

HOLY TRINITY



C.E. PRIMARY ACADEMY
(HANDSWORTH)

Design and Technology Policy

Subject Champion: Rebecca Clarke

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Holy Trinity CE Primary Academy Vision Statement

At Holy Trinity CE Primary Academy our distinctive Christian values are at the heart of all we do. Our children develop independent curiosity, acquire a life-long appetite for learning and become well-rounded individuals who achieve their full potential, both personally and academically.

“For I know the plans I have for you,” declares the Lord, “plans to prosper you and not to harm you, plans to give you hope and a future.” – Jeremiah 29:11

1. Intent

1.1 Holy Trinity Curriculum

Our curriculum is about **bringing engagement, fun and enthusiasm** to learning so that our children develop independent curiosity, acquire a lifelong appetite for learning and become well-rounded individuals who achieve their full potential, both personally and academically. Our curriculum starts from the children in our academy and works out.

1.2 Design and Technology at Holy Trinity

At Holy Trinity, we intend for our children to master design and technology to such an extent that they can go on to have future careers within design and technology and make use of design and technology effectively in their everyday lives. We aim to inspire pupils to be innovative and creative thinkers who have an appreciation for the product design cycle through ideation, creation, and evaluation. We want pupils to develop the confidence to take risks, through drafting design concepts, modelling, and testing and to be reflective learners who evaluate their work and the work of others. Design and Technology at Holy Trinity is taught through the Kapow Primary scheme. Through this scheme of work, the aim is to build an awareness of the impact of design and technology on their lives and encourage pupils to become resourceful, enterprising citizens who will have the skills to contribute to future design advancements.

1.3 Curriculum aims

The national curriculum for design and technology aims to ensure that all pupils:

- produce creative work, exploring their ideas and recording their experiences
- become proficient in drawing, painting, sculpture and other art, craft and design techniques
- evaluate and analyse creative works using the language of art, craft and design
- know about great artists, craft makers and designers, and understand the historical and cultural development of their art forms

The National Curriculum organises the Design Technology attainment targets under five subheadings and strands:

- Design
- Make
- Evaluate
- Technical Knowledge
- Cooking and Nutrition

2. Implementation

We want to ensure that Design and Technology is embedded in our whole school curriculum and that opportunities for enhancing learning by using design and technology are always taken. We follow Kapow's Design and Technology scheme allowing for a clear and concise coverage of key skills across key stages. The Kapow curriculum has been implemented from September 2021 and staff have received CPD training on the use of Kapow and the resources available.

Through Kapow's Design and Technology scheme, pupils respond to design briefs and scenarios that require consideration of the needs of others developing their skills in six key areas:

- Mechanisms
- Structures
- Textiles
- Cooking and Nutrition (food technology)
- Electrical systems (KS2)
- Digital world (KS2)

Each of the key areas follows the design, make and evaluate process and has a particular focus on developing technical knowledge.

2.1 Curriculum delivery

All classes in Key Stage 1 and 2 are taught Design and Technology weekly for three half terms. Teaching covers three units every year building upon previously taught skills. Design and Technology is taught in 1 hour sessions in Key Stage 1 and 45 minute sessions in Key Stage 2.

2.2 Planning

At Holy Trinity, Design and Technology is taught through a knowledge-based approach. The subject overview for the school states which area of Design and Technology is to be covered and the Progression of Skills document states which skills and techniques will be covered in each year group over time.

The Kapow scheme consists of a spiral curriculum with following key principles in mind:

- Cyclical: Pupils return to the key areas again and again during their time in primary school.
- Increasing depth: Each time a key area is revisited it is covered with greater complexity.
- Prior knowledge: Upon returning to each key area, prior knowledge is utilised so pupils can build upon previous foundations, rather than starting again

Design and Technology in the early years is taught as an integral part of the EYFS curriculum and opportunities to explore creating, designing and making are developed through continuous provision.

2.3 Teaching and Learning

Lessons incorporate a range of teaching strategies from independent tasks, paired and group work including practical hands-on, computer-based and inventive tasks. This variety means that lessons are engaging and appeal to those with a variety of learning styles. Lessons are differentiated to ensure that lessons can be accessed by all pupils and opportunities to stretch pupils' learning are available when required. Knowledge organisers for each unit support pupils in building a foundation of factual knowledge by encouraging recall of key facts and vocabulary.

By the end of EYFS, pupils will:

- be able to explore and choose a range of materials to create and make things
- be able to investigate how things work
- draw, build and make things which fulfil a function

By the end of Key Stage 1, pupils will:

- learn the knowledge and skills needed to design and make products for a range of relevant contexts
- be able to design and test products that are purposeful and appealing
- select tools and materials which are most suitable to make their products from
- evaluate their products against existing products and design criteria
- develop the technical knowledge needed to build structures which are stronger and more stable and be able to use a range of mechanisms

- develop an understanding of where food comes from and how to use the basic principles of a healthy diet to make their own simple dishes

By the end of Key Stage 2, pupils will:

- develop further knowledge and skills to enable them to design and make purposeful and quality products in different contexts
- be able to research how existing products work and use this to develop designs and products to meet a design brief
- be able to produce more detailed, annotated designs and to test and refine their ideas
- be able to select and use a wider range of tools and materials according to their function and properties
- develop the technical knowledge required to make their products work effectively
- be able to evaluate the effectiveness and quality of their products and use this to improve their work
- develop an understanding of a healthy and varied diet and be able to prepare and cook a range of dishes.

3. Impact

The expected impact of following Kapow's Design and Technology scheme of work is that children will:

- Understand the functional properties of a range of materials and resources
- Understand how to use and combine tools to carry out different processes for shaping, decorating and manufacturing products
- Build and apply a repertoire of skills, knowledge and understanding to produce high quality, innovative outcomes.
- Understand and apply the principles of healthy eating, diets and recipes
- Have an appreciation of key individuals, inventions and events in history and of today that impact our world.
- Self-evaluate and reflect on learning at different stages
- Meet the required expectations of attainment at different stages

3.1 Assessment

- Assessment is used to monitor progress and to identify any child needing additional support as soon as they need it.
- **Assessment for learning** is used:

- daily within class to identify children needing support and adapt teaching.
- weekly in planning meetings to assess gaps and address these immediately.
- during marking to highlight misconceptions and identify next steps.
- **Summative assessment** is used:
 - at the end of each unit to assess progress, to identify gaps in learning that need to be addressed, to identify any children needing additional support and to plan the support that they need.

Please read this policy in conjunction with our *Assessment Policy*.

3.2 Monitoring

The subject is led by the Subject Champion and supported by the Senior Leadership Team. Each year, time is set aside to review standards and monitor curriculum provision and ensure training and resources are up to date.

Monitoring takes place regularly by the Subject Champion and the Senior Leadership Team through sampling children's work, book scrutinies, learning walks, lesson observations and pupil voice.

3:3 Equal opportunities

This policy firmly supports the equal opportunities philosophy of the school. Every child, regardless of gender, ethnicity or ability is given equal access to all aspects of the curriculum and participates fully in all lessons.

At Holy Trinity we recognise protected characteristics from *The Equality Act 2010*.

The following characteristics are protected characteristics:

- age
- disability
- gender reassignment
- marriage and civil partnership
- pregnancy and maternity
- race
- religion or belief
- sex
- sexual orientation.