and equipment to perform practical tasks accurately, e.g. cutting, shaping, joining and finishing.
- To 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.

4.4. **Evaluate**

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

4.5. **Technical knowledge**

- To apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
- To understand and use mechanical systems in their products, e.g. gears, pulleys, cams, levers, and linkages.
- To understand and use electrical systems in their products, e.g. series circuits incorporating switches, bulbs, buzzers and motors.
- To apply their understanding of computing to program, monitor and control their products.

5. Cooking and nutrition

5.1. As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the greatest expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

5.2. By the end of KS1, pupils will be taught to:

- Use the basic principles of a healthy and varied diet to prepare dishes.
- Understand where food comes from.

5.3. By the end of KS2, pupils will be taught to:

- Understand and apply the principles of a healthy and varied diet.
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

6. Cross-curricular links - D&T

6.1. **English:**

- D&T offers the opportunity to reinforce what pupils have been learning during English lessons. Discussion, drama and role-play are important methods that the school employs to help pupils develop an understanding of people's different views and opinions of D&T and society.

- Evaluating products requires pupils to articulate and formulate their ideas to compare their views with other pupils' views; through discussion, pupils will learn to justify their own views and clarify their design ideas.

6.2. **Maths:**

- D&T will assist pupils in learning about shape and size and will make use of what they have already learned in maths lessons.
- Pupils will carry out investigations, and by doing this they will learn to read and interpret scales, collect and present data, as well as draw their own conclusions.

6.3. **PSHE:**

- D&T lessons will be used to teach pupils how to discuss their own work and the work of others.
- Pupils will be taught about health and hygiene, including diets, and how to prevent disease from spreading when working with food.

6.4. **Spiritual, moral, social and cultural development (SMSC):**

- Teaching D&T offers opportunities to support the social development of pupils through the way they are expected to work with each other in lessons.
- D&T helps pupils develop a respect for other pupils' abilities. Working in groups encourages collaboration and gives pupils the opportunity to learn from each other and share ideas and feelings.

6.5. **ICT:**

- ICT enhances the teaching of D&T and provides pupils with additional equipment, extending the possibilities for developing, sharing and recording their work.
- Utilising ICT also benefits pupils by helping them collect information and present their designs and ideas through a range of design and presentation software.

7. Roles and responsibilities

6.1The subject leader is responsible for:

- Preparing policy documents, curriculum plans and schemes of work for the subjects.
- Reviewing changes to the national curriculum and advising teachers on their implementation.
- Monitoring the learning and teaching of design technology providing support for staff where necessary.
- Ensuring the continuity and progression from year group to year group.
- Encouraging staff to provide effective learning opportunities for pupils.
- Helping to develop colleagues' expertise in the subject.
- Organising the deployment of resources and carrying out an **annual** audit of all related resources.
- Liaising with teachers across all phases.
- Communicating developments in the subjects to all teaching staff and the senior leadership team (SLT), as appropriate.
- Leading staff meetings and providing staff members with the appropriate training.
- Organising, providing and monitoring CPD opportunities in the subjects.

- Ensuring common standards are met for recording and assessing pupil performance.
- Collating assessment data and setting new priorities for the development of D&T in subsequent years.

6.2 **The classroom teacher(s) is/are responsible for:**

- Acting in accordance with this policy.
- Ensuring progression of pupils' design technology skills, with due regard to the national curriculum.
- Planning lessons effectively following the Kapow scheme of learning.
- Liaising with the **subject leader** about key topics, resources and support for individual pupils.
- Monitoring the progress of pupils in their class and reporting this to parents on an **annual** basis.
- Reporting any concerns regarding the teaching of the subjects to the **subject leader** or a member of the SLT.
- Undertaking any training that is necessary in order to effectively teach the subjects.

6.3 The special educational needs coordinator (SENCO) is responsible for:

- Liaising with the **subject leader** in order to implement and develop specialist art learning throughout the school.
- Organising and providing training for staff regarding the curriculum for pupils with special educational needs and disabilities (SEND).
- Advising staff how best to support pupils' needs.

- Advising staff on the inclusion of design technology objectives in pupils' individual education plans.
- Advising staff on the use of TAs in order to meet pupils' needs.

7-Equal opportunities

7.1 At St. John Vianney, we are an inclusive school that ensures all pupils are provided with equal learning opportunities, regardless of social class, gender, culture, race, disability or learning difficulties.

7.2 In order to ensure pupils with SEND achieve to the best of their ability, outcomes are adapted and the delivery of the design technology curriculum is differentiated for these pupils.

7.3 The planning and organising of teaching strategies for each subject will be reviewed on a **termly** basis by the **subject leader** to ensure that no pupil is at a disadvantage.

7.4 The school aims to maximise the use and benefits of design technology as one of many resources to enable all pupils to achieve their full potential.

8. Planning

8.1. Planning of the D&T curriculum is focussed on creating opportunities for pupils to:

- Use a wide range of materials.
- Produce creative work, explore their ideas and record their experiences.
- Record their ideas and plan for larger pieces of work.
- Learn how to gather and evaluate different materials.

- Evaluate and analyse their work and that of others using the language of design.
- Discuss ideas and planning with their peers.
- See that their work is valued, celebrated and displayed around the school.

8.2. The school creates long-term and short-term plans for the delivery of the D&T curriculum – these are as follows:

- Long-term: includes the topics studied in each term during the key stage
- Short-term: includes the details of work studied during each lesson which can be found on Kapow.

8.3. The subject leader is responsible for reviewing and updating long-term plan and informing the teachers of these updates.

8.4. Teachers are responsible for reviewing and updating short-term plans, taking into account pupils' needs and identifying the methods in which topics could be taught.

8.5. All relevant staff members are briefed on the school's planning procedures as part of their staff training.

8.6. In our school, art, design and D&T is taught both as a discrete lesson and as part of cross-curricular themes when appropriate.

8.7. Teachers will use the key learning content in the DfE's statutory guidance 'Art and design programmes of study: key stages 1 and 2', and 'Design and technology programmes of study: key stages 1 and 2', both published in 2013.

8.8. Lesson plans will demonstrate a balance of interactive and independent elements used in teaching, ensuring that all pupils engage with their learning.

8.9. There will be a clear focus on direct, instructional teaching and interactive oral work with the whole class and targeted groups.

8.10. Long-term planning will be used to outline the units to be taught within each year group.

8.11. Short-term planning will be used flexibly to reflect the objectives of the lesson, the success criteria and the aims of the next lesson.

8.12. All lessons will have clear learning objectives, which are shared and reviewed with pupils.

9. Assessment and reporting

9.1. Pupils will be assessed and their progression recorded in line with the school's assessment policy.

9.2. Pupils aged between two and three will be assessed in accordance with the 'Statutory framework for the early years foundation stage', in order to identify a pupil's strengths and identify areas where progress is less than expected.

9.3. The progress and development of pupils within the EYFS is assessed against the early learning goals outlined in the 'Statutory framework for the early years foundation stage'.

9.4. The progress and development of pupils within KS1 and KS2 is assessed against the descriptors outlined in the national curriculum.

9.5. Throughout the year, teachers will plan on-going creative assessment opportunities in order to gauge whether pupils have achieved the key learning objectives.

9.6. Assessment will be undertaken in various forms, including the following:

- Talking to pupils and asking questions
- Discussing pupils' work with them
- Assessing work against the learning objectives
- Pupils' self-evaluation of their work

9.7. Teachers will also assess pupils':

- Knowledge of tools, materials and equipment.
- Ability to record and communicate their design ideas in a clear manner.
- Personal qualities and attitudes towards their work.
- Ability to explain what they have created and how.
- Ability to use tools and materials safely and effectively.
- Ability to evaluate their work and the work of others.

9.8. Formative assessment, which is carried out informally throughout the year, enables teachers to identify pupils' understanding of subjects and inform their immediate lesson planning.

9.9. Summative assessments will be used at the end of a unit of work. Teachers will make a judgement about the work of each pupil in relation to the national curriculum.

10. Resources and equipment

10.1. The school has a selection of centrally-stored materials, tools and equipment to ensure that all pupils have access to the necessary resources.

10.2. The design technology budget covers the cost of materials and replacement tools. Teachers will be required to maintain the tools and equipment in their classroom.

10.3. Pupils may occasionally be asked to bring materials from home if they can; however, to provide all pupils with the same opportunities, the school will provide for pupils who are unable to do this.

10.4. Display walls will be utilised and updated on a **termly** basis.

10.5. At the **start of every school year**, the **subject leader** and **headteacher** will assess the school's art, design and D&T tools and materials to ensure there is sufficient equipment for pupils, allowing funds to be allocated where necessary.