



**Branston Community Academy
Design and Technology Safety Policy**



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BRANSTON COMMUNITY ACADEMY

1. Introduction

This policy sets out the Academy's arrangements for ensuring that practical work within the Design and Technology department is carried out safely and that safety control measures applied are pragmatic and proportionate so as not to inhibit good teaching. It expands upon the information in the Academy's Health and Safety Policy.

2. Health and Safety Roles

The Academy's health and safety co-ordinators are Carrie Osborne (Business Manager) and Andrew Wright (Vice Principal).

The task of overseeing health and safety within the Design & Technology department is that of the Subject Leader (SL) Mark Creasey or, in his absence, other Design and Technology teaching staff. The SL is responsible for reviewing risk assessments annually or when circumstances change.

All staff are issued with a copy of this policy which they should keep in their personal health and safety portfolio.

Any new instructions, restrictions or rescinded (lifted) restrictions made by the school are communicated to all staff in writing.

Teaching staff are responsible for implementing Health and Safety policy in all lessons.

The Design and Technology Technician's role is to ensure checking and maintenance procedures together with accident documentation is kept up to date. Findings are to be reported to the SL.

Monitoring and checking

The Academy requires the D&T department to monitor the implementation of this policy. Records of monitoring are kept by the SL and the Business Manager.

Checklists on equipment and machines are customised from those suggested in CLEAPSS Guide L254 *Health and Safety Maintenance of D&T Workshop Equipment* Records of the checks are kept by the SL in the *Safety Check File*.

3. Training

The person responsible for ensuring that training is provided is the Vice Principal (Staffing) and training needs should be identified by the SL.

The school follows guidance in *BS 4163:2021 Health and safety for design and technology in schools and similar establishments – Code of practice* (page 4 section 2.6) in respect of

the training needs of staff. Staff may not use any item of equipment or machine if they have not received formal training to do so. Nothing less than documented evidence of training, such as a certificate of attendance at a training course and completion of a portfolio of evidence will be accepted as evidence of training. Staff should update their competences every five years.

Trainee teachers who are following a recognised teacher training course should be supervised by a qualified teacher at all times when they are engaged in practical work. This also applies to people following a SCITT, or a Graduate or Registered Teacher programme. Such trainees may use machines and may show pupils how to use machines as part of the lessons that they are teaching provided that appropriate supervision is maintained. This supervision may be progressively reduced, depending on the competence of the individual trainee teacher. In such instances a specific risk assessment of the situation should be carried out, and the degree of supervision needed discussed with the SL.

Records of the training received by members of the design and technology staff are kept in the department's Health & Safety file.

Teachers/ ancillary staff in the school will need to hold a recognised certificate of competency or demonstrate their competency to a registered RDTHSC before they are permitted to operate and use the following items of equipment:

- welding equipment
- centre lathe
- wood turning lathe
- milling machine
- bench shears
- brazing torch
- mortise machine
- linisher
- portable electric jigsaw
- pillar drill
- Hegner - vibro saw
- power hacksaw

The following equipment must **only** be used by persons holding a recognised certificate of competency and must **not** be used by **pupils**:

- circular saw
- offhand grinder
- planer/thicknesser
- flat bed surface sander
- Radial arm saw
- Chop saw

Certain pupils (under direct supervision and after suitable training may use):

- welding equipment
- centre lathe

- milling machine
- bench shears
- woodturning lathe
- bandsaw
- angle grinder
- mortise machine
- gas forge
- pipe bender
- Hegner- vibro saw
- router

All pupils after formal demonstration and after they have shown competent use under initial supervision, may use **all** other general workshop tools and equipment.

Staff are to refer to the safety literature for advice.

4. Risk Assessments

The school follows the recommendation of the Health and Safety Executive to adapt and adopt published 'model' or 'general' risk assessments which the D&T department adapts and adopts to fit the needs of Branston Community Academy's curriculum and facilities.

The D&T Department has its own risk assessments and operating procedures to minimise the risks of teaching the subject and use of potentially dangerous machinery.

Good practices outlined in the publications listed below are used to develop risk assessments and safe working procedures:

- *CLEAPSS L260 Model Risk Assessment for Design and Technology in Schools and Colleges November 2020*
- *CLEAPSS L235 Managing Risk Assessment in Design and Technology*
- *BSI BS 4163:2014 Health and Safety for Design and Technology in Schools and Similar Establishments – Code of Practice*

The SL and department are aware that there are recommended working areas around the machines that should not be entered by another person when the machine is in operation. The machines were sited before the publication of the recommendation. Where possible these recommendations have been clearly marked with Black and Yellow hazard tape, where it is not possible to meet the recommendations, an area has been marked that is as close as possible to the recommendation to ensure the safe working practice of all.

Where staff would like to borrow equipment from the department this must be signed out using the 'Equipment loan' book situated in the technician's office. The borrowing member of staff then takes full responsibility for the safe use and return of the equipment. The borrower must check the condition of the equipment before and after use and report any defects to any member of the D&T department. Any injuries caused to themselves or others are the sole responsibility of the person who signed out the equipment.

Where GCSE/A level practical lessons are taking place, with potentially one group using up to 2 rooms, the level of maturity and independence developed by students at Branston Community Academy throughout KS3 within the department, enable students to select and safely use the appropriate equipment in the relevant room. There should be no period of time when any student is in a situation where he cannot be seen by a member of staff albeit teacher/technician/TA. (see associated risk assessment – ‘Two Room Risk Assessment Procedure (TRRAP)’ page 17-18 of this document)

The level of supervision may vary slightly, for example where students are designing or working on CAD activities where the level of supervision would not require a D&T H&S trained colleague (TA), whereas for any practical activity it would.

Should the need arise for a personal risk assessment for a student this will be created for the specific hazard. An example of this can be found on p18 of this document ‘Specific Student Health and Safety Risk Assessment – Student name’. Students who fail to abide by the findings of their specific risk assessment could find themselves removed from practical work all together.

Whenever a new course is adopted or developed, all activities (including preparation and clearing-up work) are to be checked against the model risk assessments and significant findings incorporated into texts in daily use, i.e. the scheme of work, set of lesson plans, syllabus, technician notes.

If a model risk assessment for a particular operation involving hazards cannot be found in these texts, staff should write their own using a special risk assessment proforma obtained from CLEAPSS or the D&T Association. In order to assess the risks adequately, the following information is collected.

- Details of the proposed activity
- The age and ability of the persons likely to do it
- Details of the room to be used, i.e. size, availability of services and whether or not the ventilation rate is good or poor
- Any substance(s) possibly hazardous to health
- The quantities of substances hazardous to health likely to be used, including the concentrations of any solutions
- Class size.
- Emergency action
- Any other relevant details, e.g. high voltages, heavy masses, etc.
- Control measures

Since lesson plans have been checked against the model risk assessments, staff should deviate from them only if their proposed activities have been also checked with the models and where appropriate agreed with the SL.

Where an activity must be restricted to those with special training, that restriction is included in a note on the text.

Every activity is to be assessed for risk including working with simple hand tools as well as potentially hazardous processes such as casting and wood machining. An attempt is made to balance the desire to eliminate risk with the need to reduce risk in order to maintain practical work, eg certain activities may be demonstrated in order to reduce the level of risk to pupils.

Before a lesson starts staff should ensure that all the following are in place:

- a) All machines that will be in use during the lesson have been visually checked by the teacher and anything that is not correct either repaired or reported to the technician to be repaired. If this is not possible before the start of the lesson, then the machine will be placed 'out of order' until such a time when it can be fixed.
- b) A risk assessment has been carried out for each activity to be used during the lesson.
- c) The necessary safety equipment. All staff and pupils must wear appropriate protective clothing which demonstrates good health and safety practice in the workshops. Staff conduct should reinforce the guidelines which pupils must follow while working in the department.
- d) Staff know how and when to use facilities and equipment.
- e) Staff and Technicians should have a record of the quantity and condition of all items of equipment that are to be used by the pupils.

NOTE – If a lesson is to be repeated, for example a number of times across the same year group, there is only need to produce one risk assessment for that activity.

5. Emergency Procedures

In case of **emergency** staff should:

- be familiar with evacuation procedures in case of fire or other emergency
- know the location of, and how to use, firefighting equipment
- know the location and identity of first aid trained staff
- know how to use the eye wash bottle
- know the location of, and how to control, the mains services, i.e. gas, electricity and water.

Spills

Trivial spills are dealt with using damp cloths or paper towels. Spills of any amount which do not give rise to significant quantities of toxic or highly-flammable fumes ('minor spills') are dealt with by teachers or technical staff using a 'spill kit' prepared for this purpose.

Major spills are those involving the escape of toxic gases and vapours or of flammable gases and vapours in significant concentrations. (Small amounts can be 'major spills' if spilt in small rooms.) Staff are trained in the appropriate procedures which may involve calling the Fire and Rescue Service. This training is supported by regular drills arranged by the SL.

Accidents

In the event of a pupil injuring themselves, dealing with that incident must take priority. **All work in the workshop must STOP** and pupils must be asked to sit quietly without working or using equipment further until the incident has been dealt with and the welfare of the injured party has been taken care of. After the event, pupils should be made aware of the circumstances leading up to the accident and an appropriate short discussion about the incident should serve as an example to others.

Small cuts, abrasions and minor burns can be dealt with using the first aid facilities available in the room or workshop. These must be recorded in the 'minor accident book' which can be found in the department office. More serious matters which it is considered warrant the attention of a qualified 'first aider' should be referred to the General Office (GO) phone extension: 0 for the first available person in the GO. A runner should be sent from a room not served by a phone and the SL informed.

All accidents however minor should be recorded in the **Academy's accident book** by the end of the day on which they occur. The accident book is kept by the office manager.

Pupils should be encouraged to report all injuries however minor and should be reassured that no punishment or sanctions will be taken against them. Pupils should also be reminded at regular intervals and especially during practical demonstrations about the course of action that they should take immediately following a personal injury.

For burns, cuts and acid splashes, COLD water should be applied copiously to the affected part. For burns and acid splashes the affected area should be irrigated for at least 10 minutes. For acid splashes to the eyes and face, pupils should be instructed to put their head over the sink and to quickly splash COLD water into their eyes and on to the face in order to dilute the acid. Further action must be taken in the occurrence of an acid burn. Staff involved should ensure the individual has been assessed by a qualified first aider. If required the incident should then be reported to the HSE in accordance with RIDDOR ((The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013).

Illness & Sickness During Lessons

Pupils must be encouraged to report that they are feeling unwell during a lesson if it is likely that their condition would cause them to lose concentration or become faint. They should have confidence in knowing that such matters are taken seriously from a health and safety point of view because of the potential for injuries caused by falling onto moving parts or against sharp or solid objects). Opportunities must be afforded in such circumstances for the pupil to leave the room to visit the cloakroom, get some fresh air, have a drink of water, etc. and the advice of the school first aider should be sought if there is cause for concern or if it is thought that the incident is not genuine.

However, pupils must not leave the room/workshop area without first obtaining permission from the teacher.

Emergency Procedures (General)

In the event of damage to or faults with equipment, which is liable to render their further use dangerous, it is important that the equipment is physically isolated so far as it may be possible, and an **EQUIPMENT OUT OF USE** sign must be displayed on the equipment in order to eliminate any further risk to users until such time that the equipment has been inspected and/or repaired. Hand tools so affected must be removed from the workshop to a secure place so that they cannot be used. When a machine is taken out of use it must be logged in the department maintenance book.

Pupils must be made aware of all incidents where damage occurs to equipment so that they are not tempted to use unsafe items, and they should always be encouraged to report any situation or use of equipment which appears to constitute a risk.

Emergency Procedures (Electrical)

In the event of accidents or faults with electrical equipment - it is important that the equipment be disconnected from the power supply if possible, otherwise the isolating switch should be **switched off and locked off** and an **EQUIPMENT OUT OF USE** sign placed over the isolator and in a prominent position on the machine also to ensure that no further use takes place. Portable electrical equipment should be removed from the general workshop area and locked away until such time that the equipment has been inspected and/or repaired.

Emergency Procedures (Gas)

In the event of accidents or faults with equipment which use or are connected to a gas supply, it is important that the equipment be isolated at the nearest gas cock or valve and an **EQUIPMENT OUT OF USE** sign placed over the gas cock or valve as well as in a prominent position on the equipment. It must then be reported to the site services manager.

Gas Leaks (Piped Supply):

If a gas leak is suspected then the gas supply should be isolated at the room's main valve, and the SL should be notified immediately so that the appropriate authorities can be contacted for testing and repairs. In the event of ANY gas leak and particularly if it is not possible to isolate a leak because of physical damage caused to the supply then the following procedure should take place:

- all naked flames should be extinguished immediately.
- all personnel in the room should be informed about the problem and should be reminded about the risks of explosion caused by sparks from power tools, electrical switches, static electricity from computer screens, etc.
- all work must **STOP** and pupils should be removed from the room to a place of safety.

- after closing all doors to corridors and other working areas, an attempt should be made to disperse the gas to the outside of the building by opening windows and external doors. Fans and ventilators should not be used unless they are of the self propelled variety.
- the head caretaker, or senior caretaker on duty, must be alerted as soon as possible – either by phone or via the general office

6. Activities and Procedures

Non-departmental use

Staff outside the department and external contractors (excluding maintenance) are not allowed to use any machinery.

Local Exhaust Ventilation

The Academy requires the regular testing of local exhaust ventilation equipment (dust extraction and fume extraction from heat treatment areas) every 14 months. The Business Manager has the responsibility for ensuring that this happens and that records are maintained. The records of the tests are available for staff reference and for inspection by an HSE Inspector.

Pressure Vessels

Compressors, autoclaves and pressure cookers need periodic inspection, normally annually, under the *Pressure Systems Safety Regulations*. The Business Manager has the responsibility for ensuring that this happens and that records are maintained. Staff are to ensure that compressors are regularly drained to prevent damage.

Equipment Safety

All staff selecting equipment for purchase will check that it is safe and suitable for the intended purpose (to comply with the *Provision and Use of Work Equipment Regulations*). Equipment listed by specialist educational equipment suppliers is taken to meet these *Regulations* but all other equipment, especially gifts, are treated with caution and carefully assessed. Advice on safety and suitability is sought from CLEAPSS through publications and directly.

Any user who discovers a hazardous defect in an item of equipment must report it to the SL or other nominated person.

Use of Guards

All staff in the department must use all guards and other safety devices on machines and other equipment at all times. Under no circumstances should any guard or other safety device be removed or not used to enable a task to be done. **Any operation which cannot be done with guards and other safety devices in place must not be done.**

Personal Protective Equipment (PPE)

The Academy accepts the duty to provide eye protection, gloves, overalls and aprons for employees where the risk assessment requires them and safety spectacles for pupils. The condition of the eye protection is checked at the start of each term and monitored regularly by the DT technician. Departmental staff are required to wear PPE in all practical lesson situations.

Eye protection must be worn by all staff and students when using any machine or when soldering using soldering irons. Eye protection should be used for any other operation where the risk assessment shows it is required.

The employer expects eye protection to be available for pupils / students and visitors. Safety spectacles are provided for general use, with a set of goggles or face shields used whenever the risk assessment requires them. Safety spectacle lenses must confirm to BS2092.

The condition of personal protective equipment, including eye protection is checked at the start of each term and be subject to a regular cleaning and maintenance programme.

Waste Disposal

Waste chemicals and equipment are disposed of in an environmentally responsible manner in accordance with relevant legislation. Chemical disposal follows guidance in *CLEAPSS Hazcards* (2007 edition or later) and is done in line with any existing local authority regulations. The Finance Office has a list of appropriate approved contractors.

Broken bandsaw blades and saw blades are stored in a safe manner until such time as they can be disposed of at the local recycling centre.

Security

Access to D&T teaching and preparation rooms will be controlled to prevent unauthorised access. All teaching rooms including store rooms are to be kept locked at all times except when in use. It is the task of the staff member leaving such a room to see that the room is empty and that the door to the tool cabinet is locked. All teaching rooms which are left open are cleared of all hazards, including shutting-off all services when supervision by a suitably trained teacher or teaching assistant comes to an end. No class is allowed to be in a D&T room without adequate supervision.

All D&T areas must be made safe for cleaners or contractors to work in before these persons are allowed to proceed.

All substances that are hazardous to health must be stored in one of the two metal COSHH cabinets provided. These cabinets must be always locked, and a list of substances contained within it should be clearly displayed on the front of the cabinet. An upto date copy of this list must also be kept at the GO.

Equipment Maintenance

When maintenance of equipment is carried out, all staff must follow the guidelines contained in the CLEAPSS document L254 *Health and Safety Maintenance of D&T Workshop Equipment*. In particular machines must be isolated from the power supply and the fuses removed or the isolator locked off. A notice stating that the machine is under maintenance should be fixed to the machine. A risk assessment of the hazards involved in the task should be carried out before the work is started.

The technician will make checks every week on all machines and hand-tools as detailed in the maintenance log. Anything to be found faulty/dangerous will be marked 'out of order' until fixed by the technician or an outside agency depending on the nature of the fault. A full and comprehensive service and check of each machine is carried out annually by a competent and qualified expert and a full report published. Any issues that are flagged up will be reviewed and actioned by the Business Manager and SL.

7. ORGANISATION OF ROUTINES DURING AND BETWEEN LESSONS.

Teachers should make frequent references to the rules and procedures applicable to a particular area or activity. A list of the Department's general rules and procedures, together with a list of those specific to the area, must be prominently displayed in each room/workshop.

- a) Each pupil is given a copy of the following safety code in their introductory lessons when they first attend the Academy. This must be regularly reinforced, and a copy displayed in each workshop.

SAFETY CODE - THE DESIGN AND TECHNOLOGY DEPARTMENT

The room/workshop is a much safer place to work if you follow this code:

- **Do not enter the building without permission**
- **Do not leave the building without permission**
- **Coats and bags to be stored in a safe way**
- **Stools to be stacked out of the way during practical lessons**
- **Do not play with the vices**
- **Wear an apron during practical lessons**
- **Keep your work area clean and tidy and return all equipment**
- **Use correct tools/equipment for the task**
- **No eating or drinking**
- **Report any damage or unsafe equipment**
- **Store named work in the correct box for your class**

- **Report any accidents**
- **Bring your own writing equipment to the lesson**
- **All written work to be named and dated**
- **Work to be handed in on time**
- **All work to be completed to the best of your ability**
- **Listen carefully when the teacher is talking and follow instructions**

- b) Teachers must insist that pupils are inducted into a real sense of safety awareness and good practice, e.g. pupils must use the correct names of equipment when talking to staff and peers. It is also important that pupils feel that they have ownership of Health and Safety issues within the department.
- c) Pupils are encouraged to develop a strong sense of health and safety for themselves and others, and to become familiar with the general and area-specific rules and procedures.
- d) Pupils must heed the teacher's advice on how to avoid any potential risks when using particular tools, equipment, materials or substances. They are required to behave sensibly at all times and should be reminded regularly of the dangers of running in this area of the school.
- e) When appropriate, pupils are required to wear items of protective clothing such as aprons and gloves, and on occasions respirators and masks. Loose tie strings on aprons and lanyards should not be allowed to become a hazard.
- f) Welding gloves and oven gloves are available in the department for handling hot items, sheet metal, rough sawn timber and heavy metal sections. Rubber gloves and gauntlets are available for handling chemicals. Pupils are encouraged to use them when necessary.
- g) Localised dust extraction should be employed wherever possible but in exceptional circumstances, pupils may need to wear dust masks or respirators for sanding and paint/lacquer spraying which cannot be carried on out of doors. Pupils with respiratory problems may even need to wear a mask when others in the immediate area are carrying out the above activities. Efforts should be made to isolate them from the activity wherever possible and a local decision should be made in conjunction with a trained first aider as to whether or not it would be better to exclude them from a particular activity on medical grounds.
- h) Pupils are not allowed to enter or work in a Design and Technology room/workshop unless actively supervised.
- i) All pupils **must** wear appropriate safety goggles or face masks (which are provided) for the following activities and in any situation where they are observing others

carrying out the following activities - ordinary spectacles do not provide sufficient protection:

- lathe work - wood and metal
- milling machine
- drilling machines
- linisher
- polishing machines
- Hegner vibro saws
- paint spraying
- mortise machine
- sanders
- soldering
- punchwork and chiselling
- blowtorch
- handling wire or springs

However, despite providing general protection, pupils should be discouraged from wearing safety spectacles all the time particularly when a low or no risk activity such as drawing or marking out which calls for uninterrupted vision. Pupils who normally wear spectacles must wear goggles over them for added protection.

- j) Aprons must be worn when pupils use chemicals.
- k) Gas and electricity must be switched off at the mains at the end of the day – Gas equipment is fitted with a gas guard (gas interlocking and proving system). Electricity to each workshop can be turned off via a main switch. Individual machines should be isolated.
- l) Chemicals and substances commonly used in the department should be disposed of in a safe and environmentally friendly way, not washed down the sink. If in doubt consult the SL.
- m) At the end of a lesson staff are to ensure that all machines/equipment have been rendered safe and the cutting tools removed. If applicable, such items must be 'guarded' and be able to be 'rendered safe' when not in use by the use of key switches / padlocks / covers, etc. 'Guards' on machinery must never be removed except by those qualified to do so.
- n) Staff should ensure that the pupils leave the area in an orderly manner.
- o) Particular care should be given to the distribution and collection of hand-tools and of small items of equipment, the number and condition of which should be checked at both at the beginning and the end of an activity or a lesson.

- p) Notices identifying large items of machinery or equipment, giving instructions on how to use them safely, and warning of any potential hazards, must be prominently displayed in positions adjacent to them.

Clearing Up After a Working Session.

Clearing up after a working session should be an accepted part of a practical lesson and time always needs to be allowed for this to take place safely and effectively. The type of work, number of pupils present, the variety of equipment used and the proximity of storage facilities will dictate the time that is needed; but clearing up should never be left until the very last minute. It is recommended that at least five minutes should be allowed at the end of each lesson for clearing away. It is essential that lessons end on time and do not over run. The major safety consideration is that tools and equipment are stored in their proper designated locations so that the next lesson is not compromised, and tools will not be found by subsequent classes in an unsafe condition or in locations which might cause injury. All powered equipment must be isolated and made safe as well as adequate notice being given about items which need to cool down over a period of time. Particular care needs to be taken at the end of a working session with the storage of:

Tools which can cause injuries through incorrect storage and handling:

- Sharp edged tools such as Stanley and craft knives, scalpels, wood chisels, scissors, metal cutting snips, scribes, scribing blocks and surface gauges, engineers dividers, odd leg calliper, centre punches, wood and metal cutting hand saws, files with exposed tangs, lathe tools, planes, saw tooth cutters and wood drills, marking gauges, marking knives, screwdrivers.

Tools which get hot with use:

- Pick up and forge tongs, soldering irons, glue guns.

Equipment which gets hot with use:

- Forges, welding equipment, brazing and other gas torches, brazing hearth areas, vacuum forming machines, plastic sheet benders, hot wire cutters, glue pots, plastic oven.

At the end of every working session, unused raw materials should be returned to bins/racks, etc. There should also be some organised system for storing short ends and off-cuts. Machines, work surfaces, benches and sink areas should be cleared of tools and work pieces and then brushed/wiped clean ready for the next lesson.

All protective clothing should be returned to its storage location and checked for damage that could affect usage in subsequent lessons.

All waste materials should be disposed of safely and where hazardous waste is concerned, reference should be made to the relevant COSHH regulations. Oil or other chemical spills should be cleared immediately, particularly where there is risk of contamination to clothing or a work area. Oil and water spills on floors are particularly hazardous and may require the

attention of cleaning staff - in the short term, sawdust and shavings can be used to 'mop up', but should then be cleared by sweeping.

Large volumes of shavings, sawdust and plastic cuttings are likely to constitute a fire hazard and so clearance and disposal should take place on a regular basis, rather than at the end of the day. Excessive dust from machining operations and 'walked in' dirt contribute to respiratory problems and should be removed by vacuuming on a regular basis, rather than by sweeping – this is the responsibility of the cleaning staff managed by the Business Manager. Filters on warm air heating systems should be checked and cleaned regularly in particularly dusty environments – this is the responsibility of the Head Caretaker and Business Manager as health & safety co-ordinator.

Metal cuttings, shavings, swarf and shards from the bench shears present a particular hazard to fingers and feet. All such waste should be removed to a safe place as it accumulates and certainly before there is so much that people walk on it. Swarf and sharp metal off-cuts should only be handled with gloves, scrapers and push sticks and under no circumstances should swarf be 'gathered' from a lathe, drilling machine, shaper or milling machine whilst the machine is operational.

Pupils should always be warned about the dangers of 'blowing' sawdust or filings away from a work surface or brushing away cuttings with their hands. Bench brushes should always be on hand for cleaning purposes as well as rags for wiping up a spillage.

At the end of the day and particularly at weekends, all tool and storage cupboards should be locked, key switches and main electrical supplies isolated, gas valves closed, all machine tools and bench shears padlocked and all electrical equipment turned off. All machine keys will be stored in the key cupboard, in the department office and this will be locked. All department and trained site staff will have access. It should never be assumed that the caretaker or cleaning staff will notice if the workshops are in an unsafe condition - it is the responsibility of the teacher and technician to make sure that all systems are safe, all hot items are cool and that everything is closed down safely before they leave the building.

Copy presented to SLT on Date

Signed copy of agreed policy returned to Department on.....Date.

SignedDesign and Technology Head of Department

SignedAcademy Business Manager

SignedMember of Senior Leadership Team

Specific Student Health and Safety Risk Assessment – Student name

| Location | All | Workshop Health and Safety |
|---|-----|----------------------------|
| <p>General Health and Safety</p> <ul style="list-style-type: none"> • Aprons and Goggles worn at all times when using machinery • Loose hair tied back • Tie off or tucked in apron • Workshops kept clean and tidy • Never run in the workshop • Excess tools and materials put away after use. • Carrying tools in the correct way – all students shown, emphasise if unsure they should ask • One student in yellow/black box • To not interfere with other students or their work, keeping an appropriate distance. | | |

Student name will have a TA assigned to him in every D&T lesson, the job of the TA will solely be to monitor **Student name**. They will be in the same room as **Student name** at all times (they may help other students if this is possible **but** the main emphasise has to be on **Student name**. Should **Student name** move rooms, the TA will follow.

Student name will continue to be allowed to use the equipment as he/she would normally, to enable him/her to complete their work. There is no evidence to show he/she is incapable of using the equipment correctly. He/she chose to use it inappropriately and therefore the extra supervision has been added and will ensure that he/she is monitored closely to reduce the risk of inappropriate behaviour.

Should the situation arise where **Student name** appears to use (or pretend to use) any equipment inappropriately the HoD will be informed straight away and in turn will contact the SLT directly (via the General Office if required) to have **Student name** removed. Should the risk remain high, the other students will be removed for their safety and **Student name** will remain in the D&T block until the Principal decides on the best course of action.

| Location | All | All Fixed machinery | Risk Level | Medium |
|---|-----|--|------------|--------|
| Hazards | | Control Measure | | |
| <p>There is the potential for harm to be caused <u>mainly to the user with minimal risk to peers</u> on all fixed machinery.</p> <p>Through a variety of means,</p> <ul style="list-style-type: none"> • Dust • Flying debris • Sharp blades (Hegna Saw) • Heat • Hot/spinning swarf | | <p>Student name will adhere to the normal health and safety practise that applies to all fixed machinery as highlighted above.</p> <p>He is more than aware of the H&S rules and regulations of the workshop, however, these will be refreshed upon his return with the use of this document.</p> | | |

| Location | All | Portable Tools | Risk Level | Medium |
|---|-----|--|------------|--------|
| Hazards | | Control Measures | | |
| <p>There is the potential for harm to be caused <u>mainly to the user with potential risk to peers</u> on all portable machinery</p> <p>Through a variety of means,</p> <ul style="list-style-type: none"> • Dust • Flying debris • Sharp blades (jigsaw) • Trailing cables • Hot/spinning swarf • Sharp/rotating drill bits • Soldering tips can burn • Splashes of solder causing burns | | <p>Student name will adhere to the normal health and safety practise that applies to all portable machinery as highlighted above.</p> <p>He is more than aware of the H&S rules and regulations of the workshop, however, these will be refreshed upon his return with the use of this document.</p> <p>Extra care will be taken with trip hazards and closer supervision of Student name by his TA to ensure no inappropriate behaviour happens.</p> | | |

| Location | All | Hand Tools | Risk Level | High |
|--|-----|---|------------|------|
| Hazards | | Control Measures | | |
| <p>There is the potential for harm to be caused <u>mainly to himself but with a high risk of harm to his peers/staff</u> on all hand tools</p> <p>Through a variety of means,</p> <ul style="list-style-type: none"> • Sharp blades (knife/chisel/saw) • Metal ruler • Blunt instrument | | <p>Student name will adhere to the normal health and safety practise that applies to all portable machinery as highlighted above.</p> <p>He is more than aware of the H&S rules and regulations of the workshop, however, these will be refreshed upon his return with the use of this document.</p> <p>All knives have been removed from the workshops and will only be handed out by staff when students ask for these.</p> <p>Should Student name need a knife he will be closely monitored at all times by his TA to ensure no inappropriate behaviour happens.</p> | | |

This risk assessment has been explained and read to/by the pupil concerned and all parties agree to adhere to the control measures set out in order to protect the safety of all staff and students.

Student

TA

Teacher

Date

Two Room Risk Assessment Procedure (TRRAP)

Students journey through a rigorous KS3 SoW that engrains into them the knowledge and understanding of safe working practices in Design and Technology. At KS3 students and staff work specifically in one room.

GCSE and A level have more freedom in the D&T block due to less classes being timetabled against them. As such students have the use of up to 2 rooms at the same time. Consequently, it is not always possible to observe each student all of the time, if we are to allow the students to work independently e.g. workshop/laser cutter/CAD is in two different rooms.

| | | | | |
|--|------------------------|---|-------------------|-------------------|
| Location | 1 Room/1 staff | | Risk Level | Low |
| Hazards | | Control Measures | | |
| All students working in one room | | <p>All students will adhere to the normal health and safety practise that applies to Design and Technology and that is listed in the Dept H&S document.</p> <p>Where a Teacher/Technician/TA is present in the room there is no change to the normal working practices of the department.</p> | | |
| Location | 2 Rooms/1 staff | | Risk Level | Medium |
| Hazards | | Control Measures | | |
| Students working between 2 rooms with one member of staff | | <p>All students will adhere to the normal health and safety practise that applies to Design and Technology and that is listed in the Dept H&S document.</p> <p>If the teacher is alone with no support (Technician/TA) then they will supervise the room with most danger i.e. workshop. Students can work in the other room independently.</p> <p>Should the teacher need to leave the workshop then NO MACHINERY will be used in the workshop. Students are fine to carry on with hand tools in the workshop and/or work independently in the classroom.</p> | | |
| Location | 2 Rooms/2 staff | | Risk Level | Low/Medium |
| Hazards | | Control Measures | | |
| Students working between 2 rooms with two members of staff | | <p>All students will adhere to the normal health and safety practise that applies to Design and Technology and that is listed in the Dept H&S document.</p> <p>If the teacher has support i.e. Technician/TA then they supervise both rooms between them. Should a time arise where the teacher/technician for example need to speak to each other, or, one of them needs to collect equipment then revert to 'RA 2rooms/1 staff'</p> <p>Teacher Technician/TA is present in the room there is no change to the normal working practices of the department.</p> | | |

8. Staff roles and Emergency contacts

| | |
|---|---|
| Staff roles and Emergency contacts updated on: 10/10/21 | |
| Advice on health & safety and all aspects of practical D&T generally | CLEAPSS |
| Advice on all aspects of practical D&T | D&T Association |
| Local DT Adviser & DT H&S Consultant | Ideas in 2 Action Ltd - Les Porter |
| Overseeing health and safety in this Academy | Carrie Osborne – Business Manager Andrew Wright - Vice Principal |
| Overseeing health and safety in the D&T department | Mark Creasey |
| Technician | Zlatko Necipor |
| Serious accident: School first-aiders General Office... | General Office |
| Major chemical spill: Fire & Rescue Service Chemical Incident Unit | Business Manager/Caretakers |
| Gas leak: Gas company | Business Manager/Caretakers |
| Overseeing the checking of activities against the model risk assessments and recording significant findings | SL - Mark Creasey |
| [Detailed checking of activities is further delegated by [courses] / [subjects] / [year groups]] | DT Teaching Staff |
| The person trained to do electrical inspection and testing | External contractor – Business Manager/ Caretakers |
| The union health and safety representative(s) | none |
| Emergency contacts Serious accident: Ambulance service | Business Manager/Caretakers |