

Design and Technology subject policy

Date: July 2022

Due for review: July 2024



<u>Design and Technology – Meet the subject leader</u>

Since joining West Rainton Primary School in September 2021, I have had the pleasure of leading design and technology. As a teacher in the Early years, I believe that children begin to gain their initial 'hands-on' experience of design and technology in this phase of their education, through building a variety of structures in the construction area with a range of different materials. It is here where they should be able to develop a resilience to take risks and problem solve in order to create a product and prepare them for their future learning in the subject.



Over the past year I have attended many courses with Education Durham, relevant to the subject area. The main area I have focused on this year has been the 'food and nutrition' strand of the subject. This has provided me with the knowledge to make changes, moving forward across the whole school. New cookery equipment has been ordered and organised to provide resources for a whole class to work at any one time on a project. New personalised school aprons both for EYFS/KS1 and KS2 are now available for the children to use whilst carrying out activities within the subject. This demonstrates to our pupils the importance of sustainability and eco-friendly considerations when cooking.

From September 2022, the children will begin displaying their work in a journal. This journal will follow the children from year one to year six. I believe that this is an excellent way to show a clear journey of progress in design, technical and evaluative skills. It is also a fabulous resource for the children who are leaving year six to take on their journey into secondary school and beyond.

In line with the school's overarching curriculum key drivers, design and technology throughout the school has been planned to allow the children the opportunity to experience a rich and varied range of topics that will inspire them to become creative, inquisitive and resilient learners. It will also encourage the children to use research methods to enable them to develop innovative, functional products that will be 'fit for the purpose' and allow them to evaluate their product or the products of others.

I am excited to continue my journey within the subject and to keep moving forward in order to provide the children with as many exciting opportunities to equip them in becoming the next generation of innovative designers in the forever growing technical world we live in.

Mrs Gill Pickford

Mission Statement for design and technology

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education make an essential contribution to the creativity, culture, wealth and well-being of the nation. As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking will also open a door to one of the greatest expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

The subject of design and technology has a lead governor, Mr Gordon Murphy, who supports and challenges the subject lead in assuring the highest quality provision for all pupils.

"Tell me and I forget- show me and I may remember- let me do it, and I learn." Learning through making works! (Prue Leith, Leith's School of Food and Wine).

How design and technology fits into our overarching curriculum key drivers:



Aiming high

We want our pupils to be inspired by our provision, and to ignite strong aspirations and high expectations of themselves and their future. Promotion of strong attendance is fundamental in this. Through the use of visits,

visitors and enriching experiences, we will build knowledge and understanding of career possibilities as well as a hunger to embrace new and exciting opportunities. We will ensure we plan regular opportunities for children to develop self-belief and to see the benefits of taking risks and overcoming challenge. Our pupils will be supported to light up future pathways to fulfilling lives of employment choices, prosperity and future happiness. In design and technology this is achieved through the engaging and enriching opportunities on offer. Providing opportunities for the children to be creative, investigative and curious. Allowing the children to make mistakes but more importantly, to learn from them, creating strength and resilience. Encouraging the children to be innovative, through research and inviting businesses into school to inspire them into a range of career pathways.



Skills for learning and life

We want pupils to leave our school with a bank of knowledge and a skillset specific to each individual subject, whilst also making transferable connections across other areas of learning and life. Fundamental to this, is a

curriculum rich in core skills of language, vocabulary, communication, literacy and numeracy. Our pupils will be taught to be inquisitive, follow a line of enquiry to reach answers, and to recall and present their learning in a vibrant range of ways. Opportunities to develop resilience, organisation, leadership, teamwork, adaptability, patience and initiative are all interwoven into our subjects and wider school life in order for our children to adjust to new learning situations. In design and technology this is promoted through providing opportunities to work as part of a team, to develop their leadership skills. They are also encouraged to use their own initiative and develop patience, perseverance and resilience. The process of developing a plan (designing), creating (making), testing and evaluating are all fostered within D&T lessons.



Growing healthily

Equally as important to us is the development of the whole child. Feeling safe, happy and valued is a fundamental right of all pupils. Our inclusive-rich ethos provides the backdrop to our personal development and wellbeing provision which is skilfully interwoven into all that we do. All pupils are

supported to develop a strong understanding of the importance of good physical and mental health, whilst also learning a whole range of factors and influences that can have a negative impact on us. Making, nurturing and maintaining healthy relationships, both on and offline, equips children with the strength and security to recognise what they want and need in life. We believe a strong understanding of e-safety forms a crucial part of being a healthy, well-rounded 21st century global citizen. Design and technology provides experiences for children to enjoy on a more practical basis, promoting mindfulness and mental well-being. It is an opportunity for them to be able to interact with their peers and share ideas and opinions. It develops the children's understanding of how to work with tools and equipment safely. Through the 'food and nutrition' strand of the subject, they learn the principles of where food comes from, nutrition and healthy eating as well as life skills in cooking for themselves and others.



Knowledge of the world

When our pupils leave us at the end of Y6, we want them to feel so proud of themselves as people that they have the personal strength and self-confidence to find their place as positive global citizens. Through our carefully-planned provision, our pupils will experience a diverse and

inclusive-rich experience that allows them to bank cultural capital as well as developing a secure understanding of the importance of equality. As well as a secure knowledge of British values, our pupils will have their minds and horizons broadened through diverse social, moral, spiritual and cultural experiences. Pupils will be regularly encouraged to revisit and extend their world-view, fostering tolerance, sensitivity and empathy to interact positively with others. The design and technology curriculum map is carefully tailored to introduce a wide range of creativity, skill techniques, culture, wealth and well-being over time. Year 6 are given the opportunity to create a business enterprise that will often be linked to a project or an idea developed through the subject over the primary age phase.

o <u>Intent</u>

Long-term planning: During discussions with individual class teachers, and considering the needs of the children within our class structure each year, the design and technology leader creates an updated curriculum map for this subject, as well as a progression of skills map, which can be found on the school website. This approach is particularly important during years where there are mixed age classes, to ensure complete coverage of all objectives and to make sure that topics are not duplicated.

Medium term planning within each unit or work; learning objectives, design and technology activities, assessment opportunities, the vocabulary to be taught and used, safety issues, how information and communications technology and resources should be used. Planning is uploaded to the staff shared area on the school network for monitoring purposes.

o <u>Implementation</u>

Design and technology is a foundation subject of the National Curriculum 2014 and pupils undertake some design and technology on a rotating half term basis at both key stages. The work covered in Key Stage 1 builds on the Early Years Foundation Stage (EYFS).

In 2021-22, the EYFS unit, worked alongside subject leaders to create a curriculum offer unique to the context and needs of our pupils.

Teaching and Learning

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.

Equal Opportunities

The teaching of design and technology in our school takes consideration of our equal opportunities policy and inclusion. We recognise children as individuals and base our teaching upon our knowledge of their specific needs. A range of teaching methods and resources allow children with a wide range of abilities to achieve their full potential. Pupils with diverse learning needs are provided for through:

- Teachers planning for the pupil's full participation.
- Setting high expectations.
- Providing opportunities for all pupils to achieve.
- Creating effective learning environments.
- Setting learning targets.
- Liaison with the SENDCo, Mrs Firth, who advises and supports members of staff with their provision
- Allowing pupils access to specialist equipment and approaches where necessary.
- Continuous consultation with and involvement of parents.

<u>Learning Resources</u>

There are purposeful art areas in all classrooms except one which has a room next door which can be used for art purposes on afternoons.

Learning resources are also kept in the school resource area next to the library.

Both nursery and reception outdoor areas have specific, large central areas for creative mark-making.

The 'Plan It' scheme of work covers training the pupils in the safe and considerate use of equipment and materials. They are also taught to use consumables efficiently with a view on environmental impact.

The Learning Environment

Classrooms will often have displays of current design and technology units, including relevant vocabulary, in hand. Resources for the unit of work being covered should be appropriately accessible.

Safe Practice

All food and nutrition sessions are overseen by a staff member with a food hygiene certificate (Food Safety Essentials - approved by RoSPA), in order to ensure that all food preparation/cooking is completed safely. In addition, safe practice must be promoted at all times.

Teachers must also consider all relevant health and safety issues. Teachers will carry out a risk assessment before each activity, considering their tools, materials and equipment being used. Before undertaking practical tasks, children should be taught to use tools correctly in order to ensure safety. In addition, any out of school visits are organised through the Evolve online system, to ensure that all relevant health and safety procedures are adhered to.

o **Extra-curricular activities**

From time to time teachers plan to undertake visits to places of architectural interest and invite visitors to the school in order to support the learning objectives for units of work where relevant. Any out of school visits are organised through the Evolve online system, to ensure that all relevant health and safety procedures are adhered to.

Homework

No specific homework is set at either key stage for design and technology, although homework will be set on occasions where appropriate.

o The Contribution of design and technology to other Aspects of the Curriculum

The teaching of English, Maths, Science and Computing is promoted strongly in design and technology as part of the school's drive to raise standards in core basic skill areas.

Leadership and management

The head teacher discusses development needs so that the needs of individual members of staff are identified within the school's performance management programme. Staff attending training are expected to share the useful points with other relevant staff.

EYFS, KS1 & KS2 teachers discuss needs with the Headteacher and design and technology co-ordinator to ensure that planned units of work are adequately resourced.

Assessment and Recording

At the end of each unit individual pupil progress is assessed by their class teacher using Otrack.

Pupils are also actively involved in evaluating their own work and thinking about possible improvements throughout each unit of work. A revised 3, 2, 1 DT reflection sheet has been introduced from July 2022.

In addition to this, the actual work children produce also serves as a record of the achievement. New work journals have been introduced from September 2022. These will

follow the children through school from year one to year six. This will provide a clear progression of learning through the design, technical and evaluative skills.

o How the subject is monitored and evaluated

All teachers are responsible for monitoring standards through Otrack. This is overseen by the design and technology subject leader during leadership time, at least termly, as well as informally on a one to one basis within discussions between the subject co-ordinator and class teacher.

Design and technology evidence is available to be monitored, alongside all other books, fortnightly on our 'book look' Wednesdays. The design and technology lead will carry out a monitoring review of evidence, assessment and planning each term.

The design and technology lead will also visit and support classes during D&T lessons and activities, including how the foundations of design and technology are taught in the Early Years Foundation Stage.

The Design and Technology leader is also responsible for the implementation of the subject's action plan. This is then used as a tool to monitor and evaluate the area of design and technology across the school.

Policy Review

This policy will be reviewed at least every 2 years in line with the school's policy review programme. The subject lead, along with the identified governor lead, are responsible for reporting to the full governing body about the quality of its implementation and its impact on standards. In light of this, policy amendments may be made.

G Pickford July 2022

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Lead governor for Design and Technology – Mr Gordon Murphy