

Curriculum activity risk assessment

Portable Electric Power Tools

clever • skilled • creative

Activity scope

This document relates to the use of Portable Electric Power Tools as a curriculum activity.

Portable electrical power equipment includes machines, appliances or tools that are portable by nature in their use. They may be battery-operated, pneumatic, gas-fuel operated, or run on electricity from a power source. In some instances, these tools can be temporarily fixed for ease of use.



Teachers/leaders:		
Activity description:		
Start date:	Finish date:	No of students (approx.):
Class Groups:		Supervision ratio (approx.):

Risk level

The actual risk level will vary according to the specific circumstances of the activity and these **must** be considered when assessing the inherent risk level and planning the activity. As a starting point, ask the following questions:

- Which students will be involved?
- What will the students be doing?
- What will the students be using?
- Where will the students be?
- Who will be leading the activity?

Portable electrical power equipment is categorised into four risk levels, depending on:

- the complexity of the operation;
- the degree of risk associated with the operation of the machine
- the severity of the consequences of any potential accident.

Inherent risk level		Action required / approval	
<input type="checkbox"/>	Low	<p>Little chance of incident or injury; Portable tools such as:</p> <ul style="list-style-type: none"> • battery-operated tools with low torque • engravers • pyrographs • low-voltage electric pencils • electric pencil sharpeners • hot wire machines • orbital sanders • overhead projectors and slide projectors • strip heaters 	<input checked="" type="checkbox"/> Manage through regular planning processes.
<input type="checkbox"/>	Medium	<p>Some chance of an incident and injury requiring first aid; Portable tools such as:</p> <ul style="list-style-type: none"> • 75 millimetre electric planers • electric drills • belt sanders • electric soldering irons • electric blowers • electric screwdrivers • scroll saws • spray-painting equipment • jigsaws • spot welders 	<input checked="" type="checkbox"/> Record controls in your planning documents and/or complete this <i>Curriculum Activity Risk Assessment</i> . <input checked="" type="checkbox"/> Consider obtaining parental permission.
<input type="checkbox"/>	High	<p>Likely chance of a serious incident and injury requiring medical treatment; Portable tools such as:</p> <ul style="list-style-type: none"> • disc sanders • angle disc grinders • nibblers • routers • bench grinders • trimmers • electric planers • electric portable saws 	<input checked="" type="checkbox"/> A <i>Curriculum Activity Risk Assessment</i> must be completed. <input checked="" type="checkbox"/> Principal or delegated Deputy Principal or Head of Program (i.e. HOD, HOSES, HOC) to review and approve risk assessment. <input checked="" type="checkbox"/> Obtaining parental permission is recommended. <input checked="" type="checkbox"/> Once approved, activity details are to be entered into the <i>School Curriculum Activity Register</i> .
<input type="checkbox"/>	Extreme	<p>High chance of a serious incident resulting in highly debilitating injury; Portable tools such as:</p> <ul style="list-style-type: none"> • electric shears • chainsaws • electric welders 	<input checked="" type="checkbox"/> Consider conducting an alternative activity <input checked="" type="checkbox"/> A <i>Curriculum Activity Risk Assessment</i> must be completed. <input checked="" type="checkbox"/> Principal approval prior to conducting this activity is required. <input checked="" type="checkbox"/> Parental permission must be obtained for student participation. <input checked="" type="checkbox"/> Once approved, activity details are to be entered into the <i>School Curriculum Activity Register</i> .

Listed below are the minimum recommendations for this type of activity. For any items ticked 'No', provide further information on the additional or alternate controls to be implemented for the safe conduct of the activity.

Minimum supervision

Adequate adult supervision is to be provided. In determining what is adequate, consider the number of students, their individual needs, and the nature of the activity. If an adult other than a registered teacher is engaged for instruction, a teacher should be present to take overall responsibility. [Blue Card](#) requirements **must** be adhered to.

- Registered teacher with minimum qualifications as outlined below
OR
 An adult with minimum qualifications as outlined below, in the presence of a registered teacher

Further information:

Minimum qualifications

The qualifications listed in this section are minimums for each type of situation. Leaders are encouraged to seek training to raise their qualification level above the minimum listed.

- Current first aid qualifications including Cardio Pulmonary Resuscitation (CPR) or ready access to first aid facilities, including qualified personnel.
 [Blue Card](#) requirements met

Low — Little chance of incident or injury; Portable tools such as:

- battery-operated tools with low torque
- engravers
- pyrographs
- low-voltage electric pencils
- electric pencil sharpeners
- hot wire machines
- orbital sanders
- overhead projectors and slide projectors
- strip heaters

For a registered teacher:

- knowledge (a good working knowledge) of using this type of equipment or similar equipment
OR

For a leader other than a registered teacher:

- relevant qualifications in the use of portable electrical power equipment.

A teacher could demonstrate their competency through their:

- knowledge of the activity and the associated hazards and risks
 experience (i.e. previous involvement) in undertaking the activity
 demonstrated ability and/or expertise to undertake the activity
 possession of qualifications related to the activity.

Minimum qualifications

The qualifications listed in this section are minimums for each type of situation. Leaders are encouraged to seek training to raise their qualification level above the minimum listed.

Medium — Some chance of an incident and injury requiring first aid; Portable tools such as:

- 75mm electric planers
- electric drills
- belt sanders
- electric soldering irons
- electric blowers
- electric screwdrivers
- scroll saws
- spray-painting equipment
- jigsaws
- spot welders

High — Likely chance of a serious incident and injury requiring medical treatment; Portable tools such as:

- disc sanders
- angle disc grinders
- nibblers
- routers
- bench grinders
- trimmers
- electric planers
- electric portable saws

For a registered teacher with qualifications in Industrial Technology Design (ITD):

- competence (demonstrated ability/experience to undertake the activity) in the use of this type of equipment or similar equipment

A teacher could demonstrate their competency through their:

- knowledge of the activity and the associated hazards and risks
- experience (i.e. previous involvement) in undertaking the activity
- demonstrated ability and/or expertise to undertake the activity
- possession of qualifications related to the activity.

OR

For a leader other than a registered teacher:

- competence (demonstrated ability/experience to undertake the activity) in the use of this type of equipment or similar equipment

Extreme — High chance of a serious incident resulting in highly debilitating injury; Portable tools such as:

- electric shears
- chainsaws
- electric welders

For a registered teacher with qualifications in Industrial Technology Design (ITD):

- expertise and/or qualification in the related area and demonstrated ability in the use this type of equipment

OR

- competence (demonstrated ability/experience to undertake the activity) in the use of this type of equipment or similar equipment

A teacher could demonstrate their competency through their:

- knowledge of the activity and the associated hazards and risks
- experience (i.e. previous involvement) in undertaking the activity
- demonstrated ability and/or expertise to undertake the activity
- possession of qualifications related to the activity.

OR

- relevant documented qualification: trade or units of competency related to the activities (eg. VET staff profile, Currency of Industry Experience.)

For a leader other than a registered teacher:

- relevant trade qualifications (e.g. in carpentry and joinery)

Minimum qualifications

The qualifications listed in this section are minimums for each type of situation. Leaders are encouraged to seek training to raise their qualification level above the minimum listed.

Further information:

Minimum equipment/facilities <i>If 'No' is ticked, provide further information.</i>	Yes	No
First aid kit suitable for activity	<input type="checkbox"/>	<input type="checkbox"/>
Communication system: <input type="checkbox"/> phone-line at location <input type="checkbox"/> mobile phone <input type="checkbox"/> walkie talkies/UHF radio <input type="checkbox"/> student/adult messenger Other:		
Safety glasses and appropriate fully enclosed footwear that protects against falling sharp tools, equipment or project materials	<input type="checkbox"/>	<input type="checkbox"/>
Standard operating procedures clear and present for ALL equipment used	<input type="checkbox"/>	<input type="checkbox"/>
Guards and safety devices designed for the portable equipment	<input type="checkbox"/>	<input type="checkbox"/>
Drinking water (students should not share drinking containers)	<input type="checkbox"/>	<input type="checkbox"/>
Fixed residual current device on all portable equipment; For further information refer to: quick reference guide for specified electrical equipment	<input type="checkbox"/>	<input type="checkbox"/>
Adequate lighting and ventilation	<input type="checkbox"/>	<input type="checkbox"/>
Maintenance and service of equipment to manufacturer's specifications; access to the equipment maintenance registers.	<input type="checkbox"/>	<input type="checkbox"/>

Further information:

Hazards and suggested control measures

All persons engaging in this activity should:

- identify the hazards, including any additional hazards not mentioned here
- assess their significance
- manage the potential risks.

Listed below are indicative hazards/risks and suggested control measures. They are by no means exhaustive lists. After checking these, add details of any other identified hazards/risks and additional controls you intend to implement.

Hazards/risks	Control measures	Yes	No	Implementation plan / Additional controls
Environmental conditions <ul style="list-style-type: none"> • Weather • Surfaces • Surrounds 	<ul style="list-style-type: none"> • Complete Curriculum Activity Risk Assessment for Managing a practical workspace. • Ensure that everyone remains aware of their surroundings. • Ensure that students handle equipment carefully during use. • Ensure that students handle materials carefully after use on equipment. 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Noise <ul style="list-style-type: none"> • Continuous, repetitive noise • One-off noise exposure 	<ul style="list-style-type: none"> • Minimise the number of students working at one time • Redesign tasks so that staff are not exposed to loud noise over extended periods. 	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	
Students <ul style="list-style-type: none"> • Student numbers • Special needs • High risk behaviours • Medical conditions 	<ul style="list-style-type: none"> • Obtain parental permission, including relevant medical information. • When students with medical conditions are involved, ensure that relevant medical/emergency plans and medications are readily available (insulin, Ventolin, Epipen, etc.) • Refer to Individual education plan/Educational adjustment plan/Behaviour management plan and other student documents. • Where necessary, obtain advice from relevant advisory visiting teachers or specialist teachers. • Ensure there is adequate adult supervision. 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Tools, plant or Equipment	<ul style="list-style-type: none"> • Ensure that all loose jewellery and clothing is secured or removed. 	<input type="checkbox"/>	<input type="checkbox"/>	

Submitted by:	Date:
List the names of those who were involved in the preparation of this risk assessment.	

Approval	
<input type="checkbox"/>	Approved as submitted:
<input type="checkbox"/>	Approved with the following condition(s):
<input type="checkbox"/>	Not approved for the following reason(s):
By:	Designation:
Signed:	Date:
Once approved, activity details should be entered into the <i>School Curriculum Activity Register</i> by administrative staff.	Reference no.

Monitor and review <i>To be completed during and/or after the activity and/or at the completion of the series of activities.</i>	Yes	No
Are the control measures still effective?	<input type="checkbox"/>	<input type="checkbox"/>
Have there been any changes?	<input type="checkbox"/>	<input type="checkbox"/>
Are further actions required?	<input type="checkbox"/>	<input type="checkbox"/>
Details:		

Important links

- SCM-PR-002: School Excursions
<http://education.qld.gov.au/strategic/eppr/schools/scmpr002/>
- HLS-PR-003: First Aid
<http://education.qld.gov.au/strategic/eppr/health/hlspr003/>
- HLS-PR-004: Infection Control and Management of Prescribed Contagious Conditions
<http://education.qld.gov.au/strategic/eppr/health/hlspr004/>
- Infection Control Guideline:
http://education.qld.gov.au/health/pdfs/healthsafety/infection_control_guideline.pdf
- HLS-PR-005: Health and Safety Incident Reporting and Notification
<http://education.qld.gov.au/strategic/eppr/health/hlspr005/>
- HLS-PR-013: Developing a Sun Safety Strategy
<http://education.qld.gov.au/strategic/eppr/health/hlspr013/>
- HRM-PR-010: Working with Children Check – Blue Cards
<http://education.qld.gov.au/strategic/eppr/hr/hrmpr010/>
- HLS-PR-006: Managing Occupational Risks with Chemicals
<http://education.qld.gov.au/strategic/eppr/health/hlspr006/hs16.pdf>
- Standard Operating Procedures for EQ sites
<http://education.qld.gov.au/health/safety/hazards/equip-resources.html#sop>
- Hearing Protection Fact Sheet
<http://education.qld.gov.au/health/pdfs/healthsafety/hearing-protection-factsheet.pdf>
- 2004 Noise Code of Practice
http://www.deir.qld.gov.au/workplace/resources/pdfs/noise_code2004.pdf
- Maintain a Safe Design Technology Workspace
<http://education.qld.gov.au/strategic/eppr/health/hlspr012/pracitdworkspace.pdf>

Further information

For further information on incorporating risk management strategies into curriculum activity planning refer to [HLS-PR-012 Managing Risks in Curriculum Activities](#) and the associated list of [Curriculum Activity Risk Assessment Guidelines](#). (See: <http://education.qld.gov.au/strategic/eppr/health/hlspr012/index1.html>)

For further support with risk management training and advice, contact trained staff in schools such as Workplace Health and Safety Officers (WHSOs) and Workplace Health and Safety Representatives (WHSRs), and regional staff such as Senior Health and Safety Consultants.

Uncontrolled copy. Refer to *HLS-PR-012: Curriculum Activity Risk Management* at <http://education.qld.gov.au/strategic/eppr/health/hlspr012/> for master.