



Pendle Community High School & College Design and Technology Policy

Document Purpose

This policy reflects the school values and philosophy in relation to the teaching and learning of Design & Technology. The policy draws together National Curriculum (NC) guidelines and statutory requirements for Key Stage 3 (and where appropriate KS1 & KS2), British Nutritional Foundation (BNF) Core Competencies, The Food Safety Act 1990, Health and safety at Work Regulations 1999, General Food Hygiene Regulations 1995 onwards, as well as promoting the Spiritual, Moral, Social and Cultural (SMSC) development which includes British Values.

The policy seeks to address the individual learning needs of our pupils and sets out a framework within which teaching staff can operate.

For guidance on planning, teaching and assessment, this policy should be read in conjunction with the Scheme(s) of Learning for Design & Technology which sets out in detail what pupils in different Key Stages and in different ability ranges will be taught. This policy has been approved by the Governing Body following consultation with the wider teaching staff and is subject to regular annual reviews by the staff team and Governors.

Audience

This document is intended for all staff and other stakeholders with classroom responsibilities, school governors, parents, the Local Authority and Ofsted. A copy of this policy is made available for all staff within the curriculum policy file on the school network. A copy of this policy is also available to parents via the school website.

Overview and Aims (Intent)

At Pendle Community High School, Design & Technology is an inspiring and practical subject. Pupils use their creativity and imagination to design and make products within a variety of contexts. Pupils begin to acquire a knowledge of how to design, make and evaluate prototypes and products for a wide range of users. The Design & Technology curriculum draws on and links with other subjects such as mathematics, science, computing and art. Pupils are encouraged to trial new techniques, work with different materials and evaluate their success. Through consideration of past and present Design and Technology, pupils also begin to develop an understanding of its relevance and impact on their daily lives and the wider world. The Design & Technology curriculum is broad and balanced with cross curricular links, sets high expectations and is designed to provide appropriate challenge to all pupils and ensures they contribute to wider school life and local communities and charities.

Design & Technology aims to ensure that all pupils get opportunities to gain knowledge and skills

- to begin to develop the creative, technical and practical expertise needed to perform everyday
- tasks confidently and to participate successfully in an increasingly technological world
- to build and begin to apply a repertoire of knowledge, understanding and skills in order to design
- and make prototypes and products for a wide range of users
- to begin to critique, evaluate and test their ideas and products and the work of others
- to begin to understand and apply the principles of nutrition and learn how to cook

Cultural Capital

The Design & Technology policy at Pendle Community High School and College has been designed to follow and meet the needs of the National Curriculum Programmes of Study as well as supporting the 4 key drivers of our curriculum intent; being safe, having positive health and wellbeing, developing independence and improving communication including social interaction. Through these we set out the knowledge, skills and understanding that our pupils of different abilities are expected to gain. In addition, the Design & Technology curriculum is supplemented with a range of activities designed to enrich the learning experience of all of our pupils, furthering their knowledge and understanding of the world around them and preparing them for life beyond school. These opportunities include but are not limited to:

- Visits to sustainability places in the community. i.e. wind farm, Whalley Hydro
- Enterprise for designing and selling produce
- Community café and meals for the foodbank
- Macmillan coffee afternoon making cakes
- Pupils designing cakes and meals to compile a freshly prepared and varied menu for the Community Café
- Visits to cafes and restaurants
- Workplace visits
- Engaging in projects with local schemes such as Fair Share and Food Banks
- Opportunities to take part in our Young Chef school competitions
- Taking part in sessions with local chefs
- Preparing functional 'buffets' for a variety of purposes – e.g. Erasmus visitors, Head Teacher Christmas, presentation afternoon and leavers assembly.
- Fundraising

Implementation

Design & Technology at Pendle Community High School is based on different units throughout the year but planned so that pupils can achieve depth and progression in their learning. Design & Technology is sequenced to enable pupils to use and build on prior learning and knowledge, and to continually develop key skills. Existing knowledge is checked prior to the commencement of each unit ensuring that teaching is planned accordingly from the pupils' starting points identified through the assessment system. The units take into consideration what the pupils need to know, and which units engage pupils' interests. Units are sequenced to provide maximum progression of skills whilst maintaining the focus of design, make and evaluate.

Independent learners are encouraged to be inquisitive, ask questions and work independently, where possible as part of the design process. The curriculum is designed to provide challenge and all activities will be appropriately matched for individual learning, as well as encouraging problem solving.

Supported and experiential learners follow a thematic approach, where many areas of the curriculum are connected and integrated within a theme. These classes work in smaller groups whose learning is met primarily through experiences and activities which are multi-sensory and stimulate learning through kinaesthetic approaches and are supported through structure and routines. This curriculum is used to enhance early learning and development in pupils across school who present with sensory issues and those who learn best via a highly experiential, multi-sensory approach.

Design & Technology is well resourced and specific resources are mapped to specific groups and units to support effective teaching and learning. In lessons, we use a range of resources and materials to support practical opportunities. The specialist corridor has a dedicated Design & Technology wall,

displaying simple facts about the subject including resistant materials, equipment, the Eatwell Plate and the seasonal cycle. Some groups make bespoke resources requested by subject leaders to facilitate learning in the classroom and other large-scale material products are utilised in the sensory garden e.g. planters, benches. Several herbs and vegetables are grown on site for use in cooking and nutrition lessons which ensures the school environment further supports learners in recognising the impact and importance of the subject.

Pupils will be taught

Design

- with support, to research and design purposeful, functional, appealing products for themselves and other users based on simple design criteria
- to generate, develop, model and communicate their ideas through discussion, drawings and sketches, templates, mock-ups and prototypes, and where appropriate, ICT

Make

- to select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] accurately and independently or with support
- to select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their properties and characteristics

Evaluate

- to explore and evaluate a range of existing products
- to evaluate their ideas and products against design criteria and consider the views of others to improve their work
- to investigate new and emerging technologies with support
- to begin to understand how some key events and individuals in design and technology have helped shape the world

Technical knowledge

- to build structures, exploring how they can be made stronger, stiffer and more stable
- explore and begin to understand and use mechanical systems in their products [for example, sliders, wheels and axles, gears, pulleys, levers and linkages]
- to begin to understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- to begin to apply their understanding of computing to program, monitor and control their products

Cooking and nutrition

As part of their work with food, pupils will be taught how to cook and apply the principles of nutrition and healthy eating. For pupils at PCHS&C learning how to cook is a crucial life skill, promoting independence and aiming to enable pupils to feed themselves and others affordably and well, now and in later life.

Pupils will be taught to:

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from
- prepare and cook a variety of dishes using a range of cooking techniques, with support
- begin to understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.
- become competent in a range of cooking techniques [for example, selecting and

preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients; adapting and using their own recipes]

In KS4, all pupils continue to study Cooking and Nutrition to support the development of essential life skills and is accredited through AQA Entry level units and, where possible, pupils prepare to embark on NCFE Level 1 and 2 catering in KS5. Pupils continue to have access to working with resistant materials in the Workshop with a more defined focus on work related learning and personal development.

Meeting the needs of all pupils within Design & Technology

Pupils at Pendle Community High School & College have Moderate, Severe and / or Profound and Multiple Learning Difficulties including other associated difficulties such as Autism, Multi-Sensory, Visual & Hearing Impairment(s). All pupils access a wide range of learning opportunities within Design & Technology e.g. pupils with the most complex learning needs teaching and learning is based upon an immersive, multi-sensory and thematic approach.

Time Allocation / Cross-Curricular Links

The subject of Design & Technology is allocated the appropriate amount of time, considering NC guidance, to provide all pupils with a broad and balanced curriculum which is appropriate for their needs. For some pupils with more profound and complex needs the breadth and balance of the curriculum is addressed through a thematic approach and/ or the engagement assessment alongside personalised timetables. This subject affords opportunities to link to other curriculum areas such as:

Literacy	<p>Opportunities for reading recipe cards, information giving PowerPoints, interactive whiteboard games and posters. Writing opportunities to record evaluations, personal preferences, instructional texts, writing/re-drafting and adapting recipes and creating menus</p> <p>Product evaluation, instructional texts for construction kits. Designing, making and evaluating posters for different topics</p>
Numeracy	<p>Using scales to weigh in g, kg; measuring jugs to measure in l, ml. Counting equipment. Time: to calculate cooking times. Fractions to divide food into halves, doubling, quarters. Sorting plants and farm animals, sequencing, data collection, exploring 'Use By' dates on labels and learning to understand the 'traffic light' system displayed on labels.</p> <p>Measuring materials, creating/ drawing round templates/ accurate measurements to create products, strengthening products, angles, knowledge of shapes and right angles. Making classroom resources e.g. giant tangram sets</p>
Digital Literacy	<p>Use of short instructional films as a teaching aid, creating surveys, data presentation using digital graphs & charts. Creating PowerPoints to share information, cameras to record food production, IAWB games to reinforce nutritional information. Research information on the web. Interactive on-line webinar with Food a Fact of Life. Using design packages to develop a brand for the Food Room.</p> <p>Using computers to design products, early coding to control machines</p>
Geography	<p>Climate, where foods are grown and seasonality. Tasting different foods from around the world</p> <p>Designing and build a windmill in sustainability topic</p>
Science	<p>Find out about and describe the basic needs of animals, including humans, for survival. (water, food and air) Describe the importance for humans of exercise, eating the right amounts of different types of foods, and hygiene. Describe the simple functions of the basic parts of the digestive system in humans. Identify the different types of teeth in humans and their simple functions.</p> <p>Electrical circuits, understanding batteries and their use. Making classroom resources e.g. solar system mobile</p>
MFL	Tasting foreign foods

Careers/ Voc Ed	Access to NCFE Level 1 and 2 Certificate in Food and Cookery Skills, development of a Community Café, development of a Food Bank for students in our community and potential to develop the offer to our wider community. Potential to introduce front of house hospitality qualification. Making items to sell for charity or Christmas Fair. Health & Safety of how to use tools and equipment safely. Following functional processes for Etsy business
PSHE	What constitutes a healthy lifestyle? Including the benefits of physical activity, rest, healthy eating and dental health. To recognise opportunities to make their own choices about food, what might influence their choices and the benefits of eating a balanced diet. Tasting healthy foods, packed lunchboxes and their uses in our bodies. The Eatwell Plate, study own diet and how to improve life-styles.
Citizenship	Making products to raise money for charities/ fund raising etc
RE	Observing and respecting different food rituals and exploring foods eaten at specific religious festivals. Making classroom resources e.g. stable construction kit/ nativity character
Art	Designing and attaching applique. Using paint on products

Impact

As a pupil progresses through the school, they develop an understanding of how to design, make and evaluate own products as well as giving feedback to others. Skills and knowledge taught in Design & Technology are transferable and support pupils to do more and engage more in other curriculum areas. Teachers have high expectations and evidence of this is demonstrated in progress data and KS4 accreditation results. Impact is also recognised in pupils' contributions, questions and enthusiasm in lessons, participation in themed days, buffets and craft carousels where pupils demonstrate and describe their creations.

Pupils further develop their abilities in the 4 key drivers of the curriculum as well as improving numeracy and technical skills. Some pupils will become more confident in analysing their own work and making suggestions for improvement. The depth of knowledge that pupils will attain will vary but all will demonstrate progress from their individual starting points.

Pupils will have also learnt about careers and related work opportunities that are accessible for them in the local and wider community. This is enhanced by visitors to school and educational visit opportunities for further relevant and contextual learning.

Assessment, Recording and Feedback

Teachers record progression with evidence and levels of mastery through the school's online data recording system which allows all teachers access to cross curricular targets from other subjects. Staff have a good knowledge of the strengths and areas for development of individual pupils. From this, accurate judgements can be discerned to ensure targets are sufficiently challenging to meet staff's high expectations through:

- Continuous Teacher assessment of small step targets which are related to previous National curriculum and P scales descriptors.
- External assessment leading to nationally recognised accreditation.
- The monitoring and evaluation of Individual Education Plans (IEPs) and individual objectives, target planning and recording.

In addition, summative information can be found through:

- End of Key Stage 4 Record of Achievements and accreditation
- the Annual Review of a learner's Education, Health & Care Plan.
- the annual End of Year Report.

Additional supporting comments can be gathered through:

- Regular parents' evenings.
- Comments and input from parents and other professionals.

Annotation and Feedback

Digital evidence of a pupil's work should be named, dated and annotated by staff. This annotation should include comments regarding achievements, level of independence and any staff input. This is done in accordance with the annotation & marking policy and will inform future lessons and provide evidence towards pupil assessment progress on Onwards and Upwards.

Verbal feedback is provided constantly by staff to support and allow the pupil to gauge their progress and success immediately. This allows pupils to learn from errors/ misconceptions and to make appropriate adjustments in their learning. Verbal feedback must be appropriate to the level and understanding of the learner. Staff regularly inform the teacher as to the level of independence and mastery of targets throughout the lesson and all these contribute to supporting the staff team and teacher to fully monitor, evaluate and record pupils' progress.

Role of the Subject Leader

The subject leader's responsibilities are to:

- ensure a high profile of the subject in both the independent curriculum and the thematic approach
- ensure a full range of relevant and effective resources are available to enhance and support learning and for providing a regularly updated audit of resources planned through the annual Subject Development Planning cycle and expenditure evaluated as part of that process.
- model the teaching of Design & Technology
- ensure progression of the key knowledge and skills identified within each unit and that these are integral to the programme of study and relevant to each child's start and end points.
- monitor data, books and ensure that key knowledge is evidenced in outcomes, alongside and as supported, by SLT
- monitor planning and oversee the teaching of Design & Technology
- lead further improvement in and development of the subject as informed by effective subject audits and colleague feedback
- ensure that the Design & Technology curriculum has a positive effect on all pupils with SEND
- ensure that the Design & Technology curriculum takes account of the school's curriculum drivers which promote independence, communication, being safe and positive physical and mental health & wellbeing.
- ensure that the curriculum takes account of the school's context and promotes children's pride in the local area and, where possible provides access to positive role models from the local area to enhance the Design & Technology curriculum
- ensure that approaches are informed by and in line with current identified good practice and pedagogy; to network and maintain existing links with clusters or individuals with specialist expertise, and take advantage of regular opportunities for professional development to enrich and improve teaching and learning in Design & Technology
- have a general responsibility for LA and Schools Safety Policies within their subject area and be directly responsible to the Headteacher for the application of all health, safety and welfare

measures and procedures within their own department/ area of work. E.g. conducting risk assessments for the subject and associated educational visits. See separate

Other relevant information:

1. Subject Maps for Key Stages 3 & 4
2. Schemes of Learning
3. Cooking & Nutrition Health and Safety
4. Workshop risk assessment.
5. DT audit

Links with other policies

- Curriculum Policy
- Annotation and Marking Policy
- Autism Policy
- Intensive Interaction Policy
- AAC Policy
- Total Communication Policy
- Online Safety Policy
- Health & Safety Policy appendix for subjects

This is not an exclusive list of policies and should not indicate to the reader that there are no other policies or statutory guidance relevant to the understanding of best practice within our learning community.

Policy approved by governors:	September 2022
Review Date:	September 2023
Signed: T Ashton, Chair of Governors	
Signed: D Grogan, Head Teacher	