

Model Health & Safety Policy for Technology and Design Departments

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St Benedict's College.

TECHNOLOGY and DESIGN DEPARTMENT HEALTH & SAFETY POLICY

Date: March 2015

Summary guidelines for staff

All teachers, technicians and support staff

1. Teachers, student teachers, technicians and teaching assistants have a general duty to take reasonable care for the health and safety of themselves, of other members of staff and of pupils. They have specific duties: to be familiar with this health and safety policy, its updates, the texts to which it refers and any appendices. They must cooperate with the employer's instructions, observe the requirements of this policy and fulfil any special responsibilities it gives them. They must cooperate with colleagues in their specific health & safety duties. They have a duty to report, to the Head of Department, any failure of equipment that has a health & safety function. In the absence of the HOD, failure of equipment should be reported to the technician or the Principal.
2. Staff practice **must set a good example to pupils** and be consistent with pupil workshop rules, eg, over the wearing of eye protection and other personal protective equipment.
3. Staff must be familiar with emergency procedures and with the location in each T&D room of: the escape route; fire-fighting equipment; the main shut off valves for gas, and the nearest first aid kit. (when provided to reflect school policy).
4. Machines and equipment should be isolated and locked when leaving the workshop. In general, the mains gas and electrical supplies in workshops should be completely turned off at the end of each school day, or after the end of the last lesson of the day. Machines and equipment should be isolated and locked when not in use. Special arrangements must be made for equipment if it has to be left running overnight and hazardous equipment which has to be left out.
5. Eating and drinking should not take place in workshops and workshop storage areas unless an area in which it is safe to do so has been created. Pupils should not be allowed to drink from water bottles.
6. When alone in the T&D department, staff should do nothing which could lead to an accident requiring remedial measures. The teacher or technician must assess risks carefully before doing practical work or using hazardous machines, e.g. the use of the circular saw and the lifting of timber onto it.
7. **Pupils must not be left unsupervised in any T&D room at any time.**
8. All T&D teaching rooms, preparation rooms and stores must be locked by staff when not in use. Pupils must never be allowed into preparation rooms except for occasional demonstrations. Pupils must always be supervised at these times. T&D rooms must only be used by teachers **who are not** T&D specialists for teaching or registration **after the teacher has received special training**, AND if the rooms have been specially cleared and power to machines switched off.

Teachers

1. All teachers should have the appropriate qualifications for teaching Technology and Design. These requirements are laid out by the Department of Education for Northern Ireland in [Circular 2007/22 Qualifications of Teachers in Nursery, Primary, Secondary and Special Schools](#).
2. At the beginning of each school year, teachers must make sure that their classes have copies of the student rules for working in T&D room and issue them if necessary. They should be put into an exercise book, work folder or similar place. These rules are available online (VLE) both within the school and for a wider audience, such as parents.
3. Teachers must enforce the student rules for working in T&D room, reminding students of them often enough for them to be familiar. With new students, time should be spent explaining the rules, with appropriate demonstrations throughout the year.
4. Lesson preparation should be adequate and include checking on risk assessments and, where necessary, the health & safety precautions required. Technicians must be given adequate time to prepare materials and equipment safely. Time should be allowed for consulting more-senior colleagues where there is any doubt and to try out tasks, particularly those involving significant hazards. Teachers must only deviate from the scheme of work after making a further risk assessment, checked with the Head of Department and technician, possibly obtaining a special risk assessment from CLEAPSS. **Teachers should explain precautions to students as part of their health & safety education.**
5. Examination course work must be organised to allow the teacher to assess any risks and identify precautions before any hazards are met / practical work begins.

6. **If, because of large class size or indiscipline, health and safety cannot be maintained during practical work, the work should be modified or abandoned. This decision should be reported to the Head of Department / Year Head / Vice Principal and Principal preferably by email.**
7. A teacher is responsible for the health and safety of any of his/her classes taken by a student teacher. If the normal class teacher is absent, **another T&D teacher** MUST be given this responsibility by the Principal / Vice-principal. In the event of a specialist not being available, NO practical work should not take place.
8. Technicians should make themselves familiar with the appropriate precautions needed to control any hazards which might be encountered in preparing equipment for lessons and in clearing the equipment away. Class teachers may need to remind technicians of such warnings.
9. Teachers should ensure that student teachers have been adequately trained to use T&D equipment and a record kept of this training (e.g. in the teacher's planner, or the qualifications folder).

1. The role of this policy

This *Technology and Design Department Health & Safety Policy* should be read in conjunction with the employer's general Health & Safety Policy. The purpose of this document is to record the arrangements made in the Technology and Design department to implement the policy.

This document is maintained by the Technology and Design department. It is copied to all new members of staff, i.e., teachers, student teachers, technicians, teaching assistants, etc working in the department. Staff are expected to sign the list, kept in the T&D office, to show that they have received a copy. A reference copy, together with various appendices, is kept in the T&D Office and the Departmental Folder available for consultation by staff and for inspection by visiting HSE inspectors or a representative of the employer. A copy of this document has been lodged in the school office and is available on the school VLE website and another has been passed to the Principal and endorsed.

The Technology and Design department will cooperate with any union health & safety representative to promote health, safety and welfare, and will address any matters raised by or through such a representative in a manner appropriate to the level of risk.

2. General aims

Technology and Design teaching has an excellent health & safety record. This department is keen to promote practical work as an essential component of good Technology and Design teaching. However, it is the duty of all members of the T&D staff, i.e., teachers / student teachers, technicians, teaching assistants and other support staff (e.g., special needs and classroom assistants) and staff who work in the department occasionally:

- to take reasonable care for the health and safety of themselves and other persons who may be affected by their acts or omissions during work,
- to be familiar with this health & safety policy by periodic reference to it,
- to look out for any revisions,
- to follow its provisions, and
- to co-operate with other members of staff in promoting health and safety.

3. Health and safety roles

3.1 Duties, functions and tasks

The employer, CCMS and DENI, has the ultimate duty to ensure the health and safety of employees and others on the site and hence in this department.

The task of overseeing health and safety on this site has been delegated by the employer to the Principal. Within the T&D department, this task is further delegated to the Head of T&D.

This policy is reviewed annually during the first term.

3.2 Communications

It is acknowledged that communication of health & safety information is of the greatest importance and it is the task of the Head of Department, with the assistance of subject specialists, to communicate these health and safety functions.

In this department, all staff will be issued with a copy of this policy which they should keep in their personal portfolio. A reference copy is kept in the departmental office. A copy is also available on the school website (VLE).

3.3 Monitoring and checking

The Principal expects the T&D department to monitor the implementation of this.

Checklists on equipment and machines for termly/annual use by technicians are customised from those suggested in CLEAPSS Guide L254 *Health and Safety Maintenance of T&D Workshop Equipment* policy. Records of the checks are kept by the Senior Technician on the *Safety Check clipboard*.

4. Training policy

The person with the task of seeing that training is provided is the Principal / Vice Principal. This training may be organised by the appropriate officer in the NEELB.

Generally, this department follows guidance in *BS 4163:2007 Health and safety for Technology and Design 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 will be accepted as evidence of training. Staff should update their competences every five years **(Circular saw every 3 years).**

Student 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 Graduate or Registered Teacher programme).*** Such students 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 student teacher). In such instances a specific risk assessment of the situation should be carried out, and the degree of supervision needed discussed with the head of T&D.

Records of the training received by members of the Technology and Design staff are kept in the *Departmental File*.

5. Risk assessments

Every employer is required under various regulations¹ to supply employees with a risk assessment before any hazardous activity takes place. (Common hazardous activities carried out in T&D departments are listed in the publications below.) Because it is impracticable for the employer to write risk assessments for each of the many activities in school Technology and Design, this employer follows the recommendation of the Health and Safety Commission to adopt published 'model' or 'general' risk assessments which school T&D departments adapt to their local circumstances.

The course I attended suggested that the following publications be used as sources of model (general) risk assessments.

[CLEAPSS² publications generally]

[CLEAPSS, *Model Risk Assessment for Technology and Design in Schools and Colleges*]

[CLEAPSS, *L235: Managing Risk Assessment in Technology and Design*]

[BSI *BS 4163:2007 Health and safety for Technology and Design in schools and similar establishments – Code of Practice*]

I have been using SSER School Management series' "Design Technology Risk Assessment Pack A" since March 2011

Whenever a new course is adopted or developed, all activities are checked against the model risk assessments and significant findings are incorporated into daily use, ie, the scheme of work

If a model risk assessment for a particular operation involving hazards cannot be found in these texts, a special risk assessment should be obtained from CLEAPSS.

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, ie, 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. (N.B. We do not use any solvent based substances at the moment 12/9/16).
- Class size.
- Any other relevant details.

Since the scheme of work will have been checked against the model risk assessments, staff should deviate from it only if their proposed activities have been agreed with the Head of T&D.

The development of new practical activities is encouraged but these should be undertaken only after a prior check against model risk assessments and/or a special risk assessment has been obtained.

(Practical activities on open evenings will not take place)

¹ Risk assessments are required by the *Control of Substances Hazardous to Health (COSHH) Regulations*, the *Management of Health & Safety at Work Regulations*, the *Dangerous Substances and Explosive Atmospheres Regulations (DSEAR)* and others.

² Most relevant CLEAPSS publications for secondary schools are on the *CLEAPSS web site* or the *CLEAPSS T&D Publications CD-ROM*. This is updated as required and issued, free of charge, to all member schools as it becomes available. T&D departments are encouraged to mount it onto school networks and copy it onto stand-alone computers, laptops and teachers' home computers.

6. Equipment and resources

6.1 Local exhaust ventilation

The *COSHH Regulations* require the regular testing of local exhaust ventilation equipment (dust extraction and fume extraction from heat treatment areas) every 12 months. Testing is scheduled to take place each year and this department is on the maintenance list. It is a school's responsibility to consider the extent of repair or maintenance work that is required to be undertaken. If a school is unsure whether or not repairs or modifications are required as remarked in the report, then a risk assessment should be carried out to ascertain reasonable control measures. The Senior Technician has the function of seeing that this happens. The Principal will contact NEELB Maintenance who will be allowed access to carry out the tests. The records of the tests are available for staff reference and for inspection by the employer's representative at NEELB.

6.2 Electrical testing

To meet the requirements of the *Electricity at Work Regulations*, this employer requires portable electrical equipment to be inspected and tested regularly (PAT testing). The Principal has the function of seeing that this happens within the school and, therefore, the T&D department. Testing normally takes place each year by a company called Ampion and they can be contacted through the NEELB.

All users should carry out a quick visual inspection before using equipment. Such equipment includes soldering irons and portable mains powered tools extension leads etc.

6.3 Pressure vessels

Air receivers of air compressors, need periodic inspection under the *Pressure Systems Safety Regulations*. **(The compressor has been isolated in the switch room and is not to be used). I am unaware of who is expected to service this equipment).**

6.4 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*.

Equipment restricted to those users who have received special training is listed here: circular saw, band saw, CNC router, PCB tanks, Milling machines, and welding equipment.

Any user who discovers a hazardous defect in an item of equipment must report it, to the Senior Technician / Class teacher / or Head of T&D.

6.5 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.

6.6 Personal protective equipment

The employer accepts the duty to provide eye protection, gloves, overalls and aprons for employees where the risk assessment requires them (*Personal Protective Equipment at Work Regulations*).

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. Overall coats and aprons are purchased by the T&D dept. with the cost of laundering claimed against income tax.

The employer expects eye protection to be available for pupils / students. Safety spectacles are provided for general use, with a set of goggles used whenever the risk assessment requires them. Goggles to protect against chemical-splash standard are worn whenever there is a risk to the eyes.

The condition of the eye protection is checked regularly by the technician.

6.7 Waste disposal

Waste chemicals and equipment are disposed of in an environmentally-responsible manner in accordance with relevant legislation. Chemical disposal follows guidance on the relevant risk assessments. Whenever there is any doubt on waste disposal please consult CLEAPSS / the local NEELB T&D adviser.

7. Activities and procedures

7.1 Outdoor activities

When planning any visits or trips etc, staff should consult the following document ***Educational Visits, Policy, Practice and Procedures 2004*** (Produced by Education & Library Boards, Council for Catholic Maintained Schools, Governing Bodies Association, Northern Ireland Council for Integrated Education, Education & Training Inspectorate and schools (primary, post primary and special.)

7.2 Manual handling and working at height

All regular operations involving lifting or carrying equipment, pushing trolleys, etc will be assessed to see if any may give rise to risks of injury (*Manual Handling Operations Regulations*) by the Head of Department and the technical staff.

As it is sometimes necessary to carry equipment through heavy fire doors, we will always use two people, one to hold open the door, the other to carry the items.

Occasional (i.e., one-off) manual-handling operations will be assessed by the staff member(s) before attempting them. Problems will be reported to the Head of Department / Senior Technician.

Under the *Work at Height Regulations*, when it is impossible to avoid storage or display above head height, **glass or other fragile items are never stored above head height** and only light-weight and rarely-used items are stored there. When displaying items at high level or fetching or replacing items stored at high level, step ladders or kick stools are used; staff never climb onto stools or benches. Where technicians are required to carry out work that involves working at heights, the person setting the task should carry out a relevant risk assessment. The employer's guidelines on working at heights should be followed.

7.3 Security

Access to T&D teaching and preparation rooms will be controlled to comply with the *Management of Health & Safety at Work Regulations*. All teaching rooms / preparation rooms / 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, the door is locked, machines and equipment have been isolated from mains power and are locked. It is also the task of the technician in charge to see that the room is empty and that the door is locked when the teacher leaves. No class is allowed to work / be in a T&D room without supervision by a qualified T&D teacher, familiar with the departmental safety procedures.

Any non-T&D staff member, who has to supervise any class in a T&D room, will receive brief training in the department's safety rules.

7.4 Concern for others

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

7.5 Maintenance of equipment

When maintenance of equipment is carried out, all staff follow the guidelines contained in the CLEAPSS document L254 *Health and Safety Maintenance of T&D 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 by the technician before the work is started. No machine will be 'under maintenance' when a class is in the room.

8. Emergency procedures

8.1 Fire

T&D staff will follow the normal school procedures in case of major fires. All T&D staff are **to be trained** to deal with minor fires when heat treatment areas are in use. This training is supported by regular drills arranged by the Principal.

8.2 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.

N.B. the department has a policy not to use toxic/flammable chemicals so this matter should not arise.

Staff are to be trained in the appropriate procedures which may involve calling the Fire and Rescue Service. This training is supported by regular drills arranged by the Principal.

8.3 Injury

T&D staff will follow the **normal school procedures** in cases that require first aid.

Instructions for immediate remedial measures are posted on the walls of all T&D teaching and prep rooms as directed by the Principal and to reflect the school first aid policy.

8.4 Reporting procedures

Injuries or suspected injuries to a pupil or a member of staff, dangerous occurrences and instances of damage or theft will be reported using the standard school procedures. Following an injury, the accident must be reported to Mrs Danielle Watters (in the General Office) as quickly as possible.

Dangerous situations and incidents which might have resulted in injury ('near-misses') should be reported to the head of department. These will be analysed and discussed at departmental meetings.

9. Technology and Design room rules for students

The rules for students during T&D lessons are as follows.

<h3>Rules for Working in Design & Technology Rooms</h3>

SAFETY

1 You must line up in a single line outside the rooms in a quiet manner until you are asked to come into the studio or workshop.

2 Do not enter the yellow "ZONED" areas unless given permission from the teacher.

3 Never enter the stores under any circumstances.

4 The workshop is not a playground. You must NEVER act the fool in the workshop.

5 NEVER run in the workshop, you may hurt yourself or one of your classmates.

6 NEVER, ever, throw anything. Eyesight is precious to everyone and injury to the eyes could have very serious consequences.

7 NEVER jab or stick anyone with a sharp object or piece of material.

8 Always wash your hands carefully before AND after going to the toilet from the workshop and also after the class has ended.

9 Always use the safety goggles provided when you are using power-tools or machines.

10 Always use the aprons provided.

11 Report ALL cuts or burns to the teacher.

12 All loose clothing, such as ties, should be tucked away when working.

13 Only ONE person must operate a machine at a time.

14 Never carry tools or marking instruments in your pockets.

15 Any spillage on the floor such as water must be wiped up immediately.

16 Benches and machines should be kept clean and always brushed down after use.

17. Report all damaged or broken equipment to the teacher.

18. Only use or touch tools, materials or equipment when given permission by the teacher.

19. Report all damaged or broken equipment to the teacher.

20. Never leave anything of value in your coat.

21. You must not drink water or juice in the T&D department.

22. This is perhaps the most important rule;

When the teacher gives instructions, **ALWAYS** listen carefully, they may be of great importance to your personal safety.

10. Staff roles and Emergency contacts



Staff roles

Staff roles and/or emergency contacts updated on:	
Advice on health & safety and all aspects of practical T&D generally	CLEAPSS <i>Ηελλπινε</i> , 01895 251496
Advice on all aspects of practical T&D	The T&D board advisor
[Local authority T&D [adviser] / [inspector] / [consultant]]	[... .. tel
[Local authority health & safety adviser]	[... .. tel
Overseeing health and safety [in this school] / [on this site]	Mr S McAuley
Overseeing health and safety in the T&D department	Mr C Lavery
[T&D department health & safety officer]	As above
Senior technician	Mr K McTeague
Various training functions	The Principal
Subject specialist for consultation over health & safety matters in resistant materials	The Board Officer NEELB
Subject specialist for consultation over health & safety matters in systems and control	The Board Officer NEELB
Overseeing the checking of activities against the model risk assessments and recording significant findings	Mr C Lavery
[Detailed checking of activities is further delegated by [courses] / [subjects] / [year groups]]	Mr C Lavery
[The person trained to do electrical inspection and testing]	External testing organisation.
[The person in charge of manual handling]	
[The union health and safety representative(s)]	

Emergency contacts

Emergency advice	CLEAPSS <i>Ηελλπινε</i> , 01895 251496
<i>Serious accident:</i> Ambulance service	[999] / [9-999]
<i>Serious accident:</i> School first-aiders	Mrs D Waters
<i>Serious accident:</i> School health & safety officer	Mr S McAuley
[<i>Serious accident:</i> Employer's health & safety officer]	
<i>Major chemical spill:</i> Fire & Rescue Service Chemical Incident Unit	
<i>Gas leak:</i> Gas company	

11. Appendix

Further guidance material on health and safety in Technology and Design.

BS4163:2007 – Health and Safety for design and technology in schools and similar establishments – code of practice.

DENI – Safety in Technology and Design Accommodation in schools (DENI Safety Series No. 10 1991)

CLEAPSS Publications (below) (Password required for access)

L235 [Managing Risk Assessment in Design and Technology](#)

L254 [Health & Safety Maintenance of D&T Workshop Equipment](#)

[Model Risk Assessments for Design & Technology update](#)

HSE website and material <http://www.hse.gov.uk/services/education/>

Safe use of woodworking machinery. **Provision and Use of Work Equipment Regulations** 1998 as applied to woodworking. Approved Code of Practice and Guidance L114 HSE Books 1998 ISBN 0 7176 1630 4