

## Design and Technology Policy

Date	Author	Comment
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## Design and Technology Policy

This policy outlines the structures in place to ensure that Southcoates Primary Academy delivers a high quality design and technology curriculum for all learners.

Curriculum	Intent
	Implementation
	Impact
Pedagogy	Rationale
	Resources
	Opportunities to Revise, Repeat and Build on Prior Learning
Assessment	Assessment for Learning
	Formative and Summative Assessment
Culture	Opportunities for All
	Fostering a Love of the Subject
Subject Monitoring and Improvement	Subject Leadership
	Subject Triangulation
	Subject Improvement
	CPD

### Intent

#### **Purpose of Study**

At Southcoates Primary Academy, a high-quality design and technology education should be inspiring, rigorous and practical. We aim to promote creativity and imagination whilst equipping the children with the skills needed to design with purpose. As pupils progress, they should acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art.

#### **Aims**

Design and technology teaching at Southcoates Primary Academy aims to ensure that all pupils:

- Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world;
- Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users;
- Critique, evaluate and test their ideas and products and the work of others;
- Understand and apply the principles of nutrition and learn how to cook.

### Implementation

#### **Organisation**

Design and technology is taught through a whole school theme based approach. Design and technology and art and design projects alternate on a half termly basis. Each term, the children design, make and evaluate a product that is linked to one of the themes. These theme based design and technology projects cover the following areas:

- Construction, including electronics and computing;
- Sewing;
- Food technology.

The **Subject Leader Audit for Design and Technology** outlines the design focus (construction, sewing or food technology) for each theme, along with the intended outcome for each project.

The **Termly Progression Document for Design and Technology** details the procedural and declarative knowledge that will be taught in each phase, each term.

- Early Years objectives have been written in line with the **Early Years Framework**, with most of the design and technology objectives relating to the 'Expressive Arts and Design' Area of Learning.
- The objectives for Years One to Six cover the expectations of the **National Curriculum**.

- The design and technology curriculum at Southcoates plans for opportunities to embed learning related to our Curriculum Drivers: Safe Behaviours, Positive Role Models and Awareness of the World.
- The progression of technical vocabulary relating to design and technology is also planned for on the **Termly Progression Document**.

Using the objectives from the Termly Progression Document for Design and Technology and each phase's Medium Term Plans, **Short Term Planning** is conducted by teachers to plan the sequence of lessons that will enable the high quality teaching of the objectives.

The **Declarative and Procedural Knowledge Progression Document for Design and Technology** outlines how progression is planned for, with opportunities to recap and build on prior learning.

### **Impact**

Each term's design and technology project follows a cycle of designing, making and evaluating. The children's learning is evidenced in their individual theme books, with photographic evidence being used to record children's outcomes and final products.

Pupil voice interviews are conducted by Subject Leaders to check that children have retained the knowledge taught in each unit. Teachers use questioning and opportunities to revise prior learning to help children to hold learning in their long term memories.

As children move through their years at Southcoates, the curriculum design should enable our children to become independent, creative designers who are able to apply age appropriate skills and knowledge, and use a range of technical vocabulary. The children should be able to talk confidently about their learning and think critically to evaluate their work.

## **Pedagogy**

### **Rationale**

The SPA Curriculum aims to provide our children with teaching, opportunities and experiences that will help them to flourish and grow into successful citizens who will make positive contributions to the world around them. Underpinning our curriculum are our Curriculum Drivers:

<b>Safe Behaviours</b>	The design and technology curriculum has a heavy focus on safe behaviours. Within their design and technology lessons, children will be taught the importance of the safe and responsible use of tools and equipment.
<b>Positive Role Models</b>	It is very important that the children value their learning. Meeting designers and engineers will help them to understand where the subject fits in the world. It will help to raise our children's ambitions and aspirations for their own futures.
<b>Awareness of the World</b>	Our world is evolving and changing at a fast pace, and our children are the next generation that will contribute to these changes. Children at Southcoates are given the opportunity to think about positive and negative impacts of design and technology on our world, and to discuss their thoughts and feelings on this.

## Resources

A wide variety of resources are available in the design and technology store room and are restocked by the design and technology subject leader. Teachers are able to order additional resources to support teaching and learning when required, ensuring that children have access to high quality resources in all of their lessons.

## Opportunities to Revise, Repeat and Build on Prior Learning

Our SPA Curriculum has been designed by Southcoates' teachers to ensure that the objectives progress as the children move through their years at Southcoates. Opportunities to revise, repeat and build on prior learning are built into our Long Term Plans, Medium Term Plans and Short Term Plans.

For example, opportunities to revisit and build upon construction skills and knowledge are planned for within the Long Term Plan, as evidenced in the diagram below. The specific progression of procedural and declarative objectives can be found in the Declarative and Procedural Knowledge Progression Document for Design and Technology.

## Assessment

### Assessment for Learning

Ongoing assessment is carried out within lessons through questioning, discussion and observation to check the children's understanding. Teachers evaluate how children explore, develop and analyse their own designs and products, and monitor their application of newly learned skills. Teachers and pupils engage in focussed discussions about how to make progress, and ongoing assessment for learning influences the following teaching inputs and lesson design.

### Formative and Summative Assessment

Early Years:

Termly Early Years assessments in relation to the Areas of Learning outlined on the Early Years Framework are inputted on the Bromcom system. The code Y (Yes) or N (No) is inputted to indicate whether or not each child is on track to achieve the Early Learning Goal by the end of the year.

Years One to Six:

Formal teacher assessments for Years One to Six are conducted biannually at the following assessment points:

- Mid-year assessment: class teachers make an end of year prediction based on whether or not the child is on track to achieve the expected standard by the end of the year. (Assessments are based on each child's attainment in relation to the end of phase objectives outlined on the Termly Progression documents and Medium Term Plans.)
- End of year assessment: class teachers make a final judgement to indicate whether the children are working towards, have achieved, or have exceeded the expected standard. These grades are reported to parents on the mid-year Annual Reports, and the End of Year

Reports. The following codes are inputted onto the Foundation Subject Assessment Tracker to record the level at which each child is working:

WTS – Working Towards the Expected Standard

EXS – At the Expected Standard

GDS – Greater Depth Standard

The children’s learning is assessed against end of **phase** expectations. The following assessment grid is used to show the judgements given in Years One, Three and Five in relation to the end of phase expectations:

End of Phase Standard				
	ETS	WTS	EXS	GDS
Y1	WTS	EXS	GDS	
Y2		WTS	EXS	GDS
Y3	WTS	EXS	GDS	
Y4		WTS	EXS	GDS
Y5	WTS	EXS	GDS	
Y6		WTS	EXS	GDS

## Culture

### Opportunities for All

Southcoates Primary Academy is committed to the inclusion of all pupils, within the school curriculum and participation in all aspects of school life.

All pupils that are engaging in subject-specific study are taught age appropriate objectives as outlined on the Termly Progression Document for Design Technology. Teachers ensure that these objectives can be accessed by all pupils through the use of scaffolding, personalised teaching and additional support. All children are encouraged to develop independence with regards to experimentation, creativity and producing final products, and are supported where needed to achieve optimal educational outcomes. Teachers adapt teaching methods to suit the needs of individual learners, and to remove barriers where possible, to give every child the opportunity to succeed and achieve.

Children who are confidently achieving age related expectations are challenged to deepen their learning by being given opportunities to apply their skills in a variety of situations, dependent on the task being undertaken.

## **Fostering a Love of the Subject**

Southcoates Primary Academy highly values all subjects, and is committed to ensuring that every child has access to high quality experiences as well as an ambitious progressive and embedded curriculum.

To raise the profile of design technology, and to ensure that children understand the importance of the subject outside of the school environment, the following opportunities and experiences are organised for our children:

- Visitors, such as engineers from the local Siemens Renewable Energy industry, are invited to speak to the children to highlight where design and technology skills can be used in the wider world.
- Enterprise activities for the annual Christmas and Summer Fairs give children real-life opportunities to design with purpose, making products to sell to parents.

## **Subject Monitoring and Improvement**

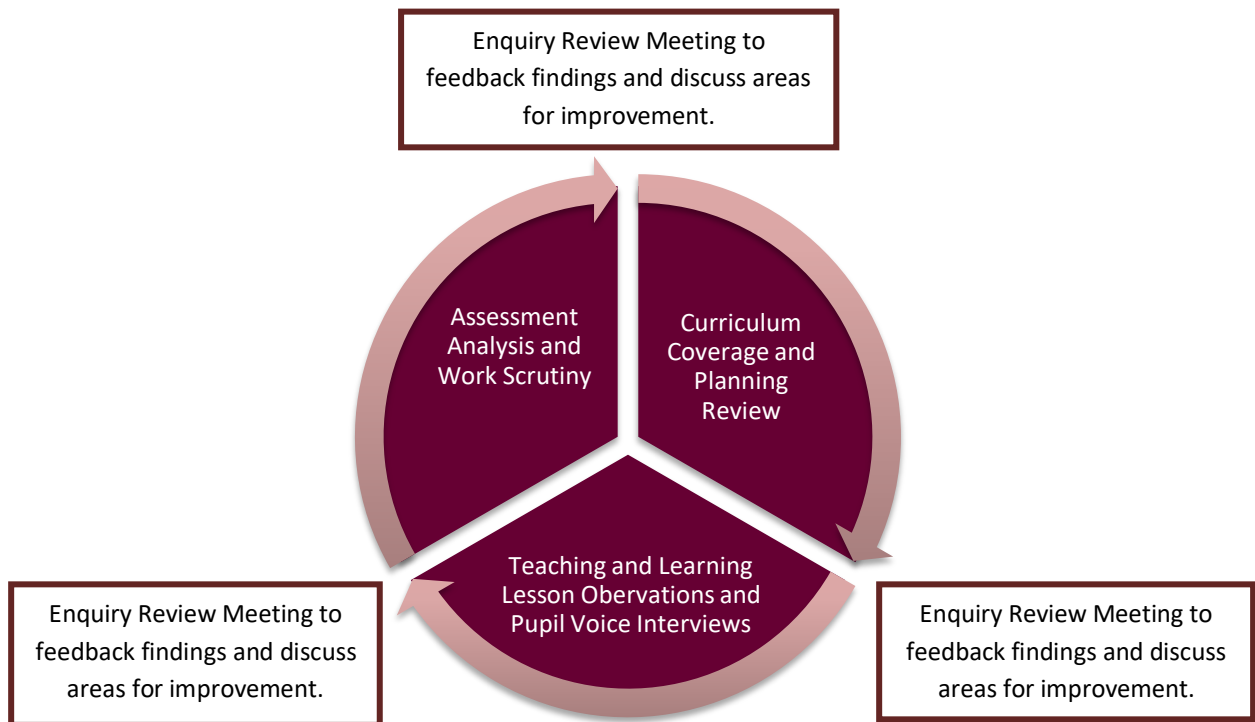
### **Subject Leadership**

- Design and Technology is overseen by the Theme Faculty. The Theme Faculty meet every other week to discuss:
  - Outcomes of monitoring.
  - Additional whole school opportunities and experiences to enrich learning and personal development.
  - CPD requirements.
  - Assessment.
  - Curriculum development.
- The Subject Leader for Design and Technology and the Subject Leader for Art and Design work in partnership to complete the monitoring cycle and to work on curriculum development and improvement for both subjects.

### **Subject Triangulation**

The curriculum, teaching and learning and outcomes of design and technology are monitored, developed and improved using an annual cycle of monitoring: subject triangulation.

Each year, a cycle of teaching and learning lesson observations, pupil voice interviews, work scrutinies, curriculum coverage/planning reviews and assessment analysis informs the subject leader of the quality of education for design and technology.



### **Subject Improvement**

Subject leaders feed back findings from the Subject Triangulation monitoring cycle to all teachers at the termly Enquiry Review Meetings. In these meetings, strengths, areas for improvement and CPD requirements are discussed. Good practice is shared to help to continually raise the standard of teaching and learning. The Enquiry Review Meetings are attended by all Teachers, Subject Leaders and members of the Senior Leadership Team, enabling constructive and productive conversations that aid continuous reflection, development and improvement of the curriculum.

### **CPD**

- Subject Leaders are given opportunities to attend CPD events run by The Enquire Learning Trust.
- Subject Leaders are able to request staff meeting slots to upskill teachers and to deliver updates and training.
- Teachers and Subject Leaders are encouraged to work together to discuss areas for improvement, and to identify areas where extra CPD may be required.
- Subject Leaders attend local Subject Leader Network Meetings to network with Subject Leaders from local schools.