FOREWORD

Part of this document is adapted from the Education Queensland Manual *Health and Safety HS-10 Workplace Health and Safety*. Full recognition is given of the work, layout and copyright pertaining to those documents.
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Section 1

POLICY AND RESPONSIBILITIES
1. **Policy and Responsibilities**

1.1 The ACT Department of Education & Community Services *Injury Prevention and Management* policy demonstrates the Department’s commitment to the provision of a safe and healthy work environment for all employees and compliance with the requirements of the *ACT Occupational Health and Safety Act 1989* as modified by the *Public Sector Management Act 1994* (modified OHS Act).

**Implementation**

1.2 Implementation of this document will assist to ensure:

- the Department complies with its obligations under the modified *OHS Act*;
- the Department’s employees are aware of their OH&S responsibilities and provide the impetus to maintain safe and healthy working environments in all work areas managed by the department;
- OH&S is considered in equipment and facilities design;
- safe systems of work are maintained;
- hazards and risks are identified, considered and eliminated or minimised when purchasing, commissioning or maintaining facilities, goods and equipment;
- the provision of appropriate information, training and safety equipment at the local and systems level to promote support safe work;
- regular monitoring of accident, incident and illness reports and rapid response, particularly at the local level, to eliminate identified hazards.

**Strategy**

1.3

- management of health and safety based on a system of risk identification, risk assessment and risk control;
- commitment at all levels of management to the maintenance and improvement of health and safety;
- effective systems of consultation at the local level with employees and elected health and safety representatives;
- provision of appropriate information and training to employees and students to promote and support this policy.

**Responsibilities**

**Legal**

1.4 Statutory obligations under the modified *OHS Act* and the common-law duty of care apply to staff and others placed in a position of responsibility or who have responsibility for the supervision of students.

1.5 The principle of “vicarious liability” means employers bear the costs resulting from negligent acts or omissions of an employee. Thus claims for damages will usually be made against the ACT as the employer for Departmental staff.

1.6 The Territory is normally named as the defendant if the alleged cause is faulty equipment or premises. The Territory’s liability depends on the facts of each claim.
1.7 A claimant may identify a teacher or other employee as the defendant.

1.8 The Department may exercise its right to take action against the employee if evidence concludes the employee has been negligent in carrying out their duty.

1.9 Employees who as a direct result of the carrying out of their duties are subject to claims against them will receive the protection of the Territory, provided they have acted reasonably and have followed Departmental policies and procedures.

**Principals**

1.10 Principals are responsible for the implementation of these guidelines. This can be achieved through:

- information, instruction, training and supervision which ensures staff are familiar with and comply with statutory and departmental health and safety requirements;
- information made available to visitors and members of the public using school facilities;
- ensuring safe work practices are implemented and maintained;
- appropriate instruction and supervision arrangements for students;
- consideration of students with special needs (e.g. students of culturally and linguistically diverse backgrounds, students with disabilities and students with learning difficulties);
- ensuring staff have the appropriate qualifications or experience to facilitate chosen or specific activities;
- consultation which precedes planning of new operations, changes in present operations or the introduction of a new plant or equipment;
- prompt reporting and investigation of accidents and incidents and corrective action initiated (refer *ACTGS Occupational Health and Safety Policy No P-17 Accident Investigation - Supervisor Responsibilities*); and
- ensuring contractors undertake their obligations in a manner that is safe to themselves, departmental employees, students and members of the public.

**Teachers and/or Leaders**

1.12 If an adult other than a qualified teacher is engaged for instruction, a qualified teacher must be present to take overall responsibility. Teachers and/or leaders must ensure all student activities are conducted in a manner that eliminates or minimises risks to health and safety. All teachers/leaders including voluntary workers should comply with the requirements of this Guidelines document.

1.13 Teachers/leaders should:

- maintain healthy and safe procedures and practices;
- identify and assess hazards, and develop and implement control measures to eliminate or minimise associated risks (the relevant manager, other employees, the workplace health and safety representative, workplace health and safety committee or occupational health and safety adviser should be consulted as necessary);
- ensure employees, students and other users of areas receive appropriate
workplace health and safety information and training;
- ensure appropriate use is made of safety guards, safety devices, and personal protective equipment;
- manage student behaviour;
- record all work related injuries, illnesses and dangerous occurrences; and
- consider requirements for special-needs groups.
Section 2

GUIDELINES FOR RISK MANAGEMENT
2. **Risk Management**

2.1 The risk management process must be used to identify hazards and to assess and control risks associated with activities.

2.2 The risk management process involves
- identification of hazards (possible sources of injury or disease);
- assessment of risks (what is the likelihood and consequence of injury);
- control of risks (determine action to eliminate or minimise the risks);
- review of outcomes (evaluate effectiveness of control measures).

2.3 The risk management process will assist teachers/leaders to make considered decisions to discharge their “duty of care”.

2.4 The risk management process should be undertaken and reviewed at least annually. It should also be undertaken when new staff, students, equipment or tasks are introduced. The process should be reviewed to ensure that all potential hazards were identified and risks involved were accurately assessed. Control measures should also be reviewed to evaluate their effectiveness and ensure that no additional hazards have been created by them.

**Identification of Hazards**

2.5 Teachers/leaders should identify potential hazards and assess the associated risks within proposed curriculum activities. Potential hazards include but are not limited to:
- mechanical energy (contact with moving machinery parts causing entanglement, friction or abrasion, cutting, shear, stabbing or puncture, impact or crushing);
- gravity (falling objects, tripping/falling);
- access/egress (slips, trips, falls, moving objects/equipment, obstructions and projections);
- handling and lifting (large/heavy materials, equipment, student projects);
- chemicals (toxic, irritant, flammable, corrosive, explosive);
- inhalation of atmospheric contaminants (mists, fumes, vapours and dust);
- electricity (shocks, burns);
- thermal energy (spills and splashes of hot matter);
- temperature extremes (the effects of heat and cold);
- visual (inadequate lighting);
- kinetic energy (projectiles, penetrating objects);
- pressure (explosion, compressed air risks);
- radiation (ultraviolet, arc flashes, microwaves, lasers);
- biological matter (infections materials, micro-organisms);
- vibration (hands, whole body);
- suffocation;
- housekeeping (storage, combustibles);
- hygiene (amenities, first aid); and
- noise.
2.6 Methods of hazard identification may include:
  • a survey of the work area conducted by teachers, members of the school's health and safety committee, the Health and Safety Representative or by other school staff using observation and/or a hazard checklist;
  • consultation with other staff;
  • analysis of incident, accident or injury data collected;
  • studying material safety data sheets and product labels; and
  • consultation with other personnel or information sources including the Health and Safety Representative, the department’s Occupational Health and Safety Adviser, external consultants (unions industry/professional associations, and ACT WorkCover), manufacturers’ instructions.

2.7 Identification of hazards should be undertaken for each work area.

Risk Assessment

2.8 Teachers/leaders must examine activities related to the work processes and equipment to be used to identify and assess potential hazards.

2.9 The following factors will affect the level of risk involved:
  • the probability* of a hazardous situation occurring (how often and for how long are persons exposed to potentially hazardous situations you’ve identified);
  • the consequence and/or severity of a potential hazardous event or situation (i.e. fatality, major, minor or negligible injuries);
  • the appropriateness of the activity for students capabilities;
  • the teacher's/leader's qualifications and/or experience;
  • the characteristics of the students;
  • the characteristics of the physical environment; and
  • the level of supervision, including the ratio of students to teachers and/or leaders.

*Important: Be very careful about judging anything as improbable. This should be reserved for very rare situations.

2.10 The probability of accidents occurring can range from frequent to improbable. The consequences of accidents can be fatal in one extreme to negligible resulting injuries at the other end of the scale. A risk table can be used to assess the level of risk for each identified hazard. Remember that the factors outlined in section 2.9 (above) will affect the level of risk.

<table>
<thead>
<tr>
<th>Probability</th>
<th>Fatality</th>
<th>Major</th>
<th>Minor</th>
<th>Negligible</th>
</tr>
</thead>
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<td>Very High</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Probable</strong></td>
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<td>Medium</td>
<td>Low</td>
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<tr>
<td><strong>Possible</strong></td>
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<tr>
<td><strong>Remote</strong></td>
<td>Medium</td>
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<td>Low</td>
<td>Low</td>
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<tr>
<td><strong>Improbable</strong></td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>
Risk Control

2.11 Measures to eliminate or minimise the risk of injury or disease should be considered in the following order:
- elimination of hazard at the source;
- substitution (replace with less hazardous equipment or substances);
- isolation (provision of a barrier between the hazard and person(s) at risk);
- engineering (modifying equipment, provision of mechanical ventilation);
- safe work practices (including provision of training where necessary);
- administration (reducing the person's exposure to hazard); and
- use of personal protective equipment.

2.12 Where possible the risk of injury and disease should be controlled through elimination, substitution, engineering or isolation. These control measures remove, reduce or minimise risk in a more reliable and permanent manner than safe work practices, administration or personal protective equipment.

2.13 In many instances, a combination of risk control measures is appropriate.

2.14 Principals should ensure that safe work practices which are developed and implemented are documented for future reference.

2.15 Personal protective equipment should be used:
- where other methods of control are not practicable in the circumstances;
- to complement existing measures; and
- as an immediate response to protect persons pending a more effective solution.

2.16 Personal protective equipment provided by the school must be functionally and hygienically maintained, worn correctly and replaced when necessary. Appropriate training/information for correct use and maintenance requirements should be provided prior to the use of personal protective equipment. Refer to Section 3.6 for clothing and personal protective equipment requirements.

2.17 Factors which determine the practicability of control measures include:
- the nature of work or work process;
- the likely severity of any potential injury or disease;
- knowledge about the injury or disease related to the work or process;
- effectiveness of control measures to prevent injury or disease;
- availability and suitability of methods to prevent, remove or mitigate causes of injuries or diseases; and
- whether the costs of preventing, removing or mitigating that injury or disease are prohibitive in the circumstances.

2.18 The degree of risk in a particular activity or environment should be considered in relation to the cost and practicality of measures required to control the risk. The greater the risk, the more reasonable it is to expect that it is eliminated or reduced to an acceptable level.
2.19 Principals should be notified when the risk assessment process identifies a hazard that cannot be reduced to an acceptable level. In this case the school should implement short-term control measures (e.g. not using the equipment, facilities or process). Proposed long term control measures valued over $5,000 should be referred to the Facilities Planning & Projects Section for consideration in the minor new works program or to the Property Management Section as appropriate. The Injury Prevention and Management Unit may be contacted for further technical or legal advice.

**Monitoring and Review**

2.20 The process should be reviewed to ensure that all potential hazards were identified and risks were assessed accurately.

2.21 The control measures should also be assessed to determine their effectiveness and ensure additional hazards have not been created by their implementation.

2.22 Hazard identification, risk assessment and control is an ongoing process which should include regular reviews of the safety of equipment, hazardous substances and systems of work. This is particularly important when changes to the workplace environment, materials, equipment, processes or the users occur.
Section 3

IMPLICATIONS FOR SCHOOLS
3. Implications for Schools

Provision of Information

3.1 Principals must ensure the department’s health and safety objectives are communicated to all staff and visitors.

Allocation of Responsibilities

3.2 Principals must ensure staff are aware of and fulfill delegated specific workplace health and safety responsibilities.

Purchasing Goods

3.3 Potential health and safety issues must be considered at the selection stage of the purchasing process to ensure that substances, equipment or services purchased will not lead to an unacceptable risk of injury or adverse health affects.

Goods and services should be assessed for potential risks associated with:
- manual handling hazards;
- chemical hazards;
- mechanical hazards;
- electrical hazards;
- production hazards (e.g. repetitive strain injury);
- storage hazards;
- disposal hazards; and
- other hazards (excessive noise, vibration, radiation etc.).

Hazardous Substances

3.4 Principals must ensure:
- a register of hazardous substances comprising Material Safety Data Sheets (MSDS) which are available from suppliers and manufacturers (other than retailers), is maintained in each workplace;
- hazardous substances are appropriately labelled and stored;
- appropriate dangerous goods labels are displayed as necessary (e.g. flammable liquids); and
- advice on hazardous substances is sought from the OH&S Adviser as required.

Plant and Equipment

3.5 Plant and equipment must be maintained in safe working order (refer to relevant Australian Standards and manufacturer’s instructions). Principals should ensure:
- where maintenance is conducted under contract, the conditions should state defined standards (e.g. legislative requirements and Australian Standards); and
- regular checks are made of equipment.
Managing Contractors

3.5 It is common for principals to use contractors (e.g. plumbers, electricians, carpet repairers, pest controllers and grounds maintenance personnel) to undertake specific tasks at their school. Tasks can range from minor repairs and maintenance to major repairs, maintenance refurbishments or new works organised through Central Office.

The principal has overall responsibility to ensure the health and safety of all persons at their school. It is important to remember that the duty of care is non-delegable. This extends to ensuring that any contractor employed in the workplace is using reasonable care to avoid reasonably foreseeable risk of injury or damage. It is clearly up to principals to ensure that contractors are protecting their own health and safety, in addition to that of all employees and third parties in the workplace. Principals should not assume that once a contractor is engaged to perform a task, the contractor and his/her employees have the responsibility for managing health and safety risks associated with that task.

When engaging contractors principals can fulfil their duty of care by:

- ensuring contractors understand and agree to comply with their OHS obligations as part of the job before they are engaged;
- meeting with the contractor before the start of work to plan when the work will be done and agree on other necessary safety measures and procedures. (Never assume the contractor will do what is required to complete the job safely in your workplace);
- jointly developing a safety plan i.e. safety measures and procedures documented in point form to ensure both parties are clear on how the work will be undertaken to minimise risks (this is recommended especially for high risk or complex tasks);
- monitoring and supervising the work to ensure that the safety measures and procedures detailed in the contract or safety plan are being met;
- at any critical stages of work asking the contractor to confirm that safety measures and procedures agreed on are being met; and,
- documenting all meetings and discussions with your contractor relating to safety.

The level of monitoring and supervision will depend on such factors as:
- complexity of the tasks;
- the level of risk;
- location of work; and
- interaction with other parties (departmental employees, other contractors, third parties).

While many of the above tasks may be undertaken by other staff, especially registrars and bursars, the principal, as the person in charge of the workplace, retains a personal duty of care under the modified OHS Act.
**Clothing and Personal Protective Equipment Requirements**

3.6 Teachers should ensure students wear suitable protective clothing and equipment when these are required for potentially hazardous school activities.

Teachers may make participation in activities conditional upon:
- wearing covered footwear with soles and uppers in good condition;
- **not** wearing loose clothing, jewellery or other ornaments that could become entangled on moving equipment or catch on stationary objects;
- wearing caps or hairnets to contain long hair and eliminate entanglement hazards;
- wearing other appropriate equipment to eliminate the risk of injury e.g. safety goggles, face shield, bicycle helmet or a mouth guard.

Alternative activities should be arranged for students who do not meet these requirements.

**Employee Training**

3.7 Staff should be provided with induction, job-related and health and safety specific training.

**Accidents—Reporting and Investigation**

3.8 Schools must implement a system to ensure accidents and incidents are recorded, reported and investigated (refer to ACTPS OHS Policy No. P17 Accident Investigation - Supervisor Responsibility, ACTPS Accident Reporting Guide for Supervisors)

**Emergency Procedures**

3.9 Schools must develop emergency first aid and evacuation procedures. These may be general or specific to work areas or curriculum activities.

**Further Information**

3.10 Further information is available from the Department’s OH&S Adviser on ☎️620 59150.
Section 4

RISK LEVELS
4. **Risk Levels**

4.1 To ensure that an activity is a safe yet challenging and enriching personal experience, the level and type of risk must be managed appropriately. With that responsibility comes the temptation to completely remove all types of risks and to guarantee safety; the potential result can, however, be to limit the learning outcomes and to detract from the experience of the individual. The aim must be to manage and minimise risk and limit accidents to a level associated with everyday living. Principals and teachers should assess the potential for injury and implement appropriate control measures where necessary.

4.2 Risk levels or categories have been determined in the activity modules (from Section 6) to reflect the level of risk involved or the degree of complexity encountered in the activity. Levels of risk will vary depending on:
- the teacher/leader’s expertise;
- student/teacher ratio;
- student skills;
- diversity of student characteristics; and
- facilities and equipment used.

4.3 To determine risk levels:
- identify the hazards associated with materials used in the activity;
- examine the complexity of the activity;
- determine the severity of the consequences of any potential accident;
- evaluate risks associated with the environment and/or operation of machinery or equipment being used; and
- evaluate the knowledge, skills and ability of persons undertaking the activity.

4.4 Only **Low Risk (Level 1)** activities should be undertaken under general supervision in primary schools. Medium risk activities may be undertaken if the potential for injury is minimised through 1:1 adult/student supervision.

**NOTE:** even activities which have been identified as low-risk may have a potential for a higher risk according to the factors mentioned in Section 4.2. Principals and teachers will need to consider this and make necessary adjustments when facilitating activities.

**DEFINITION OF RISK LEVELS**

4.5 **Low risk (level 1)** activities indicate:
- students are at minimal risk injury risk if the equipment or activity procedures are employed correctly;
- the consequence of an accident occurring would be limited to a negligible injury (nil or first aid treatment required only);
- teachers/leaders are required to provide adequate supervision;
• students have teacher approval (and parental approval where appropriate) to operate the equipment or proceed with the activity; and
• students will not be hindered or impeded while using the equipment or engaging in the activity.

Some examples of low-risk activities are: bending; gluing; cutting; nailing; tearing; building; designing; knotting; running; jumping; dancing; writing; moving to music; painting; weaving; playing instruments; and working with clay.

4.6 **Medium risk (level 2)** activities indicate:
• there is a degree of risk of injury to a student using this equipment or engaging in this activity to the extent that all the risks associated with the activity cannot be eliminated;
• the consequence of an accident occurring would be limited to a minor injury (normally reversible injury or damage to health requiring medical treatment and convalescence);
• teachers/leaders are required to provide direct supervision;
• students require safe working space to operate the equipment or engage in the activity; and
• personal protective equipment may be required to reduce further the risk of injury.

Some examples of medium risk activities are: chiselling; heating (using a stove or microwave); cutting metal; drilling using a low powered electric drill; using electrical equipment; high jumping; soldering; planing and cutting with bolt cutters/Stanley knives/lino cutters.

**NOTE:** Medium risk activities may be undertaken if the potential for injury is minimised satisfactorily through 1:1 adult/student supervision.

4.7 **High risk (level 3)** activities indicate the potential for a high risk of serious injury (normally an irreversible injury, irreversible damage to health, or a fatality) to students or others, if equipment or procedures are not employed correctly.

Some examples of high risk activities are: using a lathe; scuba diving; throwing a javelin; using chemicals not available readily at the supermarket (e.g. copper sulphate, mineral acids); heating using a Bunsen burner; growing micro-organisms; fabricating; injecting; disc-sanding; bee-keeping; and strip heating.

**NOTE:** High risk level activities are not appropriate for primary school students.
Section 5

MAINTAINING A SAFE CLASSROOM
5. **Introduction**

5.1 This module outlines minimum requirements recommended to maintain a safe classroom. Additional requirements specific to particular curriculum activities are included in the relevant sections which follow.

5.2 Students could be exposed to a wide range of activities including:

- constructing
- gluing/pasting
- fabric printing
- fixing
- forming
- joining
- observing
- running
- knotting
- peeling (fruit peeler)
- polishing
- sealing with paint/lacquer
- securing
- stapling
- taping (masking tape)
- moving to music.

5.3 These activities will require the use of various materials/equipment which may include:

- crayons/textas/pencils
- fabric
- clay
- trundle wheels
- scissors
- paper and paper products
- rulers
- objects gathered in the local environment
- wool
- wood and wood based products
- plastics
- paints
- adhesives
- solvents
- balls
- tumbling mats
- containers
- nails
- musical instruments

5.4 Classrooms could include a range of equipment, tools, work benches, storage space, wet working areas and various types of power outlets.

**Principals' responsibilities**

Principals or their nominated officers should:

5.5 • approve all elements of an activity involving the maintenance of a safe classroom;
• refer teachers to their responsibilities in managing classroom activities; and
• approve the involvement of any leader.

5.6 Principals or their nominated officers should initially assess teacher/leader qualifications before the other factors in the activity specified in this document. Additional teacher/leader qualification requirements specific to each activity are outlined in the appropriate section.
Teachers’ Responsibilities
5.8 Teachers are responsible for managing a safe educational environment and ensuring classroom activities address safety issues and procedures.

5.9 Teachers should:
- recognise their own ability in the specific area; and
- assess the appropriateness of the activity.

5.10 Teachers/leaders are reminded to refer to the Risk Management section of this document.

Teacher/leader Qualifications
5.11 It is recognised that all qualified teachers have general teaching competencies.

5.12 Depending on the type/complexity of the activity, teachers/leaders should have:
- **Knowledge** of the activity including potential hazards and associated risks.
- **Experience** encompassing previous practical involvement in the activity and sufficient exposure to the activity. This is to enable teachers/leaders to be aware of the hazards and associated risks.
- **Competence** arising from demonstrated ability to undertake or to teach the activity. The level of proficiency should reflect a thorough understanding of the technical side of the subject and associated safety requirements.

5.13 If an adult other than a qualified teacher is engaged for instruction, a qualified teacher should be present to take overall responsibility.

Student Safety
5.14 To determine limits for safe working numbers of students, staff should consider:
- complexity of the activity being undertaken;
- the number of activities being engaged in by the student group simultaneously;
- maturity of the student group;
- skills levels of individual students;
- amount of space required by each student in the group to work safely (this is often determined by the size of individual student projects);
- level of risk inherent in the activity being undertaken; and
- experience and qualifications of the teacher.

5.15 Teachers should:
- determine the students' capabilities to engage in the activity;
- consider the severity or consequence of any injury that could be sustained through involvement in classroom activity; and
- evaluate the curriculum relevance and educational outcomes and balance these against the hazards and inherent dangers of engaging in the activity.
5.16 Teachers should seek information from parents/care givers and students of any condition (e.g. physical or medical) that may impair a student's capacity to engage safely in these activities, including the use of equipment. Teachers should investigate any reported condition before students participate in the activity and take necessary precautions to ensure the students safe participation. This information should be available on the medical form completed annually by parents and kept in the school.

5.17 Teachers should ensure students:
- adhere to all safety instructions and directions for the activity and use of equipment;
- are responsible and skilled to operate safely equipment without endangering their own and/or the health and safety of others;
- wear appropriate footwear to protect against falling sharp tools, equipment or projected materials;
- can read or have read to them safety related instructions, signage or written information;
- secure/remove any loose apparel, jewellery and other ornaments that may cause injury to themselves and/or other participants; and
- secure long hair if it could impair vision or become entangled in equipment.

Access and Equity

5.18 Teachers/leaders need to address the options necessary for optimum and safe participation of all students.

5.19 Students should have access to a range of educational opportunities which cater for their specific needs and/or the diverse nature of the school community.

5.20 Teachers may need to adapt activities or the environment to maximise participation of each student.

Management of Activity

5.21 Introduction of classroom activities requires:
- theoretical instruction on equipment operation/use;
- assessment of student’s comprehension of personal safety and safe operation procedures; and
- practical demonstrations by the leader.

5.22 Rules for the classroom, equipment and activity should:
- meet the special needs of individual students; and
- be appropriate to the maturity of the students.

5.23 Safety considerations should be reinforced throughout the activity.

5.24 Material Safety Data Sheet (MSDS) information should be obtained for all hazardous substances used in the classroom including paints, adhesives, glues, and solvents. Particular attention should be given to the safe and correct use, storage, disposal and clean up of hazardous substances.
Location

5.25 The classroom layout should be appropriate for the activity. Arrange classroom equipment and furniture for persons to see all work areas clearly, have ready access and work freely.

5.26 The size of any classroom should be commensurate with its intended purpose and there should be sufficient space for the activity.

5.27 Classroom activities should not compromise the health and safety of staff or students.

5.28 Consideration should be given to providing suitable work heights and access for students with special needs.

5.29 Equipment should be arranged to minimise any risks which may stem from their operation.

5.30 The location of equipment and materials should allow for quick and efficient exit in case of fire or other emergencies.

5.31 The location should be appropriate for the activity and considered in respect to the type of equipment being used.

5.32 The location should enable sufficient supervision to be maintained at all times. This will vary depending on the maturity and responsibility of the students.

5.33 All walkways should be left free of obstructions to reduce the risk of tripping.

5.34 Work area floors should have a non-slip surface to reduce the occurrence of slips and falls.

5.35 First aid equipment and consumable items appropriate to the activity should be available readily.

Equipment

5.36 Any equipment used should have necessary guards fitted.

5.37 Portable electrical equipment must have current electrical test certification (refer Section 7.13).

5.38 Equipment should be in good condition and maintained regularly.

5.39 Privately owned equipment used at school should meet the criteria (above) and specific criteria outlined in the appropriate sections.

5.40 Teachers should make check regularly personal protective equipment supplied by or to students to ensure compliance with Australian Standard Specification and it is in good serviceable condition.
5.41 Teachers should leave the work area (including equipment and tools) in a safe, clean and tidy condition.

**Risk Control - Managing Learning Environments**

5.42 Individual teachers/leaders should establish and enforce appropriate safety rules in line with their duty of care responsibilities.

5.43 Teachers/leaders should maintain adequate supervision of students at all times.

5.44 Teachers/leaders should implement strategies for safe operations in classrooms.

5.45 Teachers/leaders should instruct and encourage students to demonstrate responsibility for their personal safety and the safety of others.

5.46 Appropriate personal protective equipment should be worn by all persons who may be at risk as a result of an activity being engaged in the classroom.

5.47 Teachers should establish alternative procedures for students who are not dressed appropriately or prepared adequately to participate safely in the activity.

5.48 For small group activities operating at any one time, teachers should take into account the number of students in the work area, the number of activities and the level of difficulty of each activity.

5.49 The potential for exposure to the following hazardous substances should be eliminated or minimised by providing fume extraction in classrooms or by conducting the activity outdoors:
  - dusts;
  - spray painting vapour;
  - chemicals;
  - solvents and surface finisher fume; and
  - adhesives fume.

Initially, teachers/leaders should ensure the materials with the potential exposure of the (above) hazardous substances are appropriate for the activity. An assessment of risk and appropriate control measures should be undertaken as outlined in Sections 2.8 - 2.22.

5.50 As far as is practicable teachers should control, administer or engineer the use of equipment to minimise noise.

5.51 Students should be informed of increased risks which occur when more than one person engages in an activity and uses equipment/materials at any one time.

5.52 Operators of equipment should be given sufficient safety instruction. Teachers/leaders may need to verify a student’s understanding about how to apply operating and safety instructions. Depending on the student’s age/maturity, this may be achieved through oral or written tests, assignments, or checklists.

5.53 The scope of the activity for some groups of students may require modifications, or be restricted to ensure staff and student health and safety is not compromised.
Emergency Procedures

5.54 Teachers should develop a clearly defined emergency procedure and ensure access to a qualified person with appropriate first aid training. (Refer to the Department’s Health and Safety Policy - First Aid.)

5.56 All injuries should be treated in the appropriate manner.

5.57 If any person loses consciousness:
- check for DANGER;
- check for RESPONSE;
- ensure casualty's AIRWAY is clear;
- check for BREATHING; and
check for CIRCULATION.

5.58 If necessary, cardio-pulmonary resuscitation should be attempted.

5.59 In the event of electrocution:
- disconnect safely power or isolate the person from the live energy source;
- maintain the patient’s breathing; and
send for assistance.

5.60 Safety goggles should be worn if there is potential for injury to the eyes.

5.61 Any sustained injuries should be reported and recorded on the appropriate accident report form.

5.62 For evacuation purposes, exits should be clearly marked and exit passages should be clear of equipment/machines/facilities.
Section 6

WOODWORK
6. Definition

6.1 **Woodwork** refers to marking, cutting, waste removal, joining, gluing and finishing timber and timber-based products for the purpose of manipulate or work this material to a desired shape or design.

6.2 Processes covered by this module include:
- marking;
- sawing;
- assembling;
- hand drilling;
- screwing;
- hand sanding;
- nailing;
- gluing;
- staining; and
- hammering.

**Principals’ Responsibilities**

6.3 Principals or their nominated officers should approve all elements of a woodwork activity and refer teachers to their responsibilities to manage these activities.

**Hazards**

6.4 Hazards encountered in woodwork may include:
- inhalation of sanding dusts and vapours from paints/solvents;
- sharp cutting and edged forming tools;
- ejected materials e.g. from drilling, sawing, hammering; and
- electric shock from faults in power leads or power tools.

6.5 The risk management process outlined in Section 2 requires teachers/leaders to identify and manage additional hazards not mentioned previously.

**Teacher Responsibilities**

**Management of Activity**

6.6 Skill development in woodwork should be progressive and sequential. Initially, leaders should supervise any practical application. Teachers/leaders are reminded to refer to the hazards outlined in Section 2. Safety considerations should be reinforced throughout the activity.

**Location**

6.7 The location should be appropriate for the activity and be considered in respect to:
- the level of difficulty of the activity;
- the number of students involved in the activity; and
- the tools and equipment being used.

6.8 The workroom should meet the safety requirements listed in Section 5.

6.9 First aid equipment and consumable items appropriate to the activity should be available readily.
Guidelines for Risk Management in Primary Schools

Equipment

6.10 Aids to increase safety (e.g. in the operation of saws and hand drills) are recommended for unskilled persons or students with disabilities.

Risk Control-Managing Learning Environments

6.12 Teachers should instruct students in safe work practices to minimise the risk of eye injury when they are nailing and using sharp or pointed tools or equipment.

6.13 There should be sufficient ventilation during sanding, painting and gluing, especially when the materials used (e.g. contact adhesives, paints, solvents and glues) release fumes.

6.14 The level of difficulty of the activity should be appropriate to the number of students involved in the activity and the selected location (Refer Section 2).

6.15 Operators of woodwork tools and equipment should be given sufficient instruction in their safe operation. Teachers/leaders should verify students understand how to apply operating and safety instructions. This may be achieved through oral or written tests, assignments or checklists.

6.16 Material Safety Data Sheets (MSDS) should be obtained for paints, adhesives, glues, solvents and medium and high density fibreboards before they are used in school activities.

6.17 Teachers should instruct/encourage students to check with the teacher/leader before an activity commences or when in doubt as to how to proceed safely.

6.18 Blunt edge tools are more dangerous than properly maintained tools because of the extra pressure required to use them. Tools should be maintained properly.

6.19 Students should be advised that step ladders and other student-manufactured articles may be unsafe for use other than as a demonstration exercise because of either manufacture defect or design fault.

6.20 All work with timber should be carried out in such a way as to minimise the generation of dust. Hand power tools should be fitted with dust bags and used in well-ventilated areas. A high efficiency vacuum cleaner or wet mop should be used to clean work areas. A dry sweeping method should not be used.

6.21 Teachers should be aware of the hazards associated with poisonous or carcinogenic wood dust produced when working with specific species of wood. The following table provides a list of timber hazards.
Guidelines for Risk Management in Primary Schools

<table>
<thead>
<tr>
<th>TIMBER/HAZARD</th>
<th>EFFECT</th>
<th>SYMPTOMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boxwood sap or latex</td>
<td>Primary skin irritant, dermatitis</td>
<td>Skin irritation, eruption</td>
</tr>
<tr>
<td>Timbers usually with acrid smell, e.g. Black Bean</td>
<td>Cumulative contact dermatitis</td>
<td>Dermatitis, secondary infection</td>
</tr>
<tr>
<td>Oregon and green Jarrah handling and splinters</td>
<td>Mechanical trauma, dermatitis</td>
<td>Dermatitis, secondary infection</td>
</tr>
<tr>
<td>Blackwood, Eucalyptus, Silky Oak, Jarrah, Oregon, Mulga, and Shorea supp.</td>
<td>Mucosal irritation</td>
<td>Rhinitis, sneezing, asthma, tight chest and coughing</td>
</tr>
<tr>
<td>Blackwood, Stringy-bark</td>
<td>Pulmonary allergic and hypersensitivity reactions.</td>
<td>Nasal inflammation, bronchial asthma</td>
</tr>
<tr>
<td>Ebony and some fungi</td>
<td>Pulmonary allergic and hypersensitivity reactions. ‘Wood Trimmers Disease’ or ‘Farmers Disease’.</td>
<td>Severe Respiratory problems within 4 to 8 hours. Symptoms similar to flu. Repeated exposure to leads to fibrosis of lungs.</td>
</tr>
<tr>
<td>*Certain hardwoods such as Beech and Oak are sensitisers</td>
<td>sensitisation can cause allergic reactions</td>
<td>Skin rash or inflammation. Nasal inflammation, bronchial asthma</td>
</tr>
<tr>
<td>*Western Red Cedar wood dust is a sensitiser and probable carcinogen</td>
<td>Pulmonary allergic and hypersensitivity reactions. Nasal and paranasal cancer (with long term exposure)</td>
<td>Skin rash or inflammation. Nasal inflammation, bronchial asthma. Cancer from long term exposure may cause death.</td>
</tr>
<tr>
<td>*Oleander sap and latex is poisonous</td>
<td>Primary skin irritant, dermatitis</td>
<td>Skin irritation, eruption, poisoning</td>
</tr>
</tbody>
</table>

*Note: Oleander, Western Red Cedar, Beech or Oak should not be used in woodwork.

6.22 Dust from the following wood is also known to produce or is suspected of producing respiratory health problems:

- Acacia spp.
- Alpine and Mountain Ash
- Ash
- Bald Cypress
- Baywood
- Beech Oak
- Birch
- Black Bean
- Blackwood
- Boxwood
- Brigalow
- Cashew
- Chestnut
- Cedar
- Cocobolo
- Coolibah
- Dahoma
- Ebony
- Elm
- Eucalyptus spp.
- Fir
- Foxwood
- Goncalo Aves
- Greenheart
- Iroko
- Indian
- Sandlewood
- Jacaranda
- Mahogany
- Mansonia
- Maple
- Mimosa
- Myrtle
- Obeche
- Olivewood
- Opepe
- Oregon
- Pine
- Padauk
- Palm
- Pau Ferro
- Peroba Rosa
- Poison Walnut
- Purpleheart
- Quebracho
- Red Cabbage
- Tree
- Redwood
- Rosewood
- Sandalwood
- Satinwood
- Sassafras
- Sequoia
- Snakewood
- Spruce
- Walnut
- Wenge
- White Cypress Pine
- White Handlewood
- Willow
- Teak
- Yellow Gum, Spotted Gum
- Yew
- Zebrwood
Respiratory protection eg replaceable filter or disposable half face-piece respirators should be worn when machining these types of wood.

6.23 The wood listed in Sections 6.22 and 6.23 are provided as examples. Staff are advised to seek hazard information associated with any type of wood before purchasing/using the material. Additional information about wood and associated hazards is available from the Department’s OH&S Adviser in the Injury Prevention and Management Unit.

6.24 High density fibreboards are made using up to 13% formaldehyde resin. Formaldehyde is classified as a probable human carcinogen and may be released during machining. The fine softwood dust from this product is a sensitiser and may cause allergic dermatitis or asthma. Respiratory protection as specified on the MSDS must be worn when machining. The risk of nasal or paranasal sinus cancers is increased if the work practices noted in the MSDS are not followed.

6.25 Softwood timbers from coniferous trees such as pine and chipboard (which is largely composed of chipped softwood) may be less of a risk to a person’s health and should be used where practicable. Protection should, however, be provided against the inhalation of all dusts.

6.26 Many tropical timbers are spalted (i.e. black lines are present within the timber). These black lines are caused by a fungus. Any timber with fungal spores will grow fungus in a bag. When this timber is worked (by hand or machine) the dust may be toxic.

6.27 Apart from the effects of the wood itself, risks posed by the use of chemicals in wood treatment, preservation and finishing should be considered.
Section 7

PORTABLE ELECTRIC POWER EQUIPMENT
Chapter 7  

Definition

7.1 Portable electrical power equipment refers to appliances or tools that are portable by nature in their use. They may be battery-operated or run on electricity from a power source. In some instances, tools/equipment can be fixed temporarily for ease of use.

Principals' Responsibilities

7.2 Principals or their nominated officers should approve all elements of an activity involving the use of portable electrical power equipment. Principals should ensure that portable electric power equipment fitted with a flexible power supply cord is checked and tagged annually by an authorised electrician.

Risk Levels

7.3 The equipment is categorised in risk levels depending on:
- the complexity of the operation;
- the degree of risk associated with the operation of the machine; and
- the severity of the consequences of any potential accident.

7.4 Low risk activities using low-risk equipment are appropriate for primary school students. Low-risk equipment may include: battery-operated tools with low power and capacity, engravers, low-voltage electric pencils, electric pencil sharpeners, electric mixers, photocopiers, computers, facsimile machines, overhead projectors and slide projectors.

7.5 Teachers should note risk levels are subjective and the degree of risk will vary according to local conditions such as teacher's experience and expertise, student abilities and competence, the location and the equipment used.

Hazards

7.6 Hazards encountered in operating portable electrical power equipment may include:
- electricity (power faults, faulty equipment, incorrect use);
- inhalation (fumes, dust);
- moving and rotating parts (blades and bits, tool disintegration, entanglement);
- movement (artefact moving or unstable) and;
- heat (burns from hot materials or friction).

7.7 The risk management process requires all teachers/leaders to identify and manage additional hazards not mentioned previously.

Teacher Responsibilities

7.8 Teachers are responsible for managing a safe educational environment and ensuring that activities involving the operation of portable electrical power equipment address safety issues and procedures.

Student Safety

7.9 Teachers should determine the students' capabilities to engage in the operation of portable power equipment.
7.10 Teachers should ensure students:
- display responsibility and skill that indicates ability to operate safely the equipment without endangering their own and or others’ health and safety;
- wear appropriate personal protection equipment. See Sections 2.15 and 3.6.
- understand the hazards and safe working rules associated with this activity.

Management of Activity

7.11 Safety considerations should be reinforced throughout the activity.

Low risk activities

7.12 Students should be instructed in the correct operation of low-risk portable tools;
- Portable tools used should be appropriate to the age level of the student group participating in the activity;
- Rules for using tools should account for students with special needs (e.g. students of culturally and linguistically diverse backgrounds, students with disabilities and students with learning difficulties). If necessary, there should be direct supervision.

Location

7.13 The location should be appropriate to the operation of portable power equipment and be considered in respect to the type of equipment being used;
- First aid equipment and consumable items appropriate to the activity should be available.

Equipment

7.14 All portable electrical equipment should be inspected and tagged annually by a licensed electrical contractor in accordance with Australian Standard 3760-1990. A record of the testing including the contractor’s name, date of inspection, details of equipment inspected and test results should be kept for a period of 2 years.

7.15 All mains voltage portable electrical equipment and extension lead, if attached, should be protected by an earth leakage circuit breaker.

7.16 Guards and safety devices designed for the portable machine must be in place.

7.17 Use of extension leads should be restricted where possible. Extension leads need to be visually checked for cuts and defects each time they are used and be stored in a neat and tidy manner with plug ends secured and out of the way. This will minimise both electrical and trip hazards.

7.18 Privately owned equipment used at school should meet the criteria described in the previous paragraphs.
### Risk Control-Managing Learning Environments

7.19 Teachers should implement strategies for safe operation of portable electrical power equipment.

7.20 The number of students involved to operate the equipment and the level of difficulty of the activity should be appropriate to the selected location (refer Section 5).

7.21 Teachers should establish alternative procedures/activities for students not dressed appropriately or prepared to participate safely in the operation of the equipment.

7.22 Students should be alerted of the need to report immediately to the teacher/leader any damage or problem associated with the safe operation of equipment.

7.23 Adequate ventilation should be available to limit inhalation of dust or fumes from classroom activities. Refer Section 5.53.

7.24 Electric extension leads are not to be laid across walkways or placed in an area where they may be subjected to danger.

7.25 Teachers should develop safe work practices for the handling of materials or tools with cutting edges and/or that cause friction and generate heat. Formal student instruction should then include these appropriate safe work practices to eliminate/minimise potential injuries.

7.26 Waste materials control and disposal measures should be developed and reflect the type and volume of waste being generated.

7.27 Appropriate personal protective equipment should be worn by all persons operating portable power equipment. This equipment should:

- be appropriate to the risk associated with the machine process; and
- conform to Australian Standards specifications, if applicable. See Sections 2.15 and 3.6.
APPENDIX 1

The list below is intended as a guide; it is not exhaustive. More recent versions of codes and standards apply as they become available. Enquiries in relation to these documents can be made to the Departmental OHS Adviser on 620 59150.

Related ACT Government Documents


ACT Department of Education & Training Injury Prevention and Management Policy

Policy and Procedures Document for Occupational Health and Safety in ACT Government Secondary Technology Programs


ACT Approved Codes of Practice

National Code of Practice on Asbestos and Guidance Note on Asbestos
National Standard and Code of Practice on Synthetic Mineral Fibres
ACT Demolition Code of Practice (2nd Revised Edition)
ACT First Aid in the Workplace Code of Practice
ACT Code of Practice for Smoke Free Workplaces
National Standard for Plant [NOHSC:1010(1994)]
Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)] with the exception of chrysotile @ 1 fibre/mL
ACT Steel Construction Code of Practice
ACT Occupational Health and Safety Regulations
Regulations 1991, No. 10 [Health and Safety Representative Training]
Regulations 1991, No. 13 [Injury and Dangerous Occurrence Reporting and Recording Requirements]
Regulations 1997, No. 32 [Manual Handling]

Australian Standards

Safety and Health in Work areas of Educational Establishments AS 1485-1983
Rules for the Design and Use of Safety Signs for the Occupational Environment AS 1319-1984
Recommended Practices for Eye Protection in the Industrial Environment AS 1336-1997
Guarding and Safe Use of Woodworking Machinery AS 1473-1991
Interior Lighting - General Principles and Recommendations AS 1680.1-1990
Interior Lighting- Educational and Training Facilities AS 1680.2.3-1994
Selection, Use and Maintenance of Respiratory Protective Devices AS 1715-1994
Respiratory Protective Devices AS 1716-1994
Maintenance of Fire Protection Equipment AS 1851-1995
- Part 1 Portable Fire Extinguishers AS 1893-1977
Code of Practice for the Guarding and Safe Use of Metal and Paper Cutting Guillotines AS 1895-1977
Code of Practice for Guarding and Safe Use of Portable Electric Tools for Domestic Use AS 1940-1993
Flammable and Combustible Liquids Code AS 2211-1997
Laser Safety AS 3160-1996
Approval and Test Specification for Hand-held Portable Electric Tools AS 3190-1994
Approval and Test Specification for Residual Current Devices
- (Current Operated Earth Leakage Devices) AS 3190-1994
Approval and Test Specification Electric Flexible Cords AS 3191-1996

General

Plant in the Workplace, Making it Safe, Worksafe Australia (AGPS Bookshop).
Artist Beware; Michael McCann, Watson Guptill, New York.
Health Hazards Manual for Artists; Michael McCann, Nick Lyons Books, New York.
Portrait of an Art Teacher; Art Craft Teachers Association of Victoria


Safety Internet Sites for Primary School Students

Football star Glen Jakovich and ThinkSafe SAM show primary school aged children how to use the ThinkSafe SAM steps at home, at school and on the road. Children can become members of the Club and be eligible to win prizes. http://www.safetyline.wa.gov.au/club/