Christ Church C of E Primary School



Policy for Art and Design Technology

Policy Reviewed: January 2023 Updated: January 2023 Date for next review: January 2024

Signed:

Our Vision

Love must be completely sincere. Hate what is evil, hold on to what is good. Love one another warmly as Christians, and be eager to show respect for one another. Work hard and do not be lazy. Serve the Lord with a heart full of devotion. Let your hope keep you joyful, be patient in your troubles, and pray at all times."

Romans 12:9-12

Mission Statement

Together we can do all things through Christ who strengthens us

Our mission is to love all children who are part of our community helping them develop respect, tolerance, self-confidence and to become the best they can be.

We will support our children to develop their God given gifts to the full and encourage a life-long passion for learning which will successfully lead them into secondary school and beyond.

As a church school at the heart of Moreton community, our work is underpinned by the Christian values of *friendship, humility, forgiveness, compassion, justice* and *service* which Jesus helps us to achieve.

We are a welcoming, caring and inclusive school committed to working in partnership with parents, governors, Christ Church and Chester Diocese Academy Trust.

We strive to provide a rich and varied curriculum which reflects God's concern for the whole child; promoting spiritual, moral, cultural, physical and emotional wellbeing alongside academic excellence and independence.

> As a school community, we all work together to provide the very best for our pupils and families; firmly believing that:

Together we can do all things through Christ who strengthens us

Christ Church C of E Primary School Policy for Art and Design

Introduction

At Christ Church C of E Primary School, we are committed to providing all children with learning opportunities to engage in Art and Design Technology.

Our setting recognises the rights of the child within Art and Design and the responsibility the teaching staff have in enabling an engaging and inclusive environment for all.

The purpose of Art and Design Technology education is to give pupils the skills, concepts and knowledge necessary for them to express their responses to ideas and experiences in a visual or tactile form. It fires their imagination and is a fundamental means of personal expression.

While it is essentially a practical subject, art should provide opportunities for reflection and, with increasing sensitivity, pupils should acquire the ability to make informed, critical responses to their own work and that of others.

Design and Technology is concerned with the ability to turn ideas into reality. It involves the application of knowledge, skills and experience, using a distinctive creative process, which evolves in practical outcomes. These outcomes should be tangible, of high quality, and provide efficient and acceptable solutions, which can be tested in use.

Design and Technology capability is best developed through being engaged in the purposeful activity of making things, using a range of processes, equipment and materials, including I.C.T.

There is great pleasure to be derived from Art and Design and, through deeper understanding; pupils can gain access to cultural richness and diversity. The appreciation and enjoyment of the visual arts enriches all our lives. We must also ensure that we take every opportunity to use Art and Design to expose our children to cultural experiences and background knowledge that will equip them with the cultural knowledge to propel them further in their future careers and social development.

Art and Design: The National Curriculum

"Art, craft and design embody some of the highest forms of human creativity. A high-quality art and design education should engage, inspire and challenge pupils, equipping them with the knowledge and skills to experiment, invent and create their own works of art, craft and design. As pupils progress, they should be able to think critically and develop a more rigorous understanding of art and design. They should also know how art and design both reflect and shape our history, and contribute to the culture, creativity and wealth of our nation."

National Curriculum, 2014.

At Christ Church C of E Primary School, our aims for the Art and Design Technology curriculum reflect those of the National Curriculum, 2014.

We aim for pupils to;

- 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.

Teaching objectives

At Christ Church C of E Primary School, our teaching objectives for the Art and Design curriculum reflect those of the National Curriculum, 2014. By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study. A skills progression has been created to ensure the progression of skills across the year bands and long term yearly overviews have been developed to ensure the children receive the knowledge for a broad and balanced curriculum. A thematic approach to teaching has been adopted to ensure autonomy across different subjects.

Art and Design in Foundation Stage:

The emphasis for children in Foundation Stage is to develop Art and Design through accessing areas of continuous provision. The combination of adult led and child initiated activities in these areas give opportunities for children to express their thoughts, ideas and feelings through a wide range of media, materials and representations. Expressive Arts and Design (EAD) is one of the four specific areas of learning in the EYFS Statutory Framework (2021).

Opportunities for Art and Design are carefully planned in Foundation Stage based on the Educational Programme for Expressive Arts and Design. Key knowledge and skills are linked to the next steps in the National Curriculum and interwoven into continuous provision.

"The development of children's artistic and cultural awareness supports their imagination and creativity. It is important that children have regular opportunities to engage with the arts, enabling them to explore and play with a wide range of media and materials. The quality and variety of what children see, hear and participate in is crucial for developing their understanding, self-expression, vocabulary and ability to communicate through the arts. The frequency, repetition and depth of their experiences are fundamental to their progress in interpreting and appreciating what they hear, respond to and observe."

Expressive Art and Design Educational Programme - EYFS Statutory Framework (2021).

Art in Key Stage 1 (KS1)

Pupils should be taught:

- To use a range of materials creatively to design and make products.
- To use drawing, painting and sculpture to develop and share their ideas, experiences and imagination.
- To develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form and space.

• About the work of a range of artists, craft makers and designers, describing the differences and similarities between different practices and disciplines, and making links to their own work.

Art in Key Stage 2 (KS2)

Pupils should be taught to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design.

Pupils should be taught:

- To create sketch books to record their observations and use them to review and revisit ideas.
- To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]
- About great artists, architects and designers in history.

Design Technology

Through teaching Design and Technology our pupils' knowledge, skills and understanding can be developed in the following areas:

- To develop both practical and thinking skills.
- To think creatively.
- To gain knowledge about a range of ideas and communicate them to others.
- To design and make products and systems.
- To apply technical knowledge and practical skills.
- To develop knowledge of the aesthetics and the functions applied in designing and manufacturing products.
- To develop the understanding of industrial practice.
- To gain an understanding of design history, product development and how technological development has impacted society.

Through teaching Art and Design Technology the following qualities can be demonstrated and developed:

- prepare pupils for life and work in the future
- encourages future thinking
- develops a sense of social responsibility of design by improving the quality of life for users
- develops autonomous and creative problem solvers
- develops the ability to work as individuals and as members of a team
- develops the ability to reflect, analyse and evaluate own work and suggest improvements

Planning and Progression

In Christ Church C of E Primary School, Art and Design is taught through a cross-curricular creative planning approach. Teachers from Foundation Stage to Year 6 will plan to ensure full coverage of the skills relating to the Art and Design curriculum for that year group throughout the year. Teachers will plan before the start of each new theme, and at this point highlight the skills that will be covered using the 'Skills Progression' document. The vocabulary maps will be used alongside planning and teaching to ensure that the children are developing their language skills.

Planning follows the National Curriculum 2014, which is divided into separate objectives for KS1 and KS2. Foundation Stage plan through a 'child initiated learning' approach and will update their overview accordingly. The Curriculum Overview (*Appendix 1*) outlines the coverage from Year 1 – Year 6. Teachers can refer to their objectives by looking at the 'Skills Progression' document, Foundation Stage – Year 6'.

At Christ Church C of E Primary School, we plan the activities in Art and Design so that they build upon the prior learning of the children. While we give children of all abilities opportunity to develop their skills, knowledge and understanding, we also plan for progression within our year group topics in topic planning, so that there is increasing challenge for the children as they move through the school. It is important that we strive to provide a high- quality Art and Design education that engages inspires and challenges children's creativity. With the aim being to equip children with the knowledge and skills to experiment, invent and create their own works of art, craft and design.

A whole school Art and Design 'journey' for a piece of work has been developed. This is to ensure that Pupils' are given the opportunity to fully immerse in creative experience that exposes them to new knowledge, skills and understanding. Teachers are expected to follow this process in their planning and delivery of each topic.

Our whole school Art and Design journey for a piece of work should include:

- 1. Stimuli (artist/piece of art/photograph/object/piece of music)
- 2. Background (wash/printed/collage)
- 3. Design (sketchbook/moodboard/pencil outline)
- 4. Media (paint/textiles/pencil colour/charcoal)
- 5. Finish (outline/layers/combine)
- 6. Presentation (final piece- mounted/displayed/in books/shared online/parents invited in/art competition)

Our whole school DT journey should include:

- 1. Present the problem- (contextual/linked to text or topic/local/global/environment)
- 2. Research- what is happening now? Market research-questionnaires in locality/at home/school etc –on-going
- 3. Product design (sketchbook/moodboard)
- 4. Proto-type construction- check scale and proportion- will it work? Gather feedback from peers/families and review
- 5. Final piece- make the product
- 6. Presentation (share with school/parents/community)
- 7. Evaluation- does it work? Did it fit the brief? How would you do it next time?

Feedback and Marking

At Christ Church C of E Primary School, we assess the children's work in Art and Design by making informal judgments as we observe the children during lessons. Work will be differentiated by ability and once completed where appropriate, children should be provided with feedback which allows them to focus on the next steps in their learning.

Record Keeping and Assessment

As in all other areas of the curriculum, assessment is an integral part of the teaching process within the Art and Design technology Curriculum.

Art and Design will be assessed using the following approaches:

- Subject leads to select a small group of children from each year group to discuss their learning in Art and Design; which will include a discussion of their thoughts, ideas, processes and evaluations of work alongside looking through the children's sketchbooks.
- Subject leads to take a sample of sketchbooks each term to monitor the process/quality of work.
- Subject leads to monitor display of children's work in corridors and classrooms.
- Time allocated in staff meetings for colleagues to share good practice and ideas- what has worked well.

Resources

All classrooms have their own set of basic resources which they replenish through their Year band budgets. We also have a central store of more specific resources to be able to teach Art and Design across the school in the art room. Teaching staff will be able to request new resources required throughout the year through the school's Subject leader.

Inclusion and Equal Opportunities

At Christ Church C of E Primary School, we teach art and design to all children, whatever their ability. It forms part of the school curriculum policy to provide a broad and balanced education to all children. Through our teaching we provide learning opportunities that match the needs of children with learning difficulties and we take into account the targets set for individual children in their Individual Plans (IPs)

It is our within our Equal Opportunities policy to give equal opportunities to all groups at Christ Church C of E Primary School, providing it is physically possible to do so. At times where there is a physical reason why a child cannot fully partake in an activity, then this activity should, as far as possible, be adapted to his/her other needs. Care should be taken to give each child the opportunity to learn about the global community, regardless of race, Religion, language or gender.

Health and Safety

Health and Safety is of the utmost importance and as with any practical activity, there is an element of risk in Art and Design activities. However, it is the class teacher's responsibility to ensure that all children are shown the safe and appropriate use of equipment and materials. Those involved with any activities should be made aware of potential hazards and appropriate steps taken to avoid accidents. The guidance document for 'Safe Practice in Art and Design' (*Appendix 2*) can be used by teachers to inform their teaching and learning however, Health and Safety Risk Assessments should be carried out if special tools or materials are being used.

Children should be working in a safe environment, both in and out of the classroom. When conducting fieldwork, children should be properly supervised and should be made aware of any potential danger such as busy roads or water hazards.

When working with tools, equipment and materials, in practical activities and in different environments, including that are unfamiliar pupils will be taught:

- a) About hazards and risk control.
- b) To recognise hazards
- c) To manage their environment to ensure the health and safety of themselves and others.
- d) To explain the steps they take to control risks.

Agreed by staff:

Agreed by Governors: Signed:



Art and Design Curriculum Overview – 2022/23

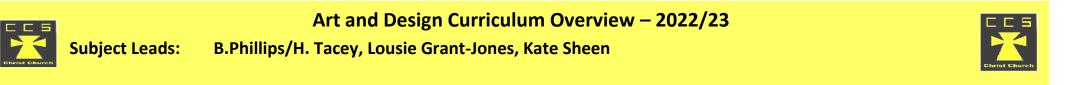
Subject Leads: B.Phillips/H. Tacey Lousie Grant-Jones, Kate Sheen



Year	Autumn 1	Autumn 2	Spring 1	Spring 2		Summer 1	Summer 2
	Expressive arts and design - continuous provision						
FS1	Theme: Marvellous me Self portraits / drawing and painting images of faces	Theme: Big Birthdays Colour mixing – primary / secondary colour focus DT – Cooking Baking cakes	Theme: Pets and the vetsCreating patterns and exploring texture to create animal printsDT - Create a moving class pet/animal masks	<u>Theme: Minibeasts</u> Printing to depict habitats and linke symmetry <u>DT - Minibeast habitats</u>	ed to	Theme: Going places Transient art Large scale structu DT – Create a cl bus	Friends res Collage Water colour
	Exploring and using media and materials/ Being imaginative – Continuous Provision						
FS2	Theme: People who help us Nature, harvest and food printing Seed collage Transient art Large scale structures Artist: Kandinsky DT – Design an FS2 uniform	Theme: Seasons to celebrate Landscape painting – water colour and pointilism Artist: Monet Theme: Christmas Clay ornaments/ salt dough	Theme: Dazzling Dinos Mark making Collaborative collage Colour mixing Textured printing DT – Creating a moving dinosaur	Theme: Amazing animals Artist: Look at a range of illustrators through the ages depicting traditional tales DT – Design a chick habitat	the wor Pap Digital r Artist: 6 E	ourney around Id and beyond Dier mache media – graphic Dackages Chesley Knight Bonestel	Theme: Sail the seven Seas Collage Water colour Weaving Artist: Katsushika Hokusai Textiles /weaving– Class Pirate flag/ Create a new fish using recycled materials.

Skills	Printing/ Collage/ 3D art	3D Sculpture / drawing	Painting/textile/collage/ painting/ printing	3D Sculpture	Collage/ Printing/ Transient Art/ Drawing/ digital media/ textiles		
Year 1	Theme: Farms and FactoriesFactoriesFocus: Printing - repeated patterns / shapesFocus: Drawing Observational drawing – plants, fruit and vegetablesArtist: Giuseppe Arcimboldo - self portraits	Theme: Farms and Factories Focus: DT - Textiles Design/ Create/ Make/ Evaluate Create your own food packet Focus: 3D art Salt dough station – mini sculptures	If you go down to the woods today Focus: Drawing Nature walks – observational drawings/ bark rubbings/ photography Focus: Painting Colour mixing Focus: 3D art Nature Sculptures Artist: Andy Goldsworthy	If you go down to the woods today Focus: Collage / painting Seasonal Artwork using different resources/ techniques. Linked to Claire Thompson book Focus: DT – cooking and nutrition Design/ Create/ Make/ Evaluate Teddy Bears Picnic Artist: Claire Thompson (The visitors)	Focus: D (lever Storytellin Focus : Design, Lighthou (Link to ear Artist:	nd Holidays T – Mechanisms rs and sliders) ng through moving pictures. DT - Structures / Create/ Make/ Evaluate se with a working pulley Ancient Egypt – liest pulleys) Look at various engineers	Island Holidays Focus: Digital media Holiday leaflet/ poster Photography
Skills	Printing/Drawing	DT- Textiles/ 3D Art	Drawing/ painting/ 3D Art	Collage/ DT- Cooking	DT - Mechanisms Dig		Digital Media
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1		Summer 2
	Theme: Wonderful Wirral Focus: Drawing Mark making		Theme: Where in the world? Focus: Collage / Printing Produce a piece of art related to the key text 'Snail and the Whale'		<u>Theme: Australia</u> Focus: Painting Aboriginal Art		
Year 2	Sketching and drawing in the style of a famous illustrator. Focus: DT- Textiles		Focus: Digital Media Photography – Images of sea creatures and under the sea scenes.		Design, make a	nctures / 3D art/ Textiles and evaluate an aboriginal glayered thick card.	

	Design and make a puppet for Flat Stanley. Artist: Shirley Hughes (illustrator)	Focus: DT – Mechanisms (wheels and axels) Design, make and evaluate a vehicle using suitable materials. Artist: Axel Sheffler	Focus: DT – Cooking and Nutrition Plan, make and taste a pizza Artist: Edward Tingatinga
Skills	DT - textiles/ drawing	DT- mechanisms/ collage/ printing/ digital media	DT- Structures/ cookuing / painting/ 3D sculpture/ textiles



Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	 Focus: Drawing Cave art, sketch Focus: Printing Animal skin/ fur own mythical creation Focus: DT – Tex combine a single Christmas ornar Drawstring purs Focus: DT - Strue Designing a Store 	ing stories / patterns to design eatures linked to tiles (simple stitches to e fabric shape) - Sew a nent es	 Focus: 3D art Egyptian vase/b Focus: DT (linkag Design/make/ex Focus artist/designer: other modern day 	es and levers) valuate Egyptian Tombs Michelle Stitzlein and	 Focus: Painting Colour mixing – warm, cold, com Focus: Collage Mark making to collage large-sca for display in the Focus: DT - cook Healthy eating li Focus: Digital M Healthy plate 	i ng nked to nutrition.

	Focus artist/designer: Prehistoric Cave art Craft Makers: Weaving		
Skills	Drawing/printing/textiles/DT- Structures	3D art/DT- structures/ linkages and levers	Collage/ digital media/ 3D art/ painting/ DT- cooking-
Year	Autumn	Spring	Summer
Year 4	 Theme: Radical Romans Focus: Drawing Sketching of Roman objects and items of technology Focus: Collage Mosaic pictures Focus: DT - Structures Design and make mini model Roman city for FS1 children (What the Romans did for us - done through unit of work. Focus artist/designer: Classical Greek/Roman art inspired by the Roman architecture Craft Makers: Mosaicist	 Theme: Vicious Vikings Focus: 3D art Design and make a modern day brooch inspired by the Vikings using clay. Focus: Painting local landscape and Viking Longship Focus: DT (mechanisms) Plan/ design and evaluate a pneumatic system - Snapping Dragons. Focus artist/designer: Iconic brooch designers e.g. Chanel, Dior, Hermes. Craft makers: Jewellers 	 Theme: Did New Brighton always look like this? Focus: Printing Printing - Lighthouse printing Wallpaper. William Morris. Focus: Textiles Design a reusable canvas bag. Sewing on patterns. Using materials collected from bags. Focus: Cooking Baking bread rolls/different grains and yeast Focus artist/designer: Local artist -Ian Fennelly/John Foreman/ Zaha Hadid (Modern architect) Maxwell and Tuke (Architects that designed the original New Brighton Tower) Craft Makers: Metalworking
Skills	Drawing/ Collage/ 3D art/ DT - Structures	DT- mechanisms/ cooking/ digital media/3D art/ painting	DT- structures / Printing/ Textiles/ cooking

Year	Autumn 1	Spring	Summer
Year 5	 Theme: Medieval Medicine Focus: Collage drawing an illuminated letter and embellish using collage Focus: DT – structures Recreating a scaled model of a medieval house considering proportion and style for a model village challenge. Focus: Drawing Medieval dragon drawings. Focus artist/designer – Christian works of art through history Craft Makers: Illumination artists 	 Theme: Tudors in our Town Focus: drawing/ painting Tudor portraits Focus: DT – Textiles (Use all stitches to combine fabric shapes) Medieval weaving Focus: DT – Mechanism (pulleys/gears) Links through science. DT Electronics - Electronic Greeting card. Focus artist/designer – Historical portraits through time. Craft Makers: weavers 	 Theme: Extreme Earth Focus: 3D art Recycled material animals using wire sculpture. Focus: Printing / digital media Climate change abstract art –mixed media using their imagination depicting the effect of climate change on the world today Cooking – DT -Self sustainable recipes Focus artist/designer - Alexix Rockman (tree of extinction) / David Ambarzumjan
Skills	Collage / Drawing/ 3D art/ DT- structures	Drawing/ painting/ DT- textiles/ mechanisms	3D art / digital media/ DT - structures
Year	Autumn	Spring	Summer
Year 6	 Theme: Victorian Wirral Focus: Drawing Creating the 'mood' of a text (Wild Boy) drawing the setting and character. Focus: Collage History of collage; decoupage Modern day collage artist 	 Theme: The Liverpool Blitz Focus: Painting In the style of L.S. Lowry Focus: Digital Media Propaganda posters Focus: DT - structures Design, make and evaluate Anderson Shelters. DT - Electronics - Create lighting for Anderson Shelters 	 Theme: Africa / London / Production Focus: African Printing/ animal print onto material to be used for DT textiles Focus: 3D art Construct animal masks DT – Textiles (Use all stitches including sewing machine to make a bag or a garment) DT – Cookery – Design and make an African themed dish

	 Focus: DT – Mechanism (CAM) Plan/ design/ evaluate a collaborative 'circus' themed project using CAM mechanisms. Focus artist/designer: Ben Giles/ Kurt Schwitters Craft makers: Collage 	Focus artist/designer: L.S Lowry	Focus artist/designer: Esther Mahlangu Craft Makers: Traditional African craftspeople
Skills	Collage/drawing/DT- structures/ mechanisms	Painting/digital media/DT- structures	Printing / DT- textiles/ 3D art



Safe Practice in Art and Design



Cutting Tools

Knives

Sharp knives and tools are needed for a variety of art work. For carving wood and other resistant materials it is important to use effective holding devices. For cutting or engraving wood, linoleum or hardboard for printmaking, the use of bench keys, or G-clamps for large blocks, will provide a more stable working surface. Tools that are properly sharp present less of a hazard than when bluntness causes the user to exert excessive pressure.

Shared Use

Where tools are used by a number of teachers, one person should have the main responsibility for their maintenance and storage. Care should be taken when lending tools to other people that they understand the potential hazards and return the tools promptly.

Care of Tools

It should be emphasised to pupils that the proper care and use of tools is an important part of their education.

Guillotines

Guillotines for cutting paper and card must be properly guarded at all times and only used by pupils under supervision. Bench shears for cutting metal should be locked when not in use.

Printing and Printmaking

Screen Printing

Screen printing is reasonably risk-free, except for the use of oil-based inks and solvents. It is becoming increasingly difficult to meet the stringent standards set by the COSHH regulations on the use of solvent-based inks and processes, and the simple solution is to use toxic-free water-based inks instead. Some new products specifically designed to meet education needs and consisting of a mixture of acrylic paint and a screen-printing paste are excellent and generally risk-free.

There are important precautions to observe when using ultra-violet light boxes for exposing treated screens. Manufacturer's instructions and other regulations must be strictly observed.

Textiles

Working with Dyes

General safety precautions are normally sufficient for work with textiles, but there are potential hazards in the use of some dyes, mordants and other chemicals. Some dyes are water or oil emulsions and have to be fixed by placing the fabric in a warm oven. Unless the fabric is thoroughly dry, vapour from these dyes can ignite. Care should be taken to ensure that dyes are stored in a cool place. When mixing dye powder, it is sensible to

mix a whole packet at a time. Preventing inhalation of dye powder by wearing masks, opening the packet under water or using a glove box is also sensible. Protective gloves should be worn.

Storage, Preparation and Handling of Dyes

The storage, preparation and handling of dyes, acids and solvents should always be in strict accordance with manufacturers' instructions and legal requirement

Hot Wax

The use of hot wax for various processes can be a serious fire hazard. It should always be heated slowly in a specially designed pan suspended over a larger one partially filled with water. Care should be taken to prevent water getting into the hot wax container. The working surface should be firm and free from obstructions and the pan must be accessible without the user having to lean across other heating devices.

Computers and Visual Display Units

Computers and Visual Display Units (VDUs)

The risks associated with the occasional use of computers in art and design education are thought to be very low. Concerns are being expressed, however, in relation to very low-frequency radiation, eye disorders and posture-related stresses. Teachers need to be aware that some photosensitive pupils may have an attack of epilepsy triggered by use of the VDU. Such cases are rare, but as the use of VDUs increases it is sensible to take simple precautions.

The image on the display screen should be clear and stable. Adequate, but not excessive, illumination should be provided, and harsh contrasts in background lighting should be avoided to prevent glare and distracting reflections - avoid placing the computer in direct sunlight or against a bright window, as this will reduce the clarity of the screen image and cause unnecessary eyestrain.

Posture is important. Seating should be comfortable and adjustable. There should be sufficient space to allow postural changes. Ensuring adequate support and not allowing pupils to sit for long periods without a break should avoid back strain. The operator should sit at a reasonable distance from the screen - one metre seems to be a minimum for most people.

The work surface should allow a flexible arrangement of equipment, stability, low reflection and adequate space for hand support. It should be non-reflective in line with the Health and Safety (Display Screen Equipment) Regulations <u>www.hse.gov.uk/lau/lacs/16-1.htm</u>. There should be adequate workspace around the unit and the environment should be kept clean and dust free. Cables and connections should be kept clear of possible interference, checked regularly and placed so that accidental contact is avoided. Fit a power surge protector and avoid using extension leads where possible - avoid trailing leads at all times.

Computer Projectors

Computer projectors of the type used to show presentations or to illuminate interactive whiteboards are typically able to expose the eye in excess of one of the exposure limits the Health and Safety Executive is guided by for the purpose of enforcing relevant health and safety law. Therefore, although such exposure limits are not statutory, the Health and safety Executive considers the following usage guidance to be good practice in respect of the use of these projectors by employers in the education sector.

Employers should establish work procedures for teachers/lecturers and pupils/students and give instruction on their adoption so that:

- Staring directly into the projector beam is avoided at all times.
- Standing facing into the beam is minimized. Users, especially pupils and students, should try to keep their backs to the beam as much as possible.

In this regard, the use of a stick or laser pointer to avoid the need for the user to enter the beam is recommended.

• Pupils and students are adequately supervised when they are asked to point out something on the screen

Employers should also try to ensure that projectors are located out of the sight line from the screen to the audience; this ensures that, when presenters look at the audience, they do not also have to stare at the projector lamp. The best way to achieve this is by ceiling mounting rather than floor or table mounting the projector.

In order to minimize the lamp power needed to project a visible presentation, employers should use room blinds to reduce ambient light levels.

Materials

This section deals with materials that are not usually associated with one specific activity. For example, sculpture or experimental three-dimensional work may involve a considerable range of materials which may be duplicated in different activities. The most obvious danger is in the unorthodox or 'creative' use of processes and materials which, in other circumstances, may be prescribed by 'named' activities such as modelling, welding, casting, and so on.

<u>Paints</u>

Paint Spraying

The spraying of paint by airbrush, aerosol or on a larger scale with compressed air may produce a fine mist of pigment dust in the air, with solvent vapours which can then be inhaled. If large or regular amounts of spraying are done, a spray booth with exhaust or water-backed ventilation should be used. In any case, good ventilation is essential for all paint spraying.

Ingestion of Paints

The practice of licking or pointing a paintbrush by mouth may result in the ingestion of toxic pigments.

<u>Solvents</u>

Skin Irritants

Some solvents are primary skin irritants. Others may produce dermatitis and, by dissolving the natural grease of the skin, make it more vulnerable to damage by other substances.

Inhalation

Inhalation is the most common way in which toxic materials can enter the body. It is therefore very important that inhalation of solvent vapours is kept to a minimum. If work with solvents is carried out regularly, or on a large scale, appropriate means of ventilation must be installed.

Aerosols

Aerosols present a considerable hazard, due to the presence of probably toxic and flammable solvents and other substances. They should be avoided if possible, but otherwise only used in a well-ventilated specialist area. They should never be used when other people are near.

Dyes

Dye Powders

Dye powders are very fine, and therefore dangerous if inhaled. They should be mixed when wholly immersed in water or, if this is not possible, a dust mask or respirator should be worn. Heavy-duty rubber gloves should be worn to avoid skin contamination. Cooking utensils should not be used, as they may retain potentially hazardous amounts of chemicals. Personal protective clothing should be worn and there should be no eating, drinking or smoking in a dyeing area. Only soap and water should be used to remove splashes from the skin, as chemical substances such as bleach or potassium mangate (VII) might break down the dyes into hazardous substances.

Basic Dyes

These dyes, used for wool, silk and some synthetics, may cause allergic reactions.

Scrap Materials

Handling, Shaping and Cutting

These processes, along with joining and dismantling, are all potentially hazardous and care should be taken to ensure that materials and objects are held securely and handled with care in an appropriate working environment.

Treating Surfaces

Treating surfaces that are already painted, dyed or covered with unknown materials should also be done carefully. Since little will be known about the composition of such surface materials, burning or the application of other chemicals can cause hazardous reactions.

Personal Hygiene

Hands should be thoroughly washed after working. Appropriate personal protective clothing should be worn and care taken to avoid inhalation or ingestion of unknown substances.

Storage

Storage of scrap materials should be considered as part of normal 'housekeeping', and regular clear-outs should be made.

Adhesives and Fixatives

Irritants

Some forms of adhesives, such as epoxy resins, can be irritants. Sensible precautions must be taken to avoid skin contact. If it is considered necessary to use contact adhesives that give off heavy, toxic or flammable

vapours, good ventilation is essential. Aerosol-propelled fixatives and adhesives should only be used in controlled conditions with adequate ventilation.

'Super Glues'

Children should not use these cyanocyrlate-based adhesives, which can instantly bond body tissues.

Petroleum-Based Adhesives

These must be properly stored.

Addictive Habits

Teachers should be aware of the addictive and dangerous habits that can arise from sniffing some adhesives and fixatives.

Plaster of Paris

When mixed with water, this material hardens and then slowly becomes hot. Temperatures as high as 60 degrees centigrade can be reached. Skin damage can result at much lower temperatures, perhaps as low as 45 degrees centigrade, if contact is prolonged.

Making a cast enclosing any part of the body using this material is potentially very dangerous, particularly if the thickness of the cast exceeds a few millimetres. As a rule of thumb, if a decision to make a cast is made despite this clear warning, use no more than two layers of scrim impregnated with plaster, e.g. ModRoc.

Failure to follow this guidance can cause severe burns that may require surgical removal of affected tissue or amputation of digits or a limb.

Direct, prolonged or repeated contact with the skin may cause irritation and attempts at removal can result in abrasions. Rinse with water until free of material to avoid abrasions, then wash skin thoroughly with mild soap and water.

If Plaster of Paris is in contact with eyes, first rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.

Plaster of Paris dust needs to be controlled as it is an irritant that can cause breathing difficulties that are usually mild.

Additional References and Sources of General Information

COSHH

Control of Substances Hazardous to Health (COSHH) Regulations (1994): COSHH: a brief guide to the regulations can be accessed at: www.hse.gov.uk/pubns/indg136.pdf DfES

The Department for Education and Skills has safety information on its web site at<u>www.dfes.gov.uk</u> Health and Safety Executive

The complete HSE Books Catalogue can be accessed at www.hse.gov.uk/sources/content/summer03.pdf Much information is freely available on line at www.hse.gov.uk| Managing health and safety in schools (1995)