

The background of the slide is a spiral-bound notebook with a light beige, textured cover. The spiral binding is on the left side, and the notebook is set against a dark brown background. The title is written in a large, bold, blue font with a dark blue outline and is underlined.

Technology Teachers Safety & Responsibilities

http://teachertube.com/viewVideo.php?video_id=144518&title=Shop_Safety_Video

Luc Ouellet Technology Teacher

Safety in Technology Education Programs

Is an issue that has been on the backburner for the last 20 years

- Increased student numbers
- Multi-grade classes
- Students with learning disabilities
- ESL students
- Limited floor space
- Educational Assistance with limited or no training

Risk Management Guidelines for Public Sector

November 2010

Every Manager (Principal) is responsible for:

- Integrating a sound risk management and process into the business process they are responsible for; and
- Reporting risks with causes, impacts or mitigations, beyond their scope or available resources to their “manager”

Every Employee (Teacher) is responsible for:

- Applying sound risk management within the scope of their duties and responsibilities and:
- Reporting risks with causes, impacts or mitigations, beyond their scope or available resources to their “manager”

Employer (School District) Responsibilities Heads Up for Safety

- provide a safe environment
- take action immediately when the worker or supervisor tells you about a potentially hazardous situation
- provide personal protective equipment where required

Supervisor (Technology Teachers) Responsibilities Heads Up for Safety

➤ Provides a safe learning environment

Supervision of:

➤ Students

➤ Educational Assistants

Has a duty to conduct risk assessments

➤ identify hazards in the shops

➤ ensure protection against hazards in the shops

➤ Implement mitigation strategies to reduce the hazards

Employee (Student)

Responsibilities

Heads Up for Safety

- know and follow safety and health procedures affecting your work
- if you don't know, ask for training before you begin work
- work safely and encourage your classmates to do the same
- correct or immediately report any unsafe conditions to your teacher
- take the initiative—make suggestions for improved safety conditions

Assessing the Risks

Heads Up for Safety

Requires input from:

- ✓ **Management,**
- ✓ **Site Committee**
- ✓ **Technology Teacher to:**
 - **Identifying and assess the impact of the identified hazards on those that work in the area**
 - **determine the likelihood that the hazard may lead to injury and/or disease**
 - **determine if the risk is low, medium or high**
 - **Take steps to mitigate the risk**

Controlling the Risks

Heads Up for Safety

1. Reduce the risk

- **Can it be done in such a way that students are not exposed to the hazard?**

2. Substitute (equipment or material) with something else

- **Can a different machine or tool be used?**

3. Implement an engineering control

- **Can a physical barrier be provided (e.g. guarding)?**

Controlling the Risks

Heads Up for Safety

4. Apply an administrative solution

- **Can the shop be reorganized to provide a safe distance between the hazard and the students?**

5. Provide personal protective equipment (PPE)

- **Should only be considered if the first 4 steps are not feasible**
- **Ensure students follow safe work procedures when using PPE?**

Record Keeping

Heads Up for Safety

Safety Tests:

- Did students attend the demonstrations on how to use the equipment?
- Did they complete and pass the safety test?
- Did they attend/pass a make-up if they missed the demonstration or test?
- All class records must be kept for 7 years
- In the case of an accident, they must be kept for 10 years
- a student or their family has the right to make a claim for an injury that occurred during a school activity up until the student reaches the age of 21

Duty of Care

Heads Up for Safety

The duty of care required, is determined by the following factors:

1. The probability of an accident happening;
 2. The potential severity of such an accident; and
 3. The costs of reducing risk.
- Judges have determined that there is a high probability of risk if safety instructions are not given clearly and carefully to students receiving instruction

Liability

Heads Up for Safety

The law places a very strict 'duty of care' upon School Districts (**who is the district?**) and "teachers" (**we know who the teacher is**) with respect to students in shop classes.

- School Districts are required to provide safe facilities and equipment
- Teachers must provide proper supervision and instruction on the use of potentially dangerous equipment

Bill C-45

"217.1 Every one who undertakes, or has the authority, to direct how another person does work or performs a task is under a legal duty to take reasonable steps to prevent bodily harm to that person, or any other person, arising from that work or task."

<http://www.ccohs.ca/oshanswers/legisl/billc45.html>

WorkSafe BC in the Shops

WorkSafe Regulations are clear and concise in regards to:

- **What safety protocol is required**
- **Who is responsible for what**
- **Who, When, and Where training is required**
- **How & When inspections should be carried out**
- **Much of this information can be found in Section 3 of the OHS regulations**



Legislation and regulation:

- WorkSafeBC administers the *Workers Compensation Act*
- The Act gives WorkSafeBC the legal authority to set and enforce occupational health and safety regs.
- The *Occupational Health and Safety (OHS) Regulation* is one of the regulations in force under the *Workers Compensation Act*.
- The OHS Regulation contains legal requirements that must be met by all workplaces under the inspection jurisdiction of WorkSafeBC.

Young & “New Worker” Sec

3.22

Means any worker who is:

- new to the workplace,
- returning to a workplace where the hazards in that workplace have changed during the worker's absence,
- affected by a change in the hazards of a workplace, or
- relocated to a new workplace if the hazards in that workplace are different from the hazards in the worker's previous workplace

Orientation & Training

Sec 3.23 Young or New Worker

An employer must ensure that before a young or new worker begins work in a workplace:

- the young or new worker is given health and safety orientation and training specific to that young or new worker's workplace.
- An employer must keep records of all orientation and training provided under sections 3.23 and 3.24.

Workplace Inspections

Sec 3.5 General requirement

Every employer must ensure that regular inspections are made of all workplaces

- buildings
- Structures
- Tools, Machinery
- work methods and practices

At intervals that will prevent the development of unsafe working conditions.

- Interval timing relates to work-site risk
- WS has no regs. stating intervals
- Shops at 2 – 3 months

Supervisor **Work Safe**

“a person who instructs, directs, and controls workers in the performance of their duties”

➤ if you fail to take action or delay taking action, you not only condone the unsafe activity, but you also encourage it

Effective supervision:

- Provide/verify workers' training before undertaking new tasks
- Verify that workers' performance meets expectations for safety
- Correct improper work activities and conditions

Due-Diligence WorkSafe

Requires you take the precautions a reasonable and prudent person would take to protect the well-being of employees or co-workers (from exposure to high risk practices)

- Identify current risk factors
- Develop a plan to mitigate the risk factors
- implement the plan
- Reporting risks to your manager (principle)

BCTEA Best Practices

October 2011

Completed a Provincial Risk Assessment:

(produced by technology teachers) as a component of our

“Due-Diligence”

✓ identified many contributing factors in technology education shops increasing the risk of injury to:

- Students**
- Educational Assistance**
- Technology Teachers**

BCTEA Best Practices

Risk Assessment

BCTEA report clearly describes the ``most significant factors in whether there are safe learning environments for technology education students``

- class size & composition**
- teacher qualifications**
- education assistant (EA) training**
- facilities and budgets**

BCTEA Best Practices

Findings

Equipment:

- Without proper guarding
- Without safe work zone markings

Classes:

- inadequate space for program implementation
- inability to effectively supervise classes over 20

Educational Assistants:

- Lack of specialized training for the shop environment

Students:

- Increased diversity (special needs, ESL, drug use, multi-grade & program offerings in one setting)

BCTEA Best Practices

Guide mitigating steps

Produced a document:

- **Delivered to**
 - ✓ **Min. of Education**
 - ✓ **Technology Teachers**
- **Calling on government to address of safety in technology education shops**
- **Where do we go from here?**

Personal Health & Safety Program

- **Make a list of risks in your shop** (areas or items of concern)
- **Ask site com to have a visit of your shop** (during instructional time with personnel familiar with the shop process)
- **Invite WorkSafe to look at your facilities when you are teaching and offer suggestions**
- **Deal with industry reps for advise** (ask the experts)
- **Make sure you are an example of safety when you are working**

Present Situation

Since 2007 – 2011

- 705 reported injuries in industrial ed classes in B.C.
- 24 from the Chilliwack school district
- 17 of which occurred in the last year
- This list does not include “incidents” (near misses)