



Samuel Allsopp

Primary & Nursery School

Design and Technology Subject Policy
2024-2025

Schedule of review

Date written: November 2024

Shared with SLT/Governing body: Awaiting Governor Ratification - November 2024

Next review: November 2025

Samuel Allsopp Primary and Nursery School Intent Statement

At Samuel Allsopp Primary & Nursery School, our curriculum and all that we do intends to:

- Be supportive and inclusive of the needs for all learners
- Harness pupil independence & allows them to have a go at solving problems for themselves first
- Allow children to make their own 'informed' choices
- Develop their confidence
- Support them to be resilient and get into good habits for the future
- Prepare children for a life outside of school that enables them to make a positive contribution to British society
- Enable them to be proficient users of the English language – speaking and writing
- Widen their contextual vocabulary
- Work independently but also in teams
- Encourage children to go 'beyond their own normal' and experience new things
- Engage children in making a contribution and playing an active part
- Support parents to become active stakeholders in their child's learning
- Provide opportunities for the children to investigate, explore and play an active part in shaping their learning

Intent

At Samuel Allsopp Primary and Nursery School we recognise that Design and Technology complements and builds on other ways of studying the world - from Science as a study of the natural world; from the Arts as a study of physical expression and from Literature as a study of creativity through the written word. In many ways Design and Technology uses our innate attributes of inquiry and creativity. Everything around us has been designed and made by someone – through Design and Technology we want pupils to have the opportunity to study the ways in which products and systems are created that enrich our lives, and the materials that have been used and the manufacturing processes involved. In Design and Technology, children acquire and apply knowledge and understanding of materials and components, mechanisms and control systems, structures, existing products, quality and health and safety. Our curriculum is designed based on the needs of our pupils and is reviewed regularly to ensure every pupil is given the opportunity to make progress and achieve. We use Quality First Teaching to ensure that disadvantaged pupils, pupils with SEND and higher attaining pupils are given the best opportunity to learn in a way which benefits them and enables them to achieve. This policy outlines the purpose, nature, and management of Design and Technology (DT) that is taught and learned throughout our school. Children are encouraged to be creative and innovative, and are actively encouraged to think about important issues such as sustainability and enterprise.

At Samuel Allsopp Primary and Nursery School, we aim for the following:

- Stimulate interest, enjoyment, curiosity, and concern about technological aspects of their environment.
- Develop an awareness of:
 - The implications of Design and Technology (past and present) for our, and all, communities.
 - The significance of Design and Technology, to enjoy the subject and to realise its importance.
 - The effects that technology has had or may have on society and the environment. This should help to develop an awareness of technical, aesthetic, social, cultural, and environmental considerations.
- Develop a range of desirable personal qualities such as safety awareness, politeness, perseverance, initiative, resourcefulness, resilience, self-evaluation and independence.
- Perceive Design Technology as:
 - a major cultural feature;
 - part of a wider body of knowledge and skills,
- Develop knowledge, skills, and understanding of Design Technology through
 - developing, planning, and communicating ideas
 - working with tools, equipment, materials, and components to make quality products
 - evaluating processes and products
- Develop language and communication skills.

National Curriculum Aims:

The national curriculum for design and technology 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

To ensure consistence of teaching and learning, we follow and adapt the Kapow Design and Technology curriculum that builds on previous learning and provides both support and challenge for learners. Our Design and Technology scheme ensures a progression of knowledge and skills development. All projects follow the “research, develop skills, design, make and evaluate” cycle. To give meaning to the children’s design process, design projects are rooted in real life, using relevant contexts. While making, children are given choices and a range of tools and materials to choose from. In the evaluation stage, the children learn to reflective learners by evaluating their own products against design criteria. Embedded in each of these steps are technical knowledge and vocabulary.

The Design and Technology scheme of work enables pupils to meet the end of key stage attainment targets in the national curriculum and the aims also align with those in the national curriculum. It also supports the journey, inspiring children and young people to create, experience, and participate in great arts and culture.

Inclusion Statement

The Staff and Governors of Samuel Allsopp Primary and Nursery School believe that:

- Inclusion is an ongoing process by which the caring and learning environment is constantly monitored and adapted to meet the needs of all our pupils.
- All of our pupils are entitled to support in fulfilling their own potential in terms of academic, physical, cultural, social, emotional and moral development.
- We recognise that ALL our pupils are individuals with their own characteristics, strengths, weaknesses and learning needs.
- Our policies and practises will therefore, take account of the diverse needs and talents of our pupils.
- Pupils with additional emotional, social or learning needs should have access to high quality education and support appropriate to their needs.
- Pupils with Special Education Needs (SEND) should have access to high quality education and support appropriate to their needs.

Implementation

The Design and Technology National Curriculum outlines the three main stages of the design process: design, make and evaluate. Each stage of the design process is underpinned by technical knowledge which encompasses the contextual, historical, and technical understanding required for each strand. Cooking and nutrition* has a separate section, with a focus on specific principles, skills and techniques in food, including where food comes from, diet and seasonality.

The National curriculum organises the Design and technology attainment targets under five subheadings or strands:

- Design
- Make
- Evaluate
- Technical knowledge
- Cooking and nutrition

Kapow Primary's Design and technology scheme has a clear progression of skills and knowledge within these five strands across each year group.

Pupils respond to design briefs and scenarios that require consideration of the needs of others, developing their skills in three key areas:

- Mechanisms
- Structures
- Textiles

Each of the key areas follows the design process (design, make and evaluate) and has a particular theme and focus from the technical knowledge of the curriculum. The Kapow Primary scheme is a spiral curriculum, with key areas revisited again and again with increasing complexity, allowing pupils to revisit and build on their previous 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. Differentiated guidance is available for every lesson 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.

Three units of learning are completed throughout the school year in each year group (Years 1-6), with one being taught termly.

Health and Safety

Health and safety in Design and Technology is maintained to a high standard to ensure pupils and staff are protected from harm whenever possible. This includes both their physical and mental health, ensuring that Samuel Allsopp Primary and Nursery School complies with the Health and Safety at Work etc. Act 1974.

As necessary, risk assessments will be conducted to ensure that all potential risks and harms have been identified and to ensure that staff understand how to respond should an unexpected risk occur.

All working areas must be uncluttered and properly supervised. The safe use of tools should be carefully explained, demonstrated and pupils' understanding checked.

When undertaking work with food, at least one member of staff should hold a current Food Hygiene certificate. When tasting food, permission should be gained from parents and extra precautions taken to identify pupils with food allergies. Nuts should not be used in school. The National Curriculum from September 2014 states that all cooking should be in line with the principles of healthy eating and food made should be predominantly savoury.

Pupils must not use craft knives or glue guns themselves. A separate area away from children should be set aside for the teacher or teaching assistant to use these items observed by the pupil. Pupils should be encouraged to discuss safety implications of their work.

Remote Learning

In the case of remote learning opportunities being necessary in the future, pupils at Samuel Allsopp Primary and Nursery School will continue to be taught Design and Technology through live lessons, pre-recorded videos and online learning materials.

Impact

Impact is constantly monitored through both formative and summative assessment opportunities. Furthermore, each unit has a unit quiz and knowledge catcher which can be used at the start and/ or end of the unit.

Pupils should leave school equipped with a range of skills to enable them to succeed in their secondary education and be innovative and resourceful members of society.

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

- Understand the functional and aesthetic 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, including models, prototypes, CAD, and products to fulfil the needs of users, clients, and scenarios.
- Understand and apply the principles of healthy eating, diets, and recipes, including key processes, food groups and cooking equipment.
- Have an appreciation for key individuals, inventions, and events in history and of today that impact our world.
- Recognise where our decisions can impact the wider world in terms of community, social and environmental issues.
- Self-evaluate and reflect on learning at different stages and identify areas to improve.
- Meet the end of key stage expectations outlined in the National curriculum for Design and Technology.

- Meet the end of key stage expectations outlined in the National curriculum for Computing.

Feedback, Marking and Assessment

At Samuel Allsopp feedback is given to pupils in Design and Technology by verbal feedback, face-to-face discussions and through the floor book that all children contribute to.

Pupils are assessed on a lesson-by-lesson basis by teaching staff and lesson content is adapted accordingly. Every lesson begins with the 'Recap and recall' section which is intended to allow pupils retrieval practice of key knowledge relevant to the upcoming lesson. This section also provides teachers with an opportunity to make informal judgements about whether pupils have retained prior learning and are ready to move on.

At the end of each unit of work, children's understanding and retention of key knowledge is assessed using an assessment quiz with nine multiple choice questions and one open-ended question.

In addition, each unit uses either a skills or knowledge catcher, depending on the key strands covered in the unit. This can be used at the beginning and/or end of a unit and gives children the opportunity to further demonstrate their understanding of the key concepts covered. Assessment quizzes, and skills and knowledge catchers provide teachers with a record of summative assessment as evidence of progression throughout the year and as pupils move between key stages.

Monitoring and Review

To ensure high standards of teaching and learning of Design and Technology are maintained, the Design and Technology Coordinator , will regularly monitor and review staff practice in accordance with this policy. This process will be conducted termly in line with the monitoring calendar.

Relevant data will be collected to enable monitoring processes to be conducted. This includes:

- classroom observations
- learning walks
- floor books looks
- pupil voice
- planning looks

To ensure that staff professional development is benefited by this process, the Design and Technology Coordinator will ensure that any relevant training or development opportunities

are made available. Individual staff members will be given relevant feedback and will be celebrated or supported to develop their practice accordingly.

Resources

- DT resources are to be found in the main stockroom of each site.
- Resources must be returned neatly after every lesson and the DT coordinator made aware of any damage or shortfall.
- New and replacement resources will be ordered annually after consultation with staff.
- Teaching staff need to look at their yearly overview for DT and provide a resources request list early on in the school academic year.

This policy will be reviewed annually to reflect any necessary changes required and to ensure that staff are kept up to date with expectations relating to Design and Technology.