

Curriculum activity risk assessment: Managing a Practical ITD Workspace

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Activity scope

An **Industrial Technology and Design (ITD) Workspace** refers to the facilities where teachers and students in schools engage in designing, manipulating and processing materials for construction, fabrication, or development of projects or artefacts.

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

- gluing
- forming
- fabricating
- polishing
- fixing
- injecting
- welding
- sealing
- joining
- heating
- machining
- surface finishing



Students could be exposed to a wide range of materials, chemicals and hazardous substances including:

- timber and timber based products
- ceramics
- adhesives
- plastics
- fuel gases
- solvents
- paints
- metals

An ITD workspace could include a range of equipment, machines, tools, work benches, storage space, wet working areas, compressed air, and various types of power outlets including, single phase and three phase electricity and or compressed air.

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?

Inherent Risk Level		Action Required / Approval	
<input type="checkbox"/>	Low	Machinery, tools and equipment in this location pose little or low level of risk. Little chance of incident or injury.	<input checked="" type="checkbox"/> Manage through regular planning processes
<input type="checkbox"/>	Medium	Machinery, tools and equipment in this location pose a potentially medium level of risk. Some chance of an incident and injury requiring first aid.	<input checked="" type="checkbox"/> Record controls in planning documents and/or complete this <i>Curriculum Activity Risk Assessment</i> for a workspace location.
<input type="checkbox"/>	High	Machinery, tools and equipment in this location that pose a potentially high level of risk. Likely chance of a serious incident and injury requiring medical treatment.	<input checked="" type="checkbox"/> This <i>Curriculum Activity Risk Assessment</i> for a workspace location is required to 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"/> Once approved, details are to be entered into the <i>School Curriculum Activity Register</i> .
<input type="checkbox"/>	Extreme	Machinery, tools and equipment in this location pose a potentially high to extreme level of risk. High chance of a serious incident resulting in highly debilitating injury.	<input checked="" type="checkbox"/> Consider conducting alternative activities in this workspace.. <input checked="" type="checkbox"/> This <i>Curriculum Activity Risk Assessment</i> for a workspace location is required to be completed. <input checked="" type="checkbox"/> Principal approval is required prior to conducting activities in this workspace.. <input checked="" type="checkbox"/> Parental permission must be obtained for student participation in activities in this workspace. <input checked="" type="checkbox"/> Once approved, 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 – consider the following: the number of students; their individual needs, and; the physical nature of the workspace. 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 - Machinery, tools and equipment in this location pose little or low level of risk. Little chance of incident or injury

Medium - Machinery, tools and equipment in this location pose a potentially medium level of risk. Some chance of an incident and injury requiring first aid.

For a registered teacher:

- competence (demonstrated experience and ability - e.g. ITD staff profile)
OR
 a trade background
OR
 certified training in a course where working in an practical ITD workspace was part of the course

For a leader other than a registered teacher:

- expertise (formal trade qualifications) in a trade where appropriate practical workshop skills were a component of the trade qualifications.

A teacher could demonstrate their competency to conduct an activity to the person approving the Curriculum Activity Risk Assessment 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.

High Machinery, tools and equipment in this location that pose a potentially high level of risk. Likely chance of a serious incident and injury requiring medical treatment.

Extreme Machinery, tools and equipment in this location pose a potentially high to extreme level of risk. High chance of a serious incident resulting in highly debilitating injury.

For a registered teacher with qualifications in Industrial Technology and Design:

competence (demonstrated experience and ability - e.g. ITD staff profile)

OR

a trade background

OR

certified training in a course where working in an ITD practical workspace was part of the course

For a leader other than a registered teacher:

expertise (formal trade qualifications) in a trade where appropriate practical workshop skills were a component of the trade qualifications.

Further information:

Minimum Equipment/Facilities <i>If checked "No", provide further information.</i>	Yes	No
First Aid facilities on hand, readily visible and accessible for this location	<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 <input type="checkbox"/> audible school P.A. system <input type="checkbox"/> audible school alarm system (bell)		
Other:		
Appropriate and maintained fire safety equipment (extinguisher, blanket, evacuation plan)	<input type="checkbox"/>	<input type="checkbox"/>
Drinking water (students should not share drinking containers)	<input type="checkbox"/>	<input type="checkbox"/>
Suitable and sufficient waste bins	<input type="checkbox"/>	<input type="checkbox"/>
Adequate lighting and ventilation	<input type="checkbox"/>	<input type="checkbox"/>
Suitable non-slip floor surface	<input type="checkbox"/>	<input type="checkbox"/>
Adequate dust extraction facilities where necessary	<input type="checkbox"/>	<input type="checkbox"/>
Adequate workspace area, correctly sized for the intended purpose to prevent overcrowding	<input type="checkbox"/>	<input type="checkbox"/>
All walkways, stairways and ramps kept clear of rubbish, leads and trip hazards	<input type="checkbox"/>	<input type="checkbox"/>
Safety glasses and appropriate fully enclosed footwear that protects against falling sharp tools, equipment or project materials	<input type="checkbox"/>	<input type="checkbox"/>
Clearly marked work areas delineated with yellow paint or similar material	<input type="checkbox"/>	<input type="checkbox"/>
All electrical equipment and inspected, tested and tagged	<input type="checkbox"/>	<input type="checkbox"/>
Fixed Residual Current Device (RCD) on all portable equipment. For further information refer to quick reference guide for specified electrical equipment	<input type="checkbox"/>	<input type="checkbox"/>
Emergency stop buttons on machinery and equipment where required	<input type="checkbox"/>	<input type="checkbox"/>
Standard Operating Procedures (SOP) 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"/>
Properly installed guards and safety devices on all machinery & equipment where necessary	<input type="checkbox"/>	<input type="checkbox"/>
Material Safety Data Sheets (MSDS) for all chemicals stored in the workshop	<input type="checkbox"/>	<input type="checkbox"/>
Adequately maintained and serviced equipment and power tools, according to manufacturer's instructions. Maintenance register available.	<input type="checkbox"/>	<input type="checkbox"/>
Further information:		

Hazards/Risks	Control Measures	Yes	No	Implementation Plan / Additional Controls
	<ul style="list-style-type: none"> Redesign tasks so that staff are not exposed to loud noise over extended periods. Repair and maintain equipment and machinery to reduce their noise levels. As far as is practicable teachers should control, administer or engineer the use of equipment and/or machines to ensure the accumulated noise in the ITD workspace is not above the recognised safe industrial level, approximately 85 dB(A). Refer to; http://education.qld.gov.au/health/safety/hazards/noise.html for further information. 	<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. (i.e. 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 adequate adult supervision. 	<input type="checkbox"/>	<input type="checkbox"/>	

Additional Control Measures

These would relate to the specific student needs, location and conditions in which you are conducting your activity.

Hazards / Risks	Control Measures

Submitted by:	Date:
Indicate 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

- HLS-PR-003: First Aid
<http://education.qld.gov.au/strategic/epr/health/hlspr003/>
- HLS-PR-004: Infection Control and Management of Prescribed Contagious Conditions
<http://education.qld.gov.au/strategic/epr/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/epr/health/hlspr005/>
- HLS-PR-013: Developing a Sun Safety Strategy
<http://education.qld.gov.au/strategic/epr/health/hlspr013/>
- HRM-PR-010: Working with Children Check - Blue Cards
<http://education.qld.gov.au/strategic/epr/hr/hrmpr010/>
- HLS-PR-006: Managing Occupational Risks with Chemicals
<http://education.qld.gov.au/strategic/epr/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

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](#).* (*<http://education.qld.gov.au/strategic/epr/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.