# Design Technology Policy Statement 2022-23

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| **Approved by:** | Ruth Vayro | **Date:** | 05.09.22 |
| **Last reviewed on:** | September 2021 | | |
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In the light of the Mission Statement, Inclusion and Assessment Policies, this is the policy statement for the delivery of Design and Technology at St Ambrose RC Primary School.

## Rationale

In keeping with the ethos of St Ambrose R.C Primary School, we believe that every child within our school should have full access to Design and Technology as laid down in the National Curriculum regardless of age, gender or ability. We seek to ensure that our teaching reflects the current guidance to schools, which emphasises the particular importance of designing and making.

## Aims:

- To present Design and Technology in a fun, interesting way, which encourages children to use their imagination and initiative.

- To develop our pupils' practical and thinking skills, enabling them to offer possible solutions to practical problems.

- To develop pupils' abilities to engage with and critically appreciate a range of designed outcomes made by themselves, their peers and adult designers.

- To develop pupils ability to select appropriate materials, tools and components and use these with due regard to safety.

- To enable pupils to apply skills, knowledge and understanding from the programmes of study of other subjects, where appropriate.

- To deliver exciting and active lessons where independent learning is facilitated.

## Purpose

- To increase children's technological awareness of the world around them.
- To encourage them to draw upon their own and others experiences.
- To promote an attitude of teamwork and co-operation.
- To develop children's problem solving and self-evaluation skills.

## Teaching and Learning

Design and Technology provides opportunities for children to develop key skills such as communication, teamwork, problem solving and self-evaluation.  They will also acquire some subject specific skills that are split into four key areas:

**Our planning provides opportunities for:**

## 1) Investigating
• Looking at existing products
• Investigating the structural and characteristics of products
• Developing their analytical and critical skills
• Researching and communicating information

## 2) Designing
• Developing and planning ideas
• Communicating design ideas in different ways using annotation
• Furthering their knowledge of materials and components
• Investigating products, by analysing what they are used for and the needs of the people who use them.
• Developing innovative and imaginative design ideas

• Further their understanding of business and enterprise


## 3) Making
• Selecting appropriate tools and techniques.
• Using equipment safely and correctly
• Measuring, marking, cutting, assembling, joining and combining components with increasing accuracy
• Using finishing techniques to strengthen and improve the appearance of their products
• Following safe procedures for food safety and hygiene

## 4) Evaluating
• Reflecting on the on-going process, as well as the finished article
• Identifying ways of improving products
• Knowing that the quality of a product depends on how well it was made and how well it meets its intended purpose

### Cooking and Nutrition:

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

Within each section of the Key Stage 1 and 2 opportunities, the children will also be encouraged to use technical language, appropriate to the skills they are learning at the point in the curriculum.


## ICT
In addition Design and Technology provides the opportunity to develop the skills of ICT such as:
• Creating data bases using spreadsheet packages
• Recording using photographs using cameras and I Pads
• Designing, annotating and projecting plans using Purple Mash
• Presenting information using keynote
• Access the internet to research information


Each classroom is fitted with an interactive whiteboard enabling the teacher to use video clips and demonstration programmes to enrich lessons.

## Business and Enterprise

We aim to conduct a Business and Enterprise project with the children in the Summer term. This will lead to an enterprise fayre. Where possible outside agencies, such as Manchester airport and Simply Health being invited to participate.

The children develop knowledge, skills and understanding of:
• Handling money
• Investment
• Relate learning to real life experiences
• Presentational skills

## Progression

Wherever possible, Design and Technology should be related to everyday life and experiences.  There should be progress from year to year in both application of skills and understanding of the subject.

### Foundation Stage

Throughout the Foundation Stage, the children are constantly provided with the opportunities to design, make and evaluate different products through continuous provision. The teachers within Early Years provide the children with plenty of chances to express themselves through their own designs. The children learn from an early age that it is acceptable for their work to be unique and that it doesn't all have to look the same.

### Key Stage 1 and Key Stage 2

St Ambrose follows the revised National Curriculum for Design and Technology at Key stage 1 and 2. All pupils have one lesson in Art or Design and Technology every week and these subjects will be embedded in the curriculum as far is possible. These lessons cater for all children's abilities and potential.  Activities are planned using skill progression documents, which relate to a variety of cross-curricular links, such as computing, science or history and geography.

The National Curriculum level descriptors indicate progression in the following key areas

1. Investigating, exploring and analysing existing and own designs.
2. Developing, planning and communicating ideas.
3. Working with tools, equipment, materials and components to make quality products.
4. Evaluating processes and products.

### Assessment and Monitoring

The assessment process for Design and Technology provides key skills which enables teachers to assess and monitor progress in sketch books. Design and Technology assessment is obtained by the use of Classroom Monitor at the end of every lesson.

The Skills Progression document also provides information for what the children should be achieving at each year group.

Evidence for making judgments will be gathered through discussion and observation of the pupil during the lesson and by the child's recording of the activities, e.g. planning, designing, and photographing practical activities. All levels are based upon teacher assessment. Children are also given the opportunity to fully participate in the assessment process, through peer, self and group assessments.

## Inclusion

All our children have access to the Design and Technology curriculum, regardless of their ability, gender, physical disability or their social, cultural or ethnic background. Where possible, provision is made to support individuals or groups of SEND children or those with a disability so that they can participate effectively in Design and Technology lessons. Likewise, provision is made for our More Able children and our New Arrivals so that their needs are also met. All children are encouraged to achieve as high standard as possible.

## Equal Opportunities

In our planning we ensure that all children have equal access to all areas of the curriculum, as well as extra-curricular activities, high quality equipment and resources, high quality teaching staff and time to contribute to whole class and group work.

## Rights of the Child

The Design and Technology curriculum takes in to account Article 15, 29 and 31 of the UN Convention on the rights of the child.

## Health and Safety

An important aspect of Design and Technology is the need to develop the children's awareness of the need to work safely and with due regard to the health and safety of themselves and others. Children will be shown how to use equipment correctly and will be given the opportunity to practice skills and techniques under supervision. Risk assessments for potentially hazardous equipment will be placed in its resource tub for staff to refer to when using.

The teacher is the final decision maker about safety in his/her classroom. If there is any doubt about how to work safely, or the capacity to provide the necessary level of supervision then the activity should be postponed until advice from the subject manager or Head teacher has been obtained. If activities are deemed to be dangerous then other alternatives should be sought. Additional guidance is available in the appendix.

## Resources

The Design and Technology resources are stored in the Art/Design & Technology cupboard. The Art and Design and Technology coordinator is responsible for the management of the resources; all staff are responsible for the organisation and

maintaining of the resources. An audit is carried out to ensure resources are readily available.

## Monitoring and Evaluation of Subject

To monitor and evaluate Design and Technology the Subject co-ordinator will

• Carry out pupil and parent questionnaire

• Display examples of good work from each year group around school

• Monitor the standard of children's work via work scrutiny

• Provide and evaluate termly actions

• Analyse termly data and provide feedback to teachers

• Share and highlight areas of development

• Share examples of lesson plans

## Role of the Subject Leader

- Ensuring intended learning is clear on all planning.
- Monitor planning through whole school scrutiny procedures.
- To advise and support staff in planning, teaching and learning of DT, as well as to support staff with DT techniques.
- Develop an action plan for DT with realistic and developmental targets.
- To ensure all staff are confident with the planning and delivery of key skills across year groups.
- Monitor the use of exercise books/sketch books throughout the school, ensuring the work is of the highest quality.
- Audit, identify, purchase and order all art resources, ensuring they are readily available and well maintained.

**Dependent upon the IPC coverage these are my precautionary notes for possible equipment that may be used.**
## Appendix

While individual class teachers must judge for themselves whether or not their class is able to use a particular resource the following guidance **must** be adhered to:

Clamps: Pliers/Vices/Punches   Children may use these pieces of equipment when their strength of grip enables them to operate the tool. N.B. eyelet punches require a

considerable amount of strength to control so should be used only by teachers or older children.

Cookers    Once instruction has been given; children may be allowed to operate the cooker under close supervision.

Drills    Hand drills: children may use these after training under supervision. When the teacher is satisfied that the child has become competent in the use of this tool they may use the drill in the classroom by themselves (Unsupervised in KS2 only).

Mini Drills: KS2 children use    To after training under supervision.

Power Drills:    Not for classroom use.

Where possible drills should be in a stand and the material should be clamped to a surface.

Safety Glasses    These should be worn when there is a risk of damage to the eyes.

Food Hygiene    Children should be made aware as early as possible of the need for hygienic food preparation. Teachers should train the children to prepare food hygienically and supervise preparation.

Glues    Pritt-Sticks: These may be used by children as soon as they are competent not to get any in their eyes, mouth etc…

PVA/Hobby glues: As above in addition to some training and then general supervision.

Wood Adhesive: This should only be used by the teacher or under direct supervision

Wallpaper paste: This glue may be used after training and then under general supervision.

Solvent Glues: While the Borough allows use of solvent based glues after training and under close supervision; it is the recommendation of this policy that children use only water-based glues.

Glue Guns: Only low temperature glue guns should be used. The teacher should use them only until years 5 and six, where the child under close supervision of an adult may use them.

Paper Trimmers: children may use    These after instruction under general supervision.

While the Borough does not specify a key stage or year group, it is the recommendation of this policy that only children in years 5 and 6 and possible some mature year 4 children, at the discretion of the teacher be allowed to use a paper trimmer.

Hammers    Children may use a hammer as soon as their motor skills allow them to hit the nail accurately and as soon as they are disciplined enough to stay on task.

Smaller weight hammers are sufficient for most jobs in the classroom.

Claw hammers and Club Hammers are not for use in the classroom.

Knives    While use of scissors is preferable; children may be required to use knives for their Design and Technology work. They should only be used by older children and can be used once they have learnt the rules, techniques and skills for cutting. They should be closely supervised while working with a knife.

Paints    Children should use water based paints only. These may be used under general supervision. Emulsions (house paints) should be used by adults only or with older pupils under supervision.

Plastics    Plastic sheeting should be cut using scissors and ay be used at any age where the pupils are competent with scissors. Years 5 and 6 may sand plastics but only after training and under supervision. A competent teacher should only use hot wire cutters.

Sanding/Filing    Sandpaper/Emery paper/Files: Sanding and filing may be carried out using these tools under general supervision as soon as the children's motor skills are sufficient.

Orbital sanders: teachers should use these only. They are not for classroom use.

Edge grinders: Not for use in school.

Saws – Hand    Hacksaws and Junior Hacksaws: These are suitable for most jobs and may be used by the children providing they have undergone some training and have the appropriate motor skills.

Tenon Saws: As they are slightly larger, these saws are better suited to older children with finer motor control. The children using these should undergo some training in the use of a tenon saw.

Larger saws: For example coping saws and bow saws should not be used in class.

Saws – Power    Power saws should not be used in school.

Scissors

Paper cutters: the youngest pupils should use these until they have the motor coordination to use scissors.

Blunt ended scissors: These may be used as soon as the children can actually handle them under general supervision.

Sharp-ended scissors: These may be used under general supervision once the children can be relied upon to use the correct techniques.

Safety snips: These may be used under general supervision once the children can be relied upon to use

the correct techniques.

Tin Snips: adults should use these only.

Left handed scissors/snips: While most children are right handed left handed scissors and snips should be made available for left handed children.

Nails and Pins    These may be used under general supervision once the children have been trained in their use.

Sprays – Paints/Fixatives    These should only be used by adults in well-ventilated areas. They should not be used in the presence of children.

Staplers    Mini staplers may be used by children under general supervision. Heavy-duty staplers may be used under close supervision until the children are competent. Electric staplers are never to be used in the classroom. Staple guns are to be used on by trained adults.