

ACTIVITY

module

1

What's the problem?

Link to VELS

Physical, Personal and Social Learning

- Interpersonal development
- Personal learning

Information and Communications Technology

- ICT for visualising thinking
- ICT for communicating

IN THE CLASSROOM

Preparation

- Students will need to have access to the Internet and slideshow presentation software to enable them to report the information they collect.

Investigate the road trauma problem using the Internet.

In small groups or pairs, direct students to undertake an online search to determine the extent to which road safety is a major public health problem.

Direct the class to find information about the size and cost of the road trauma problem in Australia. Good sources of information are:

- Community Road Safety Councils (www.roadsafe.org.au)
- Australian Transport Safety Bureau (www.atsb.gov.au)
- Transport Accident Commission (www.tacsafety.com.au)
- VicRoads (www.vicroads.vic.gov.au)
- Australian Bureau of Statistics (www.abs.gov.au)
- Australian Institute of Health and Welfare (www.aihw.gov.au).

Groups could investigate the road trauma problem from a number of perspectives – such as the numbers killed, seriously injured or injured; gender and age of crash victims; type of road users mostly involved; time, day, and month when crashes mostly occur; and/or a comparison with other public health issues. The investigation could also direct students to make an international comparison. Good sources of international information are:

- World Health Organisation (www.who.int/violence_injury_prevention/en/)
- OECD (www.oecd.org)
- Austroads (www.austroads.com.au/).

Report and present information about road trauma.

Groups should develop a slideshow presentation on their findings and report back to the class. Their report needs to include graphs and graphics and suggestions for getting this information out to other people who need to know about this situation.

To debrief the activity, ask and discuss with students how the information could apply to them and their travel.

Build an understanding of contributing factors to road crashes.

Tell students that when road crashes are investigated, it is usually found that whilst a single factor may contribute to a crash occurring, in the majority of cases it is the combination of a number of factors that causes a crash. It is suggested that about 95 per cent of motor vehicle crashes have human factors alone or in combination with one or more other factors as major contributors.

Ask and discuss:

- What do we mean by 'factor'? (contributing cause)
- What are the factors that contribute to a road crash?
 - **Human factors** – the behaviour of the people involved – such as distraction (mobile phones, music, friends); tiredness (resulting in poor concentration); illness; lateness (resulting in speeding); disregard for road rules; choosing the unsafe option (such as crossing between moving vehicles)
 - **Vehicle factors** – features of the vehicle involved – such as poorly maintained vehicle; lack of modern safety features (such as ABS brakes)
 - **Environmental factors** – features of the road and surrounding area – such as the surface and condition of the road and roadside; poor visibility as a result of heavy rain or bright sunshine; wet roads needing people to travel slower so they have more time to come to a stop.
- Which of these factors can we do something about to reduce road trauma?

In small groups have students adopt the roles of crash investigators to analyse contributing factors in a crash.

Discuss the circumstances of a typical crash or use the crash scenario below:

Jason was riding his bicycle down to the local swimming pool with some of his friends. He wasn't wearing a helmet and knew that his front brake wasn't working as well as it could, but he had kept forgetting to get it fixed. To get to the pool they could either ride along quiet back streets or take a short cut and ride through the busy Main Street shopping centre. They took the shortcut and rode along Main Street. Jason had been left behind by his friends and was pedalling hard to catch up when a car suddenly pulled out from a parking spot in front of him. He tried to brake, but couldn't stop in time. He crashed into the car

and was thrown heavily onto the road. He received head injuries, a broken arm and cuts.

The investigators are to take into account the factors discussed earlier (human, vehicle and environment). Not every crash has all three categories of contributing factors, but almost always, human factors are dominant. Ask them to consider:

- What happened?
- Why?
- What effect/impact might the crash have on the victim(s), person at fault, family, observer(s) and others who knew the killed, seriously injured or injured of the crash?
- What could be done differently so that a similar crash doesn't occur again in the future?

To help organise their thinking and investigation, have students use the following matrix.

	Human	Vehicle	Environment
Before the crash what occurred?			
During the crash what happened?			
After the crash what could be done differently?			

After completing the investigation, students should write a report about the crash and make recommendations to avoid a similar event in the future.

Further investigate human factors in road crashes.

To reinforce the contribution that human factors make to road crashes, divide the class into 'human factor groups'. Have them investigate the contribution people's decisions make to road crashes in general. The groups could be: mobile phones, alcohol, drugs, fatigue, speeding, distractions (such as passengers).

Students should investigate why this is a problem or issue and find out what is already being done by road safety agencies to address this. The following websites will prove useful:

- Australian Transport Safety Bureau (www.atsb.gov.au)
- arrive alive! (www.arrivealive.vic.gov.au)
- Transport Accident Commission (www.tacsafety.com.au)
- VicRoads (www.vicroads.vic.gov.au)

They should also suggest their own ideas for solutions or strategies that could be implemented by individuals or the general community to address it.

Have each group report their findings back to the rest of the class and discuss.