



St Alban's C of E Academy
Design and Technology
Policy

2023-2024



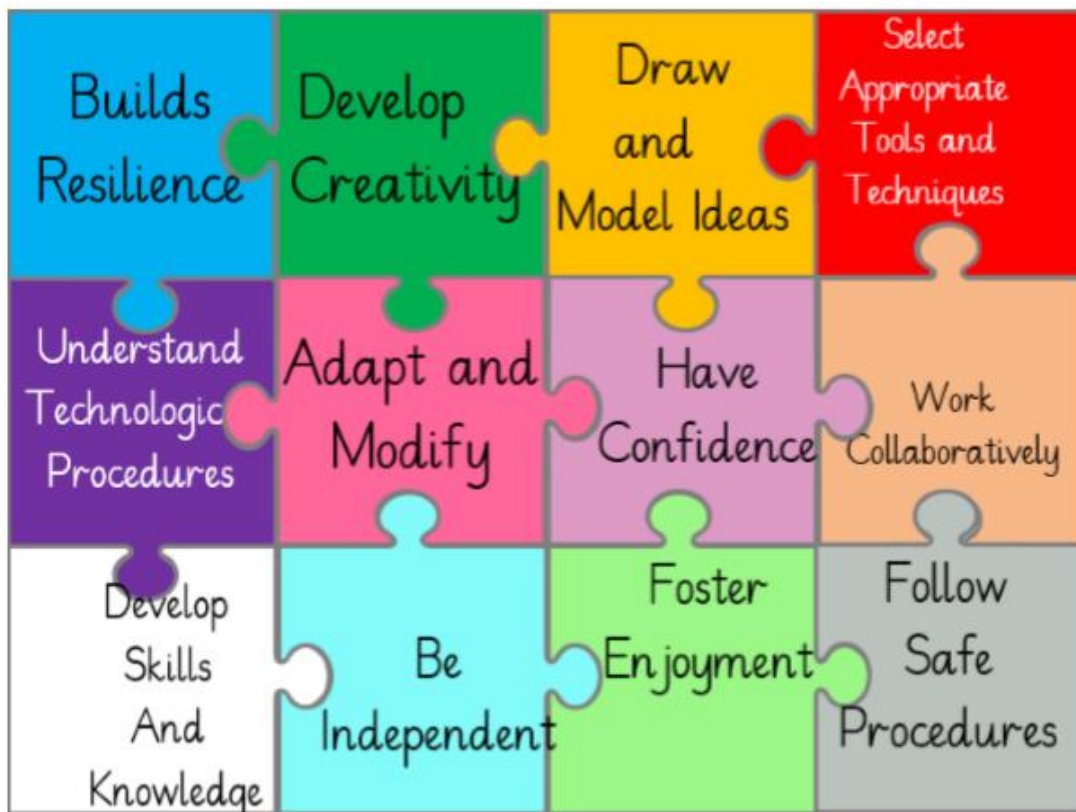
Design and Technology Policy.

St Alban's incorporates the Six Principles of DT whereby our children consider the end user, purpose, functionality, design decisions, innovation and authenticity of the products that they explore and make. This helps pupils develop knowledge, understanding and capability in the various skills and processes used when investigating, designing, making and evaluating.

INTENT

Design and technology prepares children to take part in the development of tomorrow's rapidly changing world. Creative thinking encourages children to make positive changes to their quality of life. The subject encourages children to become autonomous and creative problem-solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas and eventually making products and systems. Through the study of design and technology, they combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industrial practices. This allows them to reflect on and evaluate present and past design and technology, its uses and its impacts. Design and technology helps all children to become discriminating and informed consumers and potential innovators.

Our Design Technology curriculum is seen in its widest sense as the entire planned learning experience. This includes formal lessons as well as events, routines and learning that takes place outside the classroom. Our Design Technology curriculum is designed to allow pupils to:



Therefore, each pupil: ☐

- ✓ achieves the best possible academic experience, whatever their starting point or ability ☐
- ✓ has high levels of engagement, enjoyment and personal development ☐
- ✓ accesses a broad and balanced education, that allows a high level of personalisation which plays to their strengths and develop specialisms ☐
- ✓ develops existing and new interests and achieves their personal best in all that they do

Our Design Technology curriculum provides a broad and balanced education, which allows students to become:

- ✓ successful learners who enjoy learning, make rapid and sustained progress and achieve their very best in all they do.
- ✓ confident individuals who are able to live safe, healthy and fulfilling lives.
- ✓ responsible citizens who can make a positive contribution to society.

Our School Core Values

Our Christian Distinctiveness is purposefully threaded and woven throughout our curriculum, to enable our children to flourish both within school beyond



into the wider world. Our school curriculum is underpinned by the Christian Values that we hold dear at our school.

- ✓ Thankfulness
- ✓ Perseverance
- ✓ Friendship
- ✓ Trust
- ✓ Forgiveness
- ✓ Justice

At St Alban's, we empower each child to learn enthusiastically, grown independently and explore inquisitively to fulfil their God given potential. We offer children an excellent education in a safe, calm, creative, inclusive and stimulating environment. Every child is valued as an individual; we aim to nurture well-rounded, respectful and confident children who will develop skills for life-long learning. We nurture our children on their journey and encourage them to be creative, unique, open-minded and independent individuals, respectful of themselves and of others in our school, our local community and the wider world. We take our responsibility to prepare children for life in modern Britain very seriously and ensure that the fundamental British Values are introduced, discussed and lived out through the ethos and work of our school.

IMPLEMENTATION

The school uses a variety of teaching and learning styles in design and technology lessons. The principal aim is to develop children's knowledge, skills and understanding in design and technology. Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning and making products and then evaluating them. We do this through a mixture of whole-class teaching and individual/group activities. Within lessons, we give children the opportunity both to work on their own and to collaborate with others, listening to other children's ideas and treating these with respect. Children critically evaluate existing products, their own work and that of others. They have the opportunity to use a wide range of materials and resources, including ICT.

In all classes there are children of differing ability; we recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range



of strategies: setting common learning opportunities that are open-ended and can have a variety of results; setting learning opportunities of increasing difficulty; grouping children by ability and setting different learning for each group; providing a range of challenges through the provision of different resources; using additional adults to support the work of individual children or small groups.

ORGANISATION AND PLANNING

Design and technology is a foundation subject in the National Curriculum. Our school uses the national scheme of work as the basis for its curriculum planning in design and technology.

We carry out the curriculum planning in design and technology in three phases: long-term, medium-term and short-term. The long-term plan maps out the units covered in each term during the key stage. The design and technology subject leader maps this out to ensure progression of skills from EYFS to KS2. The spiritual life of our school enriches our planned experiences for children. For example, within EYFS, children will explore designing and making a rocket to take them to space, thus allowing discussion of the bigger questions about our place in the universe. In KS1, we reflect on the Easter Story and consider resurrection of Jesus; children then design and make a basket to hold an Easter egg. In KS2, children consider the feelings of children during WWII and design and make a teddy bear thinking about how such a product provides comfort, whilst being aesthetically pleasing.

Our medium-term plans, which we have adopted from the national scheme, give details of each unit of work for each term. They identify learning objectives and outcomes for each unit, and ensure an appropriate balance and distribution of work across each term.

We plan learning opportunities in design and technology so that they build upon the prior learning of the children. We give children of all abilities the opportunity to develop their skills, knowledge and understanding and we also build planned progression into the scheme of work, so that the children are increasingly challenged as they move through the school.

We encourage the development of skills, knowledge and understanding that help reception children make sense of their world as an integral part of the school's work. As the reception class is part of the Foundation Stage of the National Curriculum, we relate the development of the children's knowledge and understanding of the world to the objectives set out in the Early Learning



Goals. These underpin the curriculum planning for children aged three to five. This learning forms the foundations for later work in design and technology. These early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products, developing making skills and handling appropriate tools and construction material safely and with increasing control.

We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion. These activities, indoors and outdoors, attract the children's interest and curiosity.

Our school has a wide range of resources to support the teaching of design and technology across the school. Classrooms have a range of basic resources, with the more specialised equipment being kept in the design and technology store. The general teaching requirement for health and safety applies in this subject. We teach children how to follow proper procedures for food safety and hygiene.

Contribution of design and technology to teaching in other curriculum areas

English

Design and technology contributes to the teaching of English in our school by providing valuable opportunities to reinforce what the children have been doing during their English lessons. The subject reinforces the process of instruction writing, and the evaluation of products requires children to articulate their ideas and to compare and contrast their views with those of other people. Through discussion, children learn to justify their own views and clarify their design ideas.

Maths

The teaching of design and technology allows children to embed a range of maths skills that they have previously learnt; estimating, measuring accurately, collating data, shape and space, as well as number work are visited throughout numerous projects in each year group. Using such skills enables children to apply their knowledge to real life contexts in a progressive manner throughout their primary school lives.

Information and communication technology (ICT)

We use ICT to support design and technology teaching when appropriate. Children use software to enhance their skills in designing and making, and use



draw-and-paint programs to model idea. The children also use ICT to collect information and to present their designs through software such as 2Design and Make, and TinkerCAD.

Personal Life Skills (PLS) and citizenship

Design and technology contributes to the teaching of personal life skills and citizenship. We encourage the children to develop a sense of responsibility in following safe procedures when making things. They also learn about health and healthy diets. Their work encourages them to be responsible and to set targets to meet deadlines, and they also learn through their understanding of personal hygiene, how to prevent disease from spreading when working with food.

Spiritual, moral, social and cultural development

The teaching of design and technology offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons. Our groupings allow children to work together, and give them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and co-operative work across a range of activities and experiences in design and technology, the children develop respect for the abilities of other children and a better understanding of themselves. They also develop a respect for the environment, for their own health and safety and for that of others. They develop their cultural awareness and understanding, and they learn to appreciate the value of differences and similarities. A variety of experiences teaches them to appreciate that all people are equally important, and that the needs of individuals are not the same as the needs of groups.

Teaching design and technology to children with special educational needs

At our school we teach design and technology to all children, whatever their ability. Design and technology forms part of the school curriculum policy to provide a broad and balanced education to all children. Through our design and technology teaching, we provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs. Assessment against the National Curriculum allows us to consider each child's attainment and progress against expected levels. When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors – classroom organisation, teaching materials, teaching style,



differentiation – so that we can take some additional or different action to enable the child to learn more effectively. This ensures that our teaching is matched to the child's needs. Intervention through our Graduated Response will lead to the creation of an Individual Education Plan (IEP) for children with special educational needs.





We enable pupils to have access to the full range of activities involved in learning design and technology. Where children are to participate in activities outside the classroom, for example, a museum or factory trip, we carry out a risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

Staff will develop differentiated weekly slides to ensure pupils who are identified as working at a greater depth in design and technology and are achieving exceptionally high levels of achievement are catered for. Teachers assess children's work in design and technology by making assessments as they observe them working during lessons. They record the progress that children make by assessing the children's work against the learning objectives for their lessons. At the end of a unit of work, teachers make a judgement against the National Curriculum levels of attainment. Teachers then use the levels that they record to plan the future work of each child and to make an annual assessment of progress for each child, as part of the annual report to parents. Each teacher passes this information on to the next teacher at the end of each year.

Teachers meet regularly to review individual evidence of children's work against the national exemplification material produced by the QCA and the DfE.

Our Children's Curriculum Charter

Our children are entitled to a world class curriculum which enables them to: 

- ✓ Feel successful in their Design Technology learning and reach their full potential. 
- ✓ Enjoy learning and experience awe and wonder through the Design Technology curriculum that is provided. 
- ✓ Have a voice, be heard and have the flexibility to decide what they are going to learn and how. 
- ✓ Have the chance to learn about Britain's cultural heritage and about the world in which they live. 



- ✓ To develop their creativity, develop critical thinking by analysing their plan and designs, adapting upon these, to be independent and learn from one another. ☒
- ✓ Learn in different ways, both inside and outside the classroom, inside and outside of school.
- ✓ Be recognised for their achievements which support them in being the adults of tomorrow.

IMPACT

The impact of the curriculum design will lead to outstanding progress over time at all key stages, from the children's starting points. The rich and broad curriculum and units of work will enable teachers to consistently plan lessons progressively, building on prior knowledge and the development of key skills in order to deliver lessons of the highest standard and children's outcomes to be of the highest quality. Children will be confident, resilient, self-motivated, independent learners, with a depth of understanding of the changing world.

The monitoring of the standards of children's learning and of the quality of teaching in design and technology is the responsibility of the design and technology subject leader. The work of the subject leader also involves supporting colleagues in the teaching of design and technology, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. The design and technology subject leader has specially allocated, regular management time in order to review evidence of the children's work and undertake lesson observations of design and technology teaching across the school.

Our assessment system of building blocks will be used by the children and staff to reflect on the progress that is being made over time. Senior leaders will evaluate the progress that has been made and the impact of the Design and Technology curriculum to ensure all pupils, including the most disadvantaged and pupils with SEND, have been given the knowledge and cultural capital they need to succeed in life.

Review

This policy will be reviewed annually by staff and Trust Directors/CEO

