



Teacher Resource Toolkit

February 2018



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Road Smart Teacher Toolkit

Lesson Plan 1 – Crashes and survival: How speed affects severity

February 2018

Lesson 1 – Crashes and survival: How speed affects severity

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Student Outcomes

In this interactive lesson, students will build and demonstrate their knowledge of the effect of kinetic energy in a crash.

By the end of this lesson, students will be able to:

- Describe what occurs when a moving vehicle hits stationary and moving objects
- Describe the relationship between the speed of a vehicle and the severity of a crash
- Describe the effect of a crash on the human body for different types of road users

Suggested Timing

45 - 55 min

Materials and Preparation

- Devices with internet access for each group of students so they can access the relevant online materials referenced in this lesson plan.
- A computer and projector, and/or digital whiteboard for the teacher to show the opening video.
- Print-outs, for each group, of *Resource 2: Meet Graham Worksheet* from this document (and writing implements to complete them with).

Lesson Overview and Background Information

In this interactive and engaging lesson, students will explore the effects of kinetic energy in a crash. Students first analyse, as a class, a video showing the effect of speed on stopping distance. Students are then introduced to “Graham”, an interactive lifelike sculpture created by the TAC and the Monash University Accident Research Centre. Graham is a model of a human body engineered to be able to withstand the forces in a crash.

Graham is designed to show the scale of forces acting on our bodies in a crash, and the *vulnerability* of our bodies (because we are not built to withstand such forces). Students use enquiry-based learning to complete activities that deepen their understanding of the effect of kinetic energy on human bodies and the effects of crashes on different types of road users.

Students end the lesson by reflecting on their own behaviour and making personal commitments for how they can be safer road users.

Evidence Base

Speed is a major factor in road crashes, especially fatal ones. It is particularly a factor for young drivers, for whom over-confidence and inexperience often lead to disastrous results.

Coaching Tip

Clearly explain that *only* if we were built like Graham could we withstand the forces of a crash.

Curriculum Mapping

Science

Content Description

- The description and explanation of the motion of objects involves the interaction of forces and the exchange of energy and can be described and predicted using the laws of physics (VCSSU133)

Achievement Standard (extract only)

- By the end of year 10 students ...give both qualitative and quantitative explanations of the relationships between distance, speed, acceleration, mass and force to predict and explain motion.

Lesson part 2 – Group research activity – “Meet Graham: the great survivor” (35-45 minutes)

1. Play the 2-minute ‘Meet Graham’ video
<http://www.meetgraham.com.au/> (click on the ‘tell me more’ button to play the video)
2. Describe the intent of the Meet Graham project to the class. More information about this project can be found in the ‘lesson background’ above.
3. Split the class up into groups of between 2 to 4 students, with a maximum of eight groups. (Note that each group will require access to an internet enabled device).
4. Distribute a copy of the *Meet Graham worksheet (Resource 2)* to each group. Assign each group *at least* two body parts from the *Body Parts List (Resource 1)*. Note that it is okay (in fact, preferable) for multiple groups to be assigned some of the same body parts to generate discussion later.
5. Make sure students understand each question before they begin the activity. Instruct students to navigate to the *Meet Graham* website (www.meetgraham.com.au/view-graham), and explore the ‘View Graham’ section to find the answers to the questions on their worksheet, focusing on their assigned body parts.
6. Give students roughly 15 minutes (they may require additional time if they have more than two body parts) to research the information they need to answer the questions on the worksheet. It may be useful for you to circulate amongst groups while they are researching, to answer questions and assist them in their work.
 - a. Roughly halfway through the allocated research time, it may be worthwhile advising students to move onto their next body part, if they are still working on their first part.
7. When students have completed their worksheets (or time has run out), bring the groups back together. Working *body part* by body part, have groups discuss the answers to the questions and what they learned. Focus especially on answers to the third question, which relates to how people could change behaviour, vehicles and utilise safety features to decrease risk.

Part 3 – Conclusion (5 minutes)

1. Ask students to reflect for 60 seconds individually on the most important thing they learned in today’s lesson, and come up with one way they could be a safer road user.
2. Ask students to share their reflections with the class, where appropriate.

Resource 1: Body parts list

There are **eight** body parts that can be allocated to the groups. Each body part should be covered by at least one group, ensuring that all body parts are assigned.

They can be explored at www.meetgraham.com/view-graham.

The body parts are:

- Brain
- Skull
- Face
- Neck
- Rib Cage
- Skin
- Knees
- Legs & Feet

Remember that it is okay (in fact, preferable) that each group is given at least two body parts, *and* that multiple groups are given some of the same parts, to stimulate discussion and comparison later in the activity.

Resource 2: Meet Graham worksheet

| Body Part | What is the <u>risk</u> associated with this body part? Why is it particularly <u>vulnerable</u> in a crash? | What <u>changes</u> did the designers of Graham have to make to this body part to make it <u>less vulnerable</u> in a crash? | Imagine - how could you <u>change driver behaviour</u> , <u>vehicle design</u> , or the <u>road environment</u> to make this body part less exposed in real life? |
|-----------|--|--|---|
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Resource 2: Meet Graham worksheet

| Body Part | What is the <u>risk</u> associated with this body part? Why is it <u>particularly vulnerable</u> in a crash? | What <u>changes</u> did the designers of Graham have to make to this body part to make it <u>less vulnerable</u> in a crash? | Imagine - how could you <u>change driver behaviour, vehicle design, or the road environment</u> to make this body part less exposed in real life? |
|--|---|---|---|
| <ul style="list-style-type: none"> Brain Skull | <ul style="list-style-type: none"> The brain is one of the major organs in the body. It doesn't have much internal support to help cushion it from forces that could damage neural connections and deform the structure of the brain. The skull protects the brain. Depending on the amount of force the skull can fracture. | <ul style="list-style-type: none"> His skull is a lot bigger, with more cerebrospinal fluid and ligaments to brace the brain when a collision occurs. Graham's skull absorbs more of the impact. The structure of his skull is larger with inbuilt crumple zones to absorb any impact forces. The crumple zones aid in slowing down the momentum of his head as it moves forward on impact and increases his skull's ability to stop the force from continuing through to damage his brain. | <p>Four main behaviours can be applied to all of these body parts:</p> <ul style="list-style-type: none"> Vehicle positioning Speed management Driver observation Proper seatbelt use |
| <ul style="list-style-type: none"> Face Neck | <ul style="list-style-type: none"> Injuries to the face are commonly caused by impact with the steering wheel, dashboard, windshield and even shattered glass. These can range from minor scrapes to serious cuts and fractures. There is not enough strength in the neck to stop the head from jolting forward in a crash. The neck is placed under more pressure than its structure can manage. | <ul style="list-style-type: none"> His nose is reduced and his ears are protected by the larger structure of his skull and neck. Fatty tissue has been added around protruding areas like his cheekbones to help further absorb the energy on impact. Removing the neck has sacrificed his mobility to make his head more resilient to injury in a crash. The ribs, a form of protection, have been extended upwards to reach his skull. | |

| | | | |
|--|---|--|--|
| <ul style="list-style-type: none"> • Rib Cage • Skin | <ul style="list-style-type: none"> • Car seatbelts are designed to use the strength of the ribs. The seatbelt rests across your ribs and sternum and across your pelvis. It loads the centre of your chest, spreading the force over the ribcage until the ribs break when the force becomes too great. • Lacerations are lasting reminders for people injured in car crashes. Skin can be stripped down to the flesh, causing nerve damage and pain. | <ul style="list-style-type: none"> • Stronger ribs to give him better protection. Large barrel-like ribs to withstand greater impacts. Airbag like sacks placed between each of Graham's ribs. The airbags provide an inbuilt added layer of protection for the heart and other vital organs. • Graham has thicker and tougher skin to shield and reduce abrasions and road rash. | |
| <ul style="list-style-type: none"> • Knees • Legs & Feet | <ul style="list-style-type: none"> • The knee is built to bend in one direction, the knee can break if forced into unintended positions. • Injuries to the legs, feet and ankles can cause long-term debilitation because we are so reliant on them for everyday movement. | <ul style="list-style-type: none"> • His knee joints are fortified with extra tendons that give added flexibility and allow his knees to bend in other ways. • Strong, hoof-like legs with added joints allow him to jump out of the way quickly in a "spring-loaded" fashion. The extra joints in Graham's legs give his lower limbs added flexibility to reduce the impact force placed on the tibia in a crash. | |

Resource 3: Safety features explained

| Injury Reduction Safety features <i>Please note that manufacturers may use different terminology to describe these features</i> | Description |
|---|---|
| Pedestrian Friendly Bonnet Design | This feature reduces injury to a pedestrian if hit in a crash, whilst maintaining structural integrity. |
| Seatbelts | For drivers and front-seat passengers, using a lap and shoulder belt reduces the risk of fatal injury by 60 percent in an SUV, van or ute and by 45 percent in a car. |
| Airbags | Airbags provide a cushion of air that protects a person from striking other parts of the car. They may be located in the steering wheel, in front of the passenger, in the seats, along the top sides of vehicles and near the knees. |
| Side-Impact Protection System | By having a reinforced energy absorbing honeycomb materials inside the vehicle doors, force is widely distributed across the vehicle. This helps to protect against injury in a side collision. |
| Head Rests | Attached to the top of a seat, this safety feature reduces whiplash or serious neck and spinal injury. |
| Crumple Zones | Crumple zones are designed to absorb the energy from the impact of a crash. By absorbing the energy the crumpling prevents the energy traveling through the car. |

| Crash Avoidance Safety Features <i>Please note that manufacturers may use different terminology to describe these features</i> | Description |
|---|--|
| Lane-Keep Assist | Technology that detects if a car is drifting in its lane or out of the lane. It provides alerts and warnings when this occurs which helps to avoid or mitigate a crash. Some versions will proactively steer the car back into the lane. |
| Active Cruise Control | Improved cruise control that include warnings or assistance such as automatic braking to adjust the vehicle speed by detecting the distance and speed of the preceding vehicle and maintains an appropriate following distance. |
| Antilock Brake System (ABS) | Detects panic braking when sudden and forceful movement is applied to the brake pedal. When the system recognises sudden braking, it will add additional pressure to the brake. This allows the wheels on a motor vehicle to maintain tractive contact with the road surface according to driver inputs while braking, preventing the wheels from locking up (ceasing rotation) and avoiding uncontrolled skidding. |
| Electronic Stability Control (ESC) | ESC is an extension of antilock brake technology that helps drivers maintain control of their vehicles on curves and slippery roads, and hence prevent skidding. ESC becomes active when a driver loses control of their car. |
| Blind-Spot Warnings | Alarm that alerts the driver if there is something in their blind spot. The warnings administered range across different technologies and can be visual, audible and/or tactile to alert the driver that it is unsafe to change lanes. |
| Driver Fatigue Monitoring | Technology that provides warnings when it detects a driver falling asleep. This may help avoid or mitigate a crash. |
| Auto Emergency Braking (AEB) | <p>AEB is a feature that alerts a driver to an imminent crash and helps them use the maximum braking capacity of the vehicle. AEB will independently brake if the situation becomes critical and no human response is made. AEB comes in three categories:</p> <ol style="list-style-type: none"> 1. low speed system – works on city streets to detect other vehicles in front of the driver's car to prevent crashes and non-life threatening injuries such as whiplash 2. higher speed system – scans up to 200 metres ahead using long range radar at higher speeds 3. pedestrian system – detects pedestrian movement in relation to the path of the vehicle to determine the risk of collision. |



Road Smart Teacher Toolkit

Lesson Plan 2 – Saving lives through safety:
Picking the safest car you can

February 2018

Lesson 2 – Saving lives through safety: picking the safest car you can

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Student Outcomes

In this interactive lesson, students will deepen their understanding of the importance of safety features in cars, and how to pick a safer car.

By the end of this lesson, students will be able to:

- Describe the methods for assessing vehicle safety in Australia
- Identify sources of information about safer vehicles available in Australia
- Identify different types of road users
- Describe vehicle safety features designed to protect vehicle occupants and other road users in a crash and to prevent crashes

Suggested Timing

40 - 50 min

Materials and Preparation

- Devices with internet access for each group of students so they can access the relevant online materials referenced in this lesson plan.
- A computer and projector, and/or digital whiteboard for the teacher to show the opening video.
- Print-outs, for each group, of Resource 2: Car Safety Features Template from this document (and writing implements to complete them with).

Lesson Description and Background

In this interactive and engaging lesson, students will be introduced to and explore the different types of safety features in cars.

Students first watch a video introducing the concept of vehicle safety features.

Students then work in teams to brainstorm different safety features of cars using a series of stimulus materials. They supplement their own brainstorm with internet research to discover more about the types and importance of vehicle safety features.

Students use the knowledge gained through this enquiry to complete a problem-based learning activity where they must find and assess a suitable vehicle for purchase within given budgets, using real-world examples and channels.

Students end the lesson by discussing and debating a provocative statement on road safety, and reflecting on the importance of the decisions they make every day about vehicle safety.

Evidence Base

Research suggests that if everyone started driving a five-star safety rated vehicle, road trauma could be reduced by up to half. Picking safe vehicles makes a major difference to road safety.

Coaching Tip

Explicitly explain the difference between crash avoidance safety features and crash protection safety features.

Curriculum Mapping

Science

Content Description

- The values and needs of contemporary society can influence the focus of scientific research (VCSSU116)

Achievement Standard (extract only)

- By the end of Level 10 students ... predict how future applications of science and technology may affect people's lives.

Lesson Part 1 – Introduction (5 minutes)

1. Show students the TAC video *How safe is your car?*
<https://www.youtube.com/watch?v=yinmwp0brpc>
2. Ask students what safety features were named in the advertisement, and if they can define them (further information and answers in *Resource 1*, below).
3. Explain to students that in this lesson they will be learning about the safety features of various cars, and how to pick the safest car that they can afford – which could save their life.

Lesson Part 2 – Group brainstorm and research – “What are these safety features?” (10-15 minutes)

1. Divide students into groups of two or three.
2. Distribute the *Car Safety Features template (Resource 2)* to each group. Ask students to think of as many car safety features as they can, and mark them on the template. It is not important that they mark them in the correct position – the template is only there for inspiration. Remind them to think of *internal* safety features, too (like seatbelts). They must both name the safety feature *and* briefly explain why it makes the car safer. Different safety features have different functions – some prevent crashes, some protect the vehicle occupants and road users. After students have attempted to brainstorm in groups, you may direct them to use the internet to learn additional safety features. Visit <http://www.howsafeisyourcar.com.au/Safety-Features/Safety-Features-List/> for more info.
A sample filled-in template is included as Resource 3 in this document.
3. Ask each group to share their responses with the class. If desired, you can project an image of the *Car Safety Features template* during the class discussion, and fill in every answer suggested by students on this template.

Lesson Part 3 – Group-based challenge – “Safety... on a budget!” (20-30 minutes)

1. In the same groups, ask each group to imagine that they have \$3,000, \$5,000 and \$10,000 to spend on a first car.
2. Ask students to list all features that they want their first car to have (this can include both safety and non-safety related features). Encourage students to think about the features they actually want – it's okay to talk about things that really matter to some people, like 'looking cool', in a non-judgemental way, for the purpose of this exercise.
3. Without directing students to a specific website, challenge them to take 10 minutes to find some cars that fit their criteria and budgets online. (If students are struggling to find a place to start, direct them to www.carsales.com.au as a starting place, although they will visit a different site later in the activity).
4. Get students to rank the cars that meet their criteria in order of preference.
5. Ask students how they will assess whether or not their preferred car is safe. Introduce the concept of the Australasian New Car Assessment Program (ANCAP) and the Used Car Safety Rating (UCSR) (this is explained in detail in Lesson Resource 4 and 5).
6. Direct students to howsafeisyourfirstcar.com.au and review the video on the main page (you may wish to play this to the entire class, or have students view it on their own devices). The video can be found at https://youtu.be/ww_MSVsj2sc
7. Ask students to get the safety ratings for the cars that they had previously identified, and re-rank them using this new information.

Lesson Part 4 – Conclusion (5 minutes)

1. Write the following statement on the board:
“If you can’t afford a safe vehicle, you can’t afford a vehicle!”
2. Ask students to discuss this statement in the context of what they have learned in this lesson.

Resource 1: Further information and answers

The **two** safety features identified in the TAC commercial are:

1. ESC (electronic stability control)
2. Side head-protecting airbags (also called 'curtain airbags')

Further details about ESC:

According to TAC's www.howsafeisyourcar.com.au, Electronic Stability Control (ESC) helps drivers to avoid crashes by reducing the danger of skidding, or losing control as a result of over-steering. ESC becomes active when a driver loses control of their car. It uses computer controlled technology to apply individual brakes and help bring the car safely back on track, without the danger of fish-tailing.

Australian research shows that ESC reduces the risk of:

- Single car crashes by 25%
- Single 4WD crashes by 51%
- Single car crashes in which the driver was injured by 28%
- Single 4WD crashes in which the driver was injured by 66%

It has been estimated that no other active safety device has such potential to reduce single car crashes. In 2016, 41 lives lost on Victorian roads could have been saved if the vehicle involved was fitted with ESC.

Please note that different manufacturers have different names for this functionality.

See more at www.howsafeisyourcar.com.au/Electronic-Stability-Control/

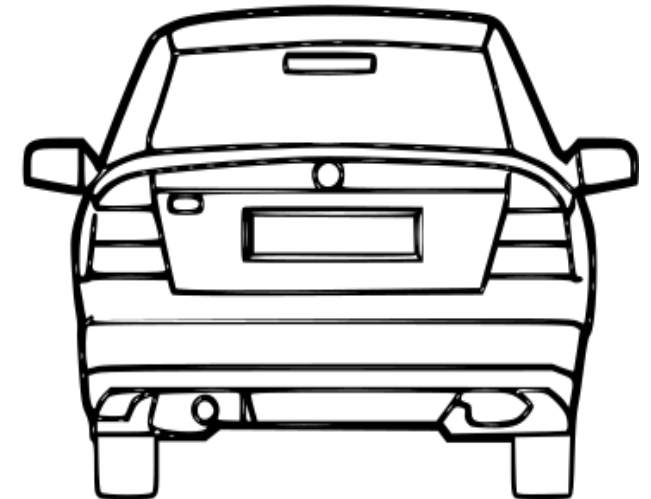
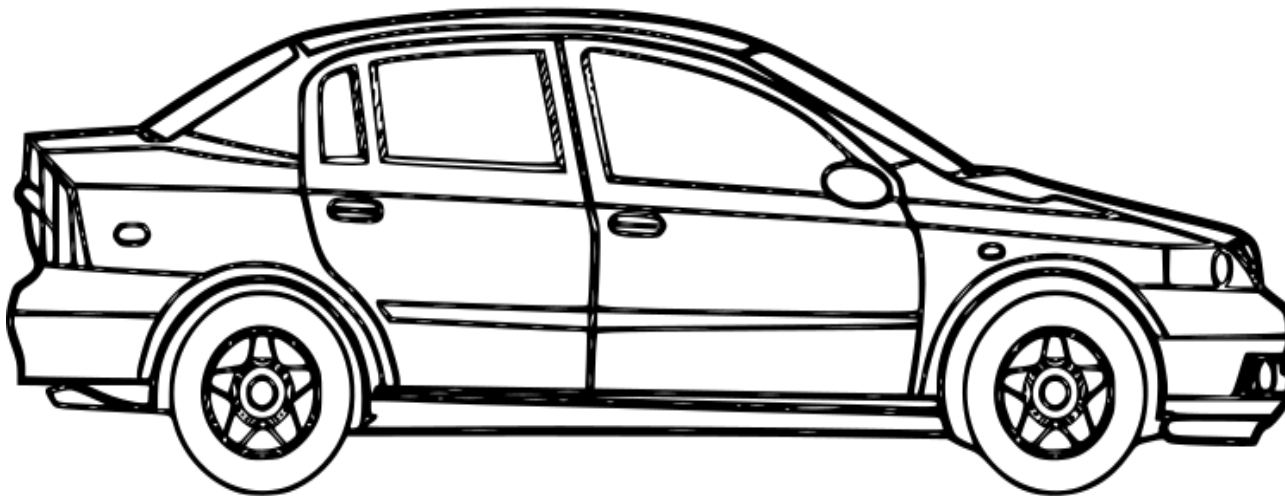
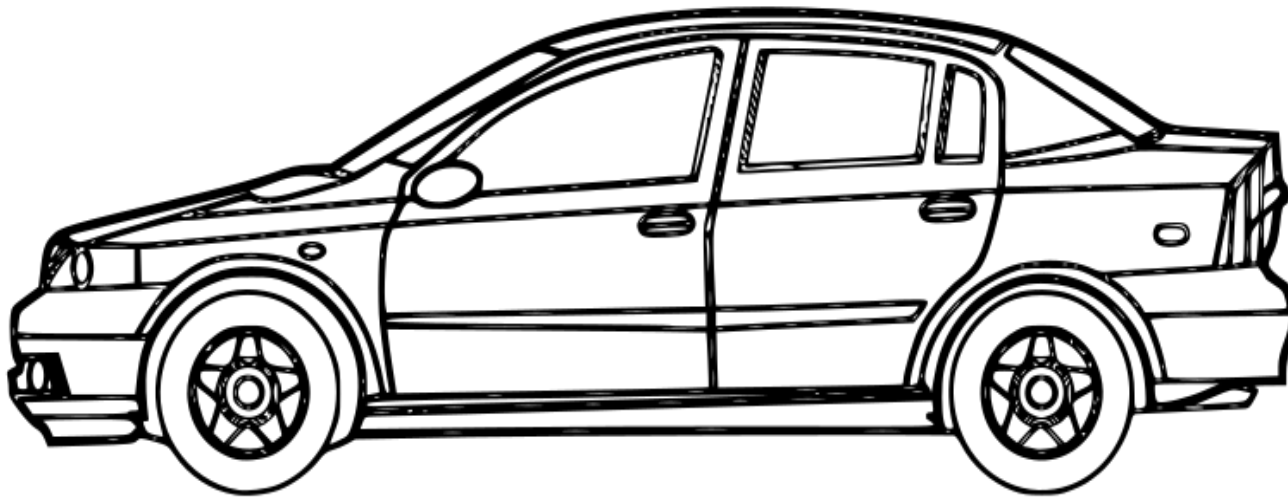
Further details about curtain airbags:

According to TAC's www.howsafeisyourcar.com.au, curtain airbags are designed to protect the driver's and passenger's heads in a crash. The curtain airbag activates instantaneously in the event of a side impact crash, deploying from the top of the door rails above the side window. They form a cushion between the driver or passenger and the window and stay in place if the car rolls over to protect their head.

Research conducted in the USA estimates that head protecting airbags can reduce driver deaths in the event of a side impact crash by close to 40%. Without them, in a side impact crash there is little to protect your head from striking the side of the car or rigid objects like trees or poles.

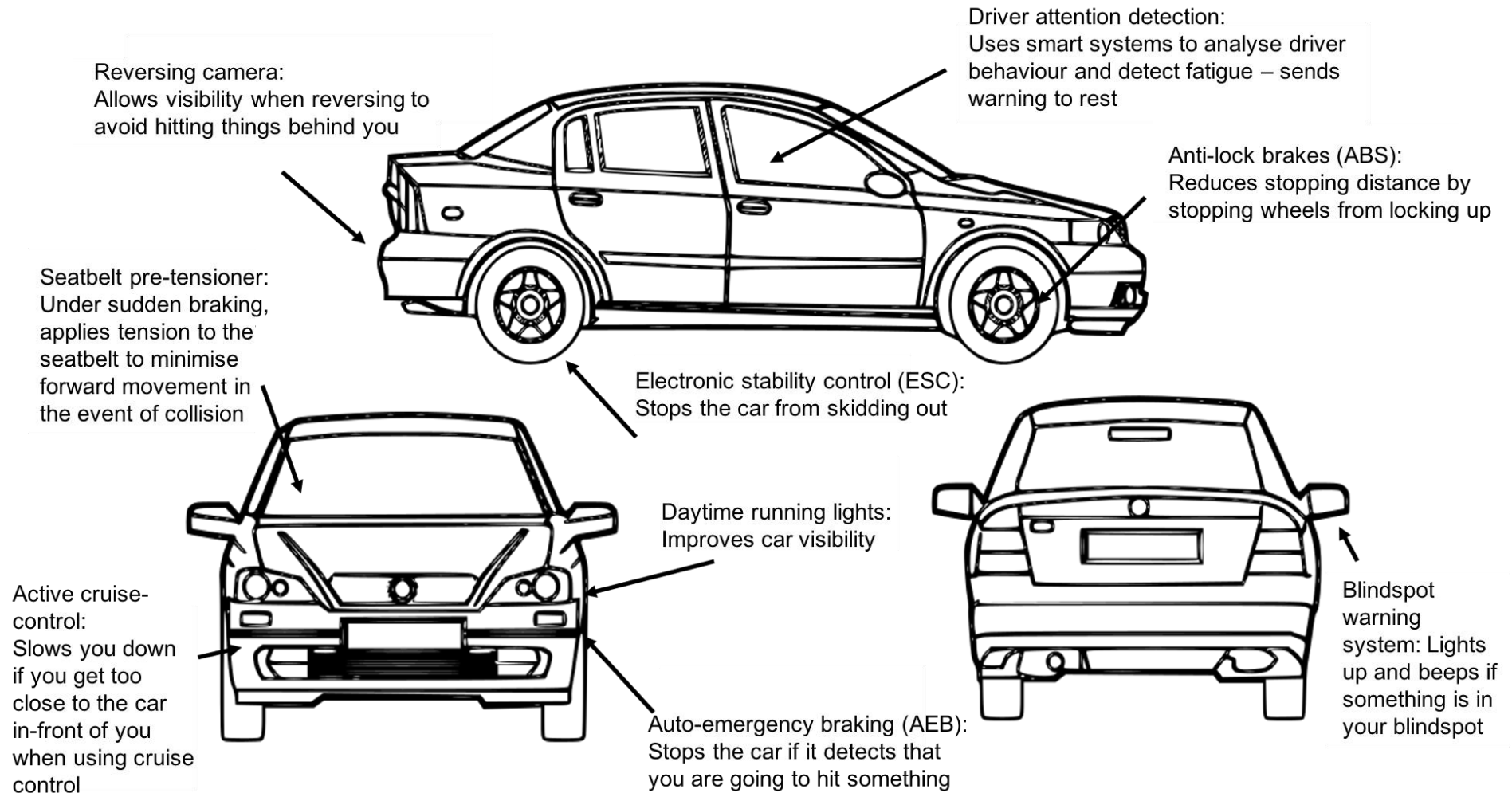
See more at <http://www.howsafeisyourcar.com.au/Curtain-Airbags/>

Resource 2: Car safety features template



Resource 3: Sample filled-in car safety template

Note for teachers: the below image is a sample of what a filled-in student template may look like. This is not a comprehensive list of features. For a detailed list and explanation of safety features, visit: www.howsafeisyourcar.com.au/Safety-Features/Safety-Features-List/



Resource 4: ANCAP Safety Ratings

ANCAP (Australasian New Car Assessment Program) is the leading independent vehicle safety advocate.

ANCAP uses a star system to rate the safety of vehicles.

The following information is taken from <http://www.howsafeisyourcar.com.au/Rating-Process/What-is-ANCAP>, and explains more about the system – for more details, visit this link.

“ANCAP provides Australian and New Zealand consumers with independent vehicle safety information through the publication of ANCAP safety ratings. ANCAP safety ratings take into account the level of occupant and pedestrian protection provided by new cars through the conduct of physical crash tests and the assessment of collision avoidance technologies.

The more stars, the better the vehicle performed in ANCAP tests. To achieve the maximum 5 star ANCAP safety rating, a vehicle must achieve the highest standards in all tests and feature advanced safety assist technologies.

Since 1992, ANCAP has published crash test results for a wide range of new passenger and light commercial vehicle makes, models and variants sold in Australia and New Zealand.

ANCAP is supported by all Australian and New Zealand motoring clubs, the Australian Government, the New Zealand Government, Australian state and territory governments, the Victorian Transport Accident Commission, NRMA Insurance and the FIA Foundation.

ANCAP buys and tests cars that are available to Australian and New Zealand consumers. Car manufacturers can examine the test cars before and after tests, and view the tests and results.

ANCAP uses a range of internationally recognised crash tests, undertaken by independent specialist laboratories.

In each of the physical tests, dummies are used to scientifically measure the various forces on occupants in the crash. The data gathered is then assessed in conjunction with a physical assessment of the vehicle, and a score determined for each test. In addition, vehicles must be fitted with certain safety features and safety assist technologies. These requirements are then assessed alongside the physical crash test scores with an overall score translated into an ANCAP safety rating of between 1 to 5 stars.

The higher the score and the greater the safety inclusions, the more stars.”

Resource 5: Used Car Safety Ratings (UCSR)

Used Car safety ratings is a resource that displays results of research conducted by Monash University Accident Research Centre around car crashes where someone has been seriously injured or killed.

The following information is taken from <http://www.howsafeisyourcar.com.au/Rating-Process/What-is-UCSR/>, and explains more about the system – for more details, visit the link listed here.

“The [Vehicle Safety Research Group](#) (VSRG) engages Monash University Accident Research Centre to estimate and develop the UCSR. The data system created through estimating these ratings is further used to research a range of vehicle safety issues to inform future policy.

The ratings system covers both the role of the vehicle in determining injury outcomes (secondary safety) and the contribution of vehicle design and specification to crash risk (primary safety). Secondary safety includes driver protection (crashworthiness) and protection for other road users (aggressivity). Driver protection ratings indicate the relative safety of vehicles in preventing severe injury to their own drivers in the event of a crash whilst protection for other road user ratings indicate how well the vehicle protects other road users with which they collide.

HowSafeIsYourCar.com.au displays the driver protection rating and protection for other road user’s ratings. The ratings reflect safety performance related to vehicle design alone by controlling for a range of non-vehicle related factors known to affect injury outcome, such as, sex, age, speed limit and number of vehicles involved. The ratings were also adjusted for the type of crash and road user combination.

Vehicles can also be awarded a “safe pick”. These vehicles provide excellent protection to their own driver and cause less serious injury to other road users.

With the progression of vehicle safety, newer vehicles are usually safer than older ones. Vehicles are now being fitted with features that can help avoid a crash or reduce the severity if a crash does occur.”



Road Smart Teacher Toolkit

Lesson Plan 3 – Saving lives through safety: Vehicle safety features reducing risk

February 2018

Lesson 3 – Saving lives through safety: Vehicle safety features reducing risk

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Student Outcomes

In this interactive lesson, students will deepen their understanding of the importance of safety features in cars, and learn how to pick a safer car.

By the end of this lesson, students will be able to:

- Describe vehicle safety features designed to protect people in a crash
- Describe the methods for assessing vehicle safety in Australia
- Identify sources of information about safer vehicles available in Australia
- Identify different types of road users
- Describe vehicle safety features designed to protect vehicle occupants and other road users in a crash and to prevent crashes
- Describe how different types of road users can manage their risk

Suggested Timing

35 - 50 min

Materials and Preparation

- A computer and projector, and/or digital whiteboard for the teacher to show the opening video.
- Print-outs, for each group, of *Resource 1: Safety Features Worksheet* and *Resource 4: Crash Analysis Worksheet* (noting that this resource runs over multiple pages and contains four images, total) from this document (and writing implements to complete them with).

Lesson Description and Background

This lesson builds on the previous lesson ("Saving Lives Through Safety: Picking the Safest Car You Can"); however, it can also be delivered as a stand-alone lesson.

In this interactive and engaging lesson, students will be introduced to and explore how different types of safety features work in different ways to reduce crash risk, and what this means for them.

Students firstly watch a striking video which shows how older versus newer cars can have widely varying levels of crash risk. They then complete a group-based activity to classify and organise safety features of cars into different categories, and understand how each works differently to keep people safe.

Students use the knowledge gained through this activity to undertake an engaging, interactive, scenario-based learning activity where they analyse different crash situations and how certain safety features could lower their risk.

Students end the lesson by discussing and debating a provocative statement on road safety, and reflecting on the importance of the decisions they make every day about vehicle safety.

Evidence Base

Research suggests that if everyone started driving a five-star safety rated vehicle, the road trauma could be reduced by up to half. Picking safe vehicles make a major difference to road safety.

Coaching Tip

Remind students that just because a car is second hand it doesn't mean that it has to be dangerous or unsafe.

Curriculum Mapping

Science

Content Description

- The values and needs of contemporary society can influence the focus of scientific research (VCSSU116)

Achievement Standard (excerpt only)

- By the end of year 10 students... predict how future applications of science and technology may affect people's lives.

Lesson Part 1 – Introduction (5 minutes)

1. Show students the video *Crash test: old versus new cars*

You can find it [here](#), and we suggest you test it prior to delivering the lesson.

Note: there is a version of this video with explanatory narration located on the news.com.au site. It may be preferable to play this video, however this website may not be compatible with all systems.

If the above link does not work there is a version without commentary found at the below link.

<https://www.youtube.com/watch?v=azrpgvbOMq4>

2. Ask students to consider whether the pros of buying an old car outweigh the possible safety risks associated with it. Remind students that just because a car is second hand it doesn't mean that it has to be dangerous or unsafe.

Lesson Part 2 – Group activity – “How does this feature work?” (10-15 minutes)

1. Divide students into groups of between two to four students.
2. Give students the Safety Features (Resource 1) worksheet and explain that safety features can be separated into two groups: (1) crash avoidance features, that help you avoid being in a crash; and (2) injury protection features, that provide greater levels of injury protection to drivers and passengers who are involved in car crashes.
3. Ask students in their groups to categorise the features listed on their worksheet into crash avoidance and injury protection features. It may be necessary for students to ask for help or to research certain features they do not understand. This is a good opportunity for discussion.
4. Ask students to rank the safety features from most important to least important, based on their opinion, and provide reasons for their answers.
5. Extension activity – Allow students to remain in their groups. Ask each group to discuss how cars could be made safer in the future. After the group discussion ask for one volunteer to share one of the safety features they want to see implemented in future vehicles.

Lesson Part 3 – Scenario-based learning – “Avoid that crash!” (15-20 minutes)

6. Distribute the Crash Analysis (Resource 3) worksheet to the groups, noting this resource runs over multiple pages, and includes four images, total. **Note: it is important to remember that some students may have been personally affected by road trauma and as such, this can be a sensitive topic. For this reason, we have selected examples in which no fatality occurred. This can be mentioned to students.**
7. Give students around 10 minutes to complete the worksheet, by identifying how crash avoidance or crash prevention features may have either prevented this crash, or reduced the likelihood of injury for those involved.
8. When students have completed the exercise, ask groups to share their answers with the class. It is not necessary for every group to share every answer.
9. At the conclusion of the discussion, ask students to consider each crash, and identify things that the driver(s) (including other road users and passengers) could have done to avoid the crash. Make the point that safer drivers and safer cars together make the road a safer place.

Lesson Part 4 – Conclusion (5-10 minutes)

10. Write the following statement on the board:
“Young drivers could use the family vehicle and parents use the “learner” vehicle”
Highlight to students that young drivers are the most likely category of driver to be involved in a serious crash. Traditionally we have seen parents buy a cheaper vehicle for the learner. The advice from road safety experts is that the family vehicle will have more safety features that could be of benefit for the learner. While it is natural for students to want a vehicle as soon as possible, it is more important to get the right vehicle. Remind students that they have coped without a personal vehicle and they may have to wait a little longer to get the right (safe) one.
11. Ask students to discuss this statement in the context of what they have learned in this lesson.

Resource 1A: Safety features

Directions: Correctly categorise each safety feature in the below list of 13 features as either a **crash avoidance feature** (which makes a crash less likely) or an **injury protection feature** (which reduces injury in a crash). Write the feature in the appropriate column of the table below.

Anti-lock Brake System (ABS) Seat Belts Airbags Electronic Stability Control (ESC) Head Rests
Lane-Keep Assist Active Cruise Control Side-Impact Protection System Crumple Zones Blind Spot Warnings
Pedestrian Friendly Bonnet Design Driver Fatigue Monitoring Auto Emergency Braking (AEB) Intelligent Speed Adaptation (ISA)

| Crash Avoidance Features (Features that make a crash less likely) | Injury Protection Features (Features that reduce injury to road users in a crash) |
|--|--|
| | |

Resource 1B: Safety features explained

| Safety Feature | Description |
|------------------------------------|---|
| Anti-lock brake System (ABS) | Detects panic braking when sudden and forceful movement is applied to the brake pedal. When the system recognises sudden braking, it will add additional pressure to the brake. This allows the wheels on a motor vehicle to maintain tractive contact with the road surface according to driver inputs while braking, preventing the wheels from locking up (ceasing rotation) and avoiding uncontrolled skidding. |
| Seatbelts | For drivers and front-seat passengers, using a lap and shoulder belt reduces the risk of fatal injury by 60 percent in an SUV, van or ute and by 45 percent in a car. |
| Airbags | Airbags provide crucial cushioning for people during a crash. |
| Electronic Stability Control (ESC) | ESC is an extension of antilock brake technology that helps drivers maintain control of their vehicles on curves and slippery roads, and hence prevent skidding. ESC becomes active when a driver loses control of their car. |
| Head Rests | Attached to the top of a seat this safety feature reduces whiplash or serious neck and spinal injury. |
| Lane-Keep Assist | Technology that detects if a car is drifting in its lane. It provides alerts and warnings to help avoid or mitigate a crash. |
| Active Cruise Control | Improved cruise control that include warnings or assistance such as automatic braking to adjust the vehicle speed by detecting the distance and speed of the preceding vehicle and maintains an appropriate following distance. |
| Side-Impact Protection System | By having a reinforced energy absorbing honeycomb materials inside the doors, force is widely distributed across the vehicle. Resulting in less directional force being applied to a specific area. |
| Crumple Zones | Crumple zones are designed to absorb the energy from the impact of a crash. By absorbing the energy the crumpling prevents the energy traveling through the car. |
| Pedestrian Friendly Bonnet Design | These features reduce injury to the pedestrians whilst maintaining structural integrity. |
| Blind Spot Warnings | Alarm that alerts the driver if there is something in their blind spot. |
| Driver Fatigue Monitoring | Technology that provides warnings when it detects a driver falling asleep. This may help avoid or mitigate a crash. |

| | |
|------------------------------|--|
| Auto emergency braking (AEB) | <p>AEB is a feature that alerts a driver to an imminent crash and helps them use the maximum braking capacity of the vehicle. AEB will independently brake if the situation becomes critical and no human response is made. AEB comes in three categories:</p> <ol style="list-style-type: none"> 1. low speed system – works on city streets to detect other vehicles in front of the driver’s car to prevent crashes and non-life threatening injuries such as whiplash 2. higher speed system – scans up to 200 metres ahead using long range radar at higher speeds 3. pedestrian system – detects pedestrian movement in relation to the path of the vehicle to determine the risk of collision. |
| Lane-Keep Assist | <p>Technology that detects if a car is drifting in its lane or out of the lane. It provides alerts and warnings when this occurs which helps to avoid or mitigate a crash. Some versions will proactively steer the car back into the lane.</p> |

Resource 2: Answers for safety features

*Directions: Correctly identify each safety feature in the below list of 11 features as either a **crash avoidance feature** (which makes a crash less likely) or an **injury protection feature** (which reduces injury in a crash). Write the feature in the appropriate column of the table below.*

| | | | | |
|-----------------------------------|---------------------------|-------------------------------|------------------------------------|---------------------|
| Anti-lock Brake System (ABS) | Seatbelts | Airbags | Electronic Stability Control (ESC) | Head Rests |
| Lane-Keep Assist | Active Cruise Control | Side-Impact Protection System | Crumple Zones | Blind Spot Warnings |
| Pedestrian Friendly Bonnet Design | Driver Fatigue Monitoring | Auto Emergency Braking | Intelligent Speed Adaptation (ISA) | |

Crash Avoidance Features (Features that make a crash less likely)


- Anti-lock Brake System (ABS)
- Electronic Stability Control (ESC)
- Lane-Keep Assist
- Active Cruise Control
- Blind Spot Warnings
- Driver Fatigue Monitoring
- Auto Emergency Braking
- Intelligent Speed Adaptation (ISA)

Injury Protection Features (Features that reduce injury to road users in a crash)

- Seatbelts
- Airbags
- Head Rests
- Side-Impact Protection Systems
- Crumple Zones
- Pedestrian Friendly Bonnet Design

Resource 3: Crash analysis worksheet

*Directions: Look at the following four images of crashes and read the accompanying descriptions. For each image, based on the picture and description, record **what crash avoidance features** may have stopped the crash, and **what injury protection features** may have reduced injury for those involved.*

| Crash Image | Description of Crash | Safety Features |
|--|--|--|
|  A photograph showing the rear of a black 4WD vehicle and the front of a silver sedan. The silver car's front end is crumpled and pushed into the back of the 4WD, indicating a rear-end collision. The 4WD has a spare tire mounted on its rear. | <p>This is a rear-end crash, and one of the most common types of crashes for young drivers.</p> <p>In this case, the black 4WD was forced to stop suddenly, and the silver car travelling behind it failed to stop in time.</p> <p>As you can see, the silver car ran into the back of the 4WD and has significant damage.</p> | <p>What crash avoidance features may have stopped this crash?</p> <p>What injury protection features may have reduced injury to those involved?</p> |



This image shows a car about to merge into the lane that the truck is in.

In this case, the driver of the silver car attempted to merge without checking their mirrors, and seconds later collided with a truck because they did not leave adequate room for the truck (which struck the rear of the silver vehicle).

What crash avoidance features may have stopped this crash?

What injury protection features may have reduced injury to those involved?



In this image, a driver skids in foggy/wet conditions and slides into oncoming lanes of traffic.

The driver was travelling too fast for the conditions and this contributed to losing control of their car.

What crash avoidance features may have stopped this crash?

What injury protection features may have reduced injury to those involved?



This image shows a cyclist moments before a driver opens their car door and causes them to crash.

It also shows that even when you're stationary, or travelling as a passenger (not a driver), you can still cause a crash and need to take care.

It also demonstrates additional risks for other types of road users.

Note

Look at the direction that the driver is looking. If the driver had used the "Dutch reach" when opening the door their eyes could be drawn to the potential hazards around them.

What crash avoidance features may have stopped this crash?

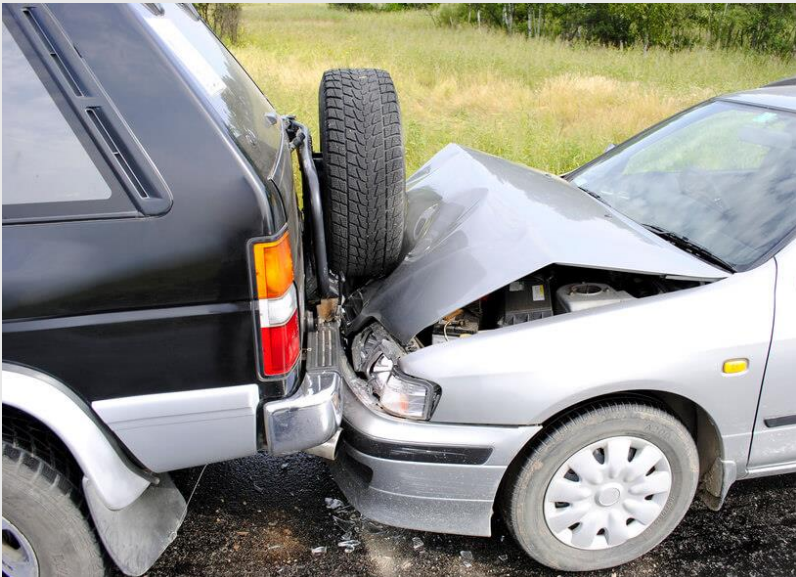
What injury protection features may have reduced injury to those involved?

Dutch reach explained:

- When opening a car door use the hand which is furthest away from the car handle
- By doing this the passenger/driver are forced to turn their body towards the door
- This allows the passenger/driver to easily look over their shoulder to check for other road users

Resource 4: Crash analysis worksheet answers

The following table contains sample answers (in the far-right column) to the crash analysis worksheet. They are sample answers, only.

| Crash Image | Description of Crash | Safety Features |
|---|--|---|
|  | <p>This is a rear-end crash, and one of the most common types of crashes for young drivers.</p> <p>In this case, the black 4WD was forced to stop suddenly, and the silver car travelling behind it failed to stop in time.</p> <p>As you can see, the silver car ran into the back of the 4WD and has significant damage.</p> | <p>What crash avoidance features may have stopped this crash?</p> <ul style="list-style-type: none">• ABS (to increase stopping distance)• Active cruise control (which if activated could have automatically slowed the silver car)• Automatic Emergency Braking (AEB) (which could have notified the driver of an impending collision)• Driver-attention detection in case of distraction or fatigue• Active braking (which could have automatically slowed the silver car)• Intelligent Speed Adaptation (ISA) (ensures the car doesn't exceed the speed limit) <p>What injury protection features may have reduced injury to those involved?</p> <ul style="list-style-type: none">• Seat belts (to prevent the driver being thrown forwards)• Airbag (to protect the driver's head)• Crumple zones (to absorb the force of a serious crash)• Head rests (reduce whiplash injuries) |



This image shows a car about to merge into the lane that the truck is in.

In this case, the driver of the silver car attempted to merge without checking their mirrors, and seconds later collided with a truck because they did not leave adequate room for the truck (which struck the rear of the silver vehicle).

What crash avoidance features may have stopped this crash?

- Lane-Keep Assist (to help keep the silver car in the correct lane)
- Blind spot indicators (to remind the driver of the silver car that there was something in their blind spot)
- Indicator (to signal to the truck that they were changing lanes)

What injury protection features may have reduced injury to those involved?

- Seat belts
- Airbags (to prevent injury to the drivers' head and side of body)
- Side impact protection system (to avoid the driver's body coming in contact with the side of the car)



In this image, a driver skids in icy conditions and slides into oncoming lanes of traffic.

The driver was travelling too fast for the conditions and this contributed to losing control of their car.

What crash avoidance features may have stopped this crash?

- Electronic Stability Control (ESC) (to help the driver keep control of the car and avoid skidding)
- ABS (so if the driver tried to slow down the car wouldn't skid)
- Active suspension (to help keep the car stable and in-control)
- Good tyres (to help maintain grip and decrease the likelihood of losing control)

What injury protection features may have reduced injury to those involved?

- Seat belts (to ensure the driver is not thrown around the inside of the car)
- Airbags (to protect the driver's head and body)



This image shows a bicycle moments before a driver opens their car door and causes them to crash.

It also shows that even when you're stationary, or travelling as a passenger (not a driver), you can still cause a crash and need to take care.

It also demonstrates additional risks for other types of road users.

What crash avoidance features may have stopped this crash?

- Side mirrors (to help the passenger see what is coming behind them)
- Using the "Dutch reach" method of opening the door. This allows the passenger/driver to check for other road users before opening the door
- Blind spot indicator (to remind both passenger and driver that things are coming from behind)
- Bell (for the cyclist)
- High visibility clothing (for the cyclist)

What injury protection features may have reduced injury to those involved?

- Helmet (for the cyclist)



Road Smart Teacher Toolkit

Lesson Plan 4 – Risky behaviours: Managing influences on how we drive

February 2018

Lesson 4 – Risky behaviours: Managing influences on how we drive

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Student Outcomes

In this interactive lesson, students will deepen their understanding of the various influences on the way they think about risk and driving.

By the end of this lesson, students will be able to:

- Explain how societal norms, stereotypes and expectations influence the way young people think about risk-taking behaviours
- Describe the role of family, friends and community in influencing their own risk taking behaviours
- Describe how the expectations of others can influence their own decisions

Suggested Timing

40 - 50 min

Materials and Preparation

- A computer and projector, and/or digital whiteboard for the teacher to show the opening video.
- A copy of *Resource 1: Graph of Young Driver Crash Risk* for each student, OR a digital copy of the image to project.
- The scenarios from *Resource 2: Crash Risk Scenarios*, cut up along the lines, with enough to be distributed amongst 4-5 groups.
- Print-outs, for each student, of *Resource 3: Crash Risk Worksheet*.

Lesson Description and Background

In this highly interactive and engaging lesson, students will begin to develop an understanding of *why* they are in a high-risk driver group, and *how* they can lower their risk.

Students begin by watching a powerful short film from the MAFMAD campaign (made by a teenager) showing a group of fictional teens in a car immediately pre-crash.

This is used as a launch pad to give students a series of scenarios. Splitting up into teams, students must 'role play' these scenarios for the rest of the class, while observers look for the different types of influences present in the scene.

Students then work together to answer a series of questions about how they could behave differently to alter the outcomes of these situations, as they begin to build real skills in self-management and self-awareness.

Evidence Base

Young drivers are often in situations where they might engage in high-risk behaviours when driving. Sometimes, they may not have the confidence or skills to manage such situations, and it can have disastrous consequences.

Coaching Tip

Always use the term "crash" rather than "accident". Accident implies a chance occurrence and a crash is as a result of largely preventable causes e.g. speed, alcohol and lack of driver experience.

Curriculum Mapping

Health and Physical Education

Content Description

- Plan, rehearse and evaluate options (including CPR and first aid) for managing situations where their own or others' health, safety and wellbeing may be at risk (VCHPEP144)

Achievement Standards (excerpt only)

- By the end of level 10 students ... compare and contrast a range of actions that could be undertaken to enhance their own and others' health, safety and wellbeing.

Lesson Part 1 – Introduction (10 minutes)

1. Show students the TAC video YES MUM.
2. <http://www.tac.vic.gov.au/road-safety/tac-campaigns/mafmad/yes-mum-2012>
Note: This video is part of the MAFMAD student video competition and was created by a teenager in 2012. It is quite confronting. Be aware students may have a strong reaction.
3. Ask students to identify what happened in the video and why it was a high-risk situation. Inform students that in today's lesson they will be discussing personal factors that influence driver behaviour – and how they can be safer road users.
4. Ask students which drivers are at highest risk of a crash (all P-platers, but especially P1 drivers), and discuss reasons for this. Note this conversation is important as students are soon to be in this highest risk group.
5. Show the graph titled Young Driver Crash Risk (Resource 1). This can be printed and distributed if desired.
6. Discuss with students how there are a combination of factors that lead to this high crash risk including the following:
 - a. Inexperience
 - b. Over confidence
 - c. What time the driving takes place
 - d. Type of vehicle
 - e. Distraction by other passengers
 - f. Peer pressure
 - g. Risky behaviours such as speeding, mobile phone use (and other distractions like interacting with the infotainment system), driving fatigued and drink/drug-driving

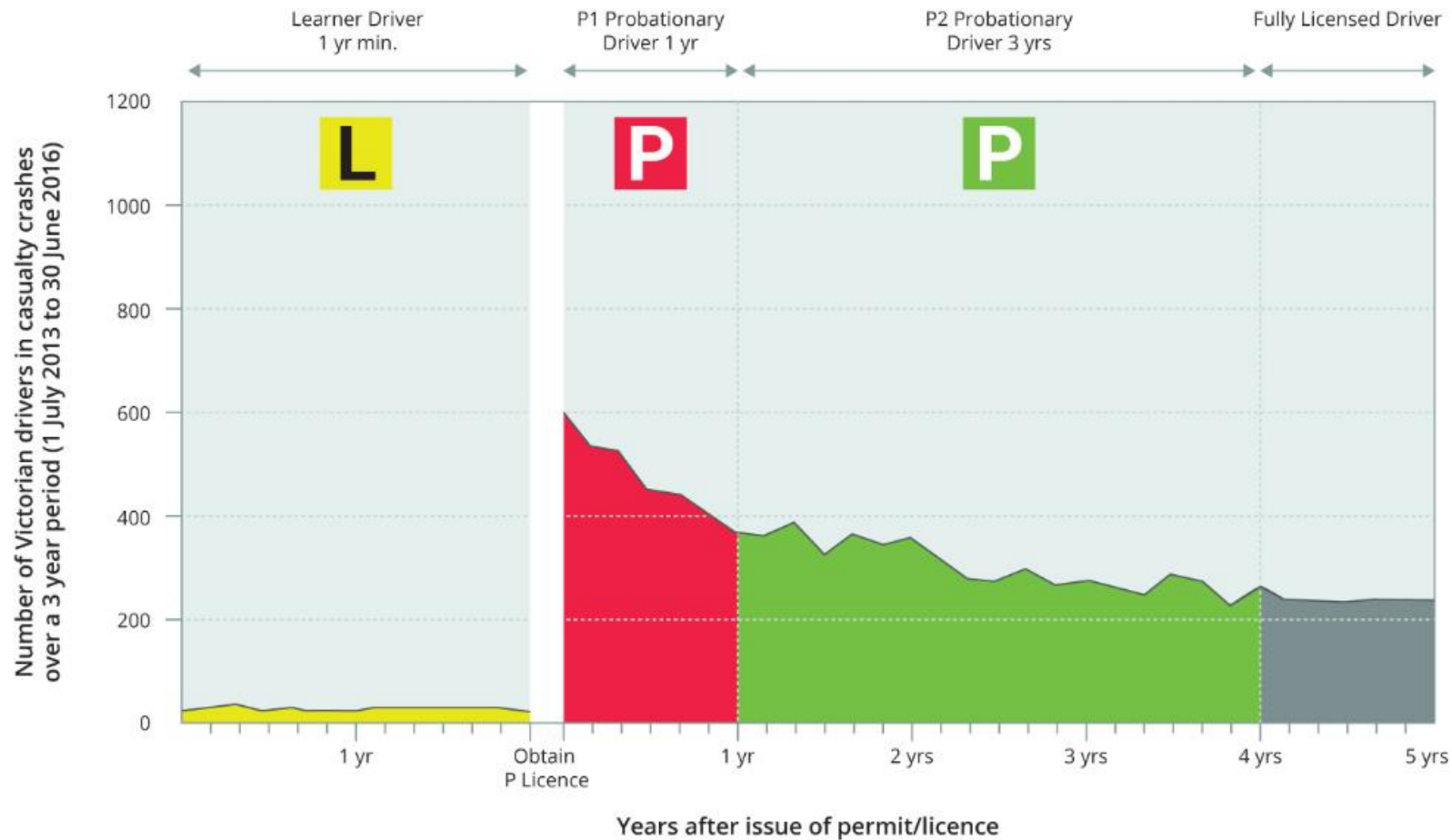
Lesson Part 2 – Scenario role play and group work – “Dealing with sticky situations” (30-40 minutes)

- Divide students into a maximum of four groups.
- Give each group a different scenario from the Crash Risk Scenarios sheet (Resource 2). Ask groups not to share their scenario with other groups at this stage.
- Give the students a maximum of 10 minutes in their groups to read and understand their scenario, and put together a short role play (maximum 60-90 seconds) for the rest of the class demonstrating their scenario. All members of the group should participate in the role play (even if some only have ‘minor’ roles!).
- Bring the groups back together and distribute a copy of the Crash Risk Worksheet (Resource 3) to each individual student. Ask the groups to take turns presenting their scenario to the rest of the class.
- While observing other groups presentation, students should fill out their own worksheets.
- After each group has presented, facilitate a short discussion where students share the answers from their worksheet, focusing in particular on how they might best handle this situation in real life.
- At the conclusion of the activity, ask students to identify the positive and negative influences in each scenario.
- Positives could include the following:
 - Remaining calm
 - Prioritising their focus on where it needs to be
 - Initiating conversations with passengers without the need of supervising driver’s input
 - Not participating in risky behaviours

Lesson Part 3 – Conclusion (5 minutes)

1. Give students one minute to reflect on their own conclusions, and come up with one thing they could start doing as a passenger today that could make the road a safer place.
2. Ask students to share their answers with the class.

Resource 1: Graph of young driver crash risk



Resource 2: Crash risk scenarios

(Note: Cut these up and distribute **one per group** – pick whichever scenarios you think are most interesting and relevant for your students)

A group of three friends are all at a mate's place after a party one Saturday night. None have been drinking but they want to get a ride home from their friend, Alex. Alex is a P-plater and knows they're not meant to have more than one passenger in the car ... but his friends are trying hard to get a ride and putting on all sorts of pressure!

Two high-school friends are in the car driving home from school. The driver has their P-plates, but the passenger does not. The passenger pulls out their phone and starts checking Instagram. The passenger keeps shoving the phone in the face of the driver to try and get the driver to look at Instagram pictures. The driver finds this very distracting.

An L-plater is in the car with their supervising driver in the front seat, and two much younger siblings in the back. The two kids in the back are making lots of noise, and have even started pushing into each other as the driver takes each corner and being very distracting. The supervising driver is paying attention to the road, but not to what is going on in the back, and does not realise the effect the noise is having on the learner driver.

A P-plater is driving their friend (who is in the front passenger seat) home from school. They are having a conversation. The passenger's mobile phone rings, and they realise that it is in their school bag, which is wedged in behind the passenger seat, behind where they are sitting. The passenger suddenly takes off their seatbelt to reach around and get their bag.

An L-plater is driving their 12-year old and 15-year old siblings home from school with their supervising driver in the front seat. The siblings in the back keep complaining that they are going to be late for their favourite TV show and urging the driver to hurry up. The supervising driver encourages the learner to speed up, even though the learner driver feels uncomfortable going any faster.

Resource 3: Crash risk worksheet

Directions: Fill in the below table as you are watching other groups present their role play.

Fill in the sheet by answering the questions at the top of the table for each group. You should fill in one row per group.

| Group | What happened in the scenario? Describe the situation and events in your own words. | What were the risks, distractions, or negative influences that were present in the scenario? | If <u>you</u> were the driver in this scenario, what could you do to achieve a better outcome? |
|-------|---|--|--|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |



Road Smart Teacher Toolkit

Lesson Plan 5 - Confidence and over-confidence: What's the difference?

February 2018

Lesson 5 - Confidence and over-confidence: What's the difference?

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Student Outcomes

In this interactive lesson, students will deepen their understanding of the various influences on the way they think about risk and driving.

By the end of this lesson, students will be able to, in relation to road use:

- Describe the role of family, friends and community in influencing their risk-taking behaviours
- Describe how the expectations of others can influence their own decisions
- List strategies to deal with challenging or unsafe situations as a road user

Suggested Timing

40 - 50 min

Materials and Preparation

- A computer and projector, and/or digital whiteboard for the teacher to show the opening video.
- A copy for each group of *Resource 1: Driving Influences, Risk* and writing implements to complete it.

Lesson Description and Background

This lesson builds on the previous lesson ("Risky behaviours: managing influences on how we drive"); however, it can also be delivered as a stand-alone lesson.

In this interactive and engaging lesson, students begin to question *what* they believe about driving and *why* they believe it. They also look at how these beliefs can shape their confidence, and even create over-confidence, perhaps increasing their risk.

Students begin by watching an amusing video that begins a light-hearted conversation about confidence (and over-confidence).

Students then break up into groups to complete an activity where they examine the different sources of information about driving, and how those difference sources shape our beliefs and attitudes towards driving.

Students then come together to define the difference between confidence and over-confidence, and examine how the sources of information they have looked at can affect those things.

Evidence Base

Everyone – including young drivers – have pre-conceived beliefs about and attitudes towards driving. These beliefs and attitudes can shape our likelihood to take risks, and other important decisions on the road that make us safer or less safe.

Coaching Tip

Focus on positive messages/influences as well as the negative.

Curriculum Mapping

Health and Physical Education

Content Description

- Plan, rehearse and evaluate options (including CPR and first aid) for managing situations where their own or others' health, safety and wellbeing may be at risk (VCHPEP144)
- Critique behaviours and contextual factors that influence the health and wellbeing of their communities (VCHPEP151)

Achievement Standards (excerpt only)

- By the end of level 10 students critically analyse contextual factors that influence their ... decisions and behaviours. ... They compare and contrast a range of actions that could be undertaken to enhance their own and others' health, safety and wellbeing.

Lesson Part 1 – Introduction (5 minutes)

1. Show students the short (funny!) video of runners being very confident about running in the snow... with sub-optimal results! <https://www.youtube.com/watch?v=-rk-zMSqE3Q>
2. Ask students whether they saw any signs of over-confidence in the runners – if so, what were the signs of over-confidence?
3. Inform students that over-confidence is a key factor in crash risk for young drivers. Explain further that over-confidence is a feeling we may all experience in our lives at some point, and that today they will be exploring the things that influence their beliefs, attitudes and behaviours when it comes to driving... and looking at overconfidence in particular.

Lesson Part 2 – Group activity – “Beliefs about driving” (20-25 minutes)

1. Divide students into groups (up to five students per group)
2. Give each group a copy of the Driving Influences sheet (Resource 1). There is a sample of a completed worksheet included in this document for your reference (Resource 2).
3. Explain to students how to complete the sheet.
4. In the first column, describe what sorts of messages that source of information (e.g. friends, siblings) says about driving. They should be specific and detailed. Encourage students to share personal examples where appropriate, and even write down quotes from these sources (e.g. things they've heard in movies or from friends). For sources such as movies and video games, they should be encouraged to site specific examples (e.g. name films). Sample answers are provided for your reference in Resource 2.
5. In the second column, describe how these messages can influence people's attitude towards and beliefs about driving
6. Give students approximately 10-15 minutes to complete this activity in their groups. During this time you can circulate between groups and observe and assist in their discussion.
7. After the allocated time is up, ask members of each group to share their answers and discuss as a class.

Lesson Part 3 – Group and class discussion – “Confidence versus over-confidence” (10-15 minutes)

1. Explain to students they are now going to examine how these different sources and influences affect confidence and over-confidence.
2. Write the following statement on the board (note, this is a quote from Dr. Joe Thurbon):
“Arrogance starts where ability stops”
Note - this quote is meant to be a little bit pithy and ironic.
3. Ask students what they believe this quote means as a general statement (i.e., not relating to driving), and whether they think it is true.
4. After the discussion has been running for 3-5 minutes ask students to consider the statement in relation to driving.
5. Split students up into different groups of between two and three, and give them three to four minutes to define the difference between ‘confidence’ and ‘over-confidence’. After the allocated time is up, have the groups share their responses with the class.
6. Referring back to their Driving Influences worksheet, ask students to describe how these influences may create over-confidence in drivers (and young drivers in particular).

Lesson Part 4 – Conclusion (5 minutes)

1. Give students one minute to reflect individually on what they have learned, and in particular how they may identify signs of over-confidence in themselves, and things they might do to counteract it.
2. Once step one has been completed ask for a couple of students to share their responses with the class.

Resource 1: Driving influences worksheet

Directions: During this activity you will discuss and brainstorm with your group. Listen to your teacher's instructions and complete the following table in your group. Influences will cover both positive and negative elements.

| Source of information/ influence | What are the key messages that this source says about driving? | What sort of influence does this have on our beliefs about driving? |
|--|---|---|
| Yourself and personal influences | | |
| Friends | | |
| Siblings | | |
| Parents | | |
| Movies | | |
| Video Games (for example, <i>Need for Speed</i> or <i>Grand Theft Auto</i>) | | |
| Advertising (for example, car advertisements) | | |
| Other sources (any you can think of! For example, other drivers) | | |

Resource 2: Sample completed worksheet

Directions: During this activity you will discuss and brainstorm with your group. Listen to your teacher's instructions and complete the following table in your group.

| Source of information/influence | What are the key messages that this source says about driving? | What sort of influence does this have on our beliefs about driving? |
|--|--|---|
| Yourself and personal influences | <i>"I'm going to stuff up royally"</i> <i>"It looks easy as, I don't see what the fuss is about"</i> <i>"There might be challenges but I've got this"</i> | <i>Negative and lacking confidence</i> <i>Overconfident</i> <i>Realistic mindset</i> |
| Friends | <i>"Come on man, go faster!"</i> <i>"Getting your P's is easy"</i> <i>"Driving is easy"</i> <i>"Driving is stressful"</i> | <i>Makes me nervous about driving</i> <i>Makes me confident and that driving is simple</i> <i>"If they can do it, so can I"</i> <i>Makes me believe driving should be avoided</i> |
| Siblings | <i>"I need you to get your licence so you can drive me around"</i> <i>"I got my licence when I was 18 so hurry up and get yours"</i> <i>"Mum and dad are good teachers and I can give you some help"</i> | <i>I owe it to other people to get my licence.</i> <i>If they did it like that, that's how I have to do it</i> <i>Makes me feel supported and confident in my learning approach</i> |
| Parents | <i>"You make me so nervous when you drive"</i> <i>"You drive like an idiot!"</i> <i>"SLOW DOWN!"</i> <i>"Take your time and you'll be fine"</i> | <i>Makes me super stressed out about driving.</i> <i>Makes me feel safe and confident</i> |
| Movies | <i>Fast and the Furious: "You can drive really fast and it's not that unsafe"</i> <i>"Getting your licence makes you popular"</i> | <i>Makes me confident that I can do it</i> <i>Makes it seem easy</i> |
| Video Games (for example, <i>Need for Speed</i> or <i>Grand Theft Auto</i>) | <i>"If you crash, you can just hit reset"</i> <i>"Going fast is easy"</i> | <i>Makes me feel like driving is a game with no real consequences</i> |
| Advertising (for example, car advertisements) | <i>"Cars make you important/cool"</i> <i>Driving is really dangerous – all the TAC ads about lives lost</i> | <i>Makes me really excited to get behind the wheel.</i> <i>Makes me scared to get behind the wheel because driving is so dangerous. Makes me anxious.</i> |
| Other sources (any you can think of! For example, other drivers) | <i>Motorsport: Cars are a way of life/driving is a career</i> | <i>Makes me really excited to get behind the wheel.</i> <i>Makes me enthusiastic to try going fast.</i> |



Road Smart Teacher Toolkit

Lesson Plan 6 - Under pressure: Removing stress from learning to drive

February 2018

Lesson 6 - Under pressure: Removing stress from learning to drive

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Student Outcomes

In this interactive lesson, students will explore how stressful learning to drive can be, and develop communication strategies to manage (and lower) that stress.

By the end of this lesson, students will be able to:

- Identify how language use can affect people
- Describe how reacting with extreme emotion may impact on effective communication
- Use communication strategies to engage with and work effectively with a supervising driver
- Communicate effectively with peers to ensure their own safety as a road user

Suggested Timing

45 - 55 min

Materials and Preparation

- A computer and projector, and/or digital whiteboard for the teacher to show the opening video.
- A printout of the *Resource 1: Communication Techniques* for each student, and writing implements to complete it.
- A copy of the scenarios from *Resource 2: Driving Scenarios*, cut into pieces so the scenarios can be distributed (one to each group).
- A copy of *Resource 3: Stressful Driving* for each student, OR a way to project a copy so the class can see it.

Lesson Description and Background

Both supervising drivers and learner drivers agree that learning to drive can be stressful... for everyone! Most people have personal experiences confirming this.

In this lesson, students begin learning how they can manage and lower that stress by building partnerships with supervising drivers and developing in-car communication skills.

Students examine materials to show how stressful learning to drive can be.

They then undertake a group activity to dissect different types of communication, and reflect on personal experiences that show how certain types of communication can increase or decrease stress.

Students then apply what they've learned and deepen their knowledge by undertaking scenario-based role play to practise and refine their skills in in-car contexts.

Coaching Tip

Give students the communication techniques handout to take home and discuss with their supervising driver(s).

Curriculum Mapping

Health and Physical Education

Content Description

- Plan, rehearse and evaluate options (including CPR and first aid) for managing situations where their own or others' health, safety and wellbeing may be at risk (VCHPEP144)
- Evaluate situations and propose appropriate emotional responses and then reflect on possible outcomes of different responses to health and wellbeing (VCHPEP147)

Achievement Standards (excerpt only)

- By the end of Level 10, students ... evaluate the outcomes of emotional responses to different situations.... They compare and contrast a range of actions that could be undertaken to enhance their own and others' health, safety and wellbeing.

Lesson Part 1 – Introduction (10 minutes)

1. Show students the first sixty seconds of Video #1 from VicRoads 'Lessons from the Road'.
2. <https://www.youtube.com/watch?v=PkhtWhDMYcE>
3. After showing the video, show the one-page Stressful Driving (Resource 3) handout included in this resource (it can either be projected, or a copy distributed to each student).
4. Note to students that both the video and the handout reflect the reality that learning to drive can be stressful. Ask students to discuss two questions:
 - a. **Why** can learning to drive be stressful for both parents/supervisors and learners?
 - b. What can emotion and stress do to **judgement and behaviour**? (You may ask students to reflect on a time they've been stressed or angry, and think about what it did to their decision-making?). It is important to reiterate and make clear that **stress and anxiety impact our ability to make good decisions and judgements**, which is why it is important to learn to manage stress when learning to drive. It is also important to keep a good relationship with your supervising driver so that you get as much and varied practice as possible.
5. Tell students that today they will be learning about effective communication and how to reduce stress and anxiety (for both them and their supervising driver) when learning to drive.

Lesson Part 2 – Student brainstorm – “Styles of communication” (10 minutes)

1. Divide students into groups (up to four per group).
2. Distribute to each group a copy of the Communication Techniques worksheet (Resource 1). This sheet describes different elements of communication (e.g. tone of voice, choice of words, volume of speech, body language etc):
3. As an optional extra, to help students understand each of the individual elements of communication, you may request students to ‘demonstrate’ it for the class. (i.e. say something very loud and then very soft, to demonstrate ‘volume’; or talk to someone standing far too close, to demonstrate ‘body language’). This can be a fun and humorous way to introduce these concepts.
4. Ask students to discuss in their group how each element of speech can have positive or negative impacts on levels of stress. Give examples (for instance, speaking loudly can increase stress, speaking more softly can lower stress). Students can provide personal examples where appropriate.
5. Ask each group to share their responses with the rest of the class.

Lesson part 3 – Interactive role play – “Taking the pressure down” (20-30 minutes)

1. Inform students that they will now apply those techniques to different driving scenarios by demonstrating them through role play.
2. Keeping students in their groups, distribute to each group a different scenario from the Driving Scenarios (Resource 2) template.
3. Give students 10 minutes in their group to:
 - a. Read and discuss the scenario.
 - b. Create a 30-60 second role play, using the communication techniques discussed, that demonstrates a *high-stress* approach to that scenario.
 - c. Create a second role play using the same techniques that demonstrates a *lower-stress* approach to that scenario.
 - d. It may be useful to ask two students in each group to perform the ‘high-stress’, and two-students to perform the ‘low-stress’ version (so everyone has a turn to role play).
4. Bring the groups back together and have each group perform their high-stress and low-stress approaches to the rest of the class.
5. After each group, ask observing students to describe how the communication of the participants in the role plays affected stress and emotion, referring to the communication techniques. Encourage students to offer suggestions for improvement.

Lesson Part 4 – Conclusion (5 minutes)

1. Ask students to reflect on the most important parts of communicating effectively with supervising drivers and peers in the car.
2. Suggest that students take home the communication techniques handout and discuss it with their supervising driver(s) how they would like to communicate when learning to drive. If desired, this activity can be set as homework, with students to report back during the next lesson.
3. Direct students to the Road Smart Supervising driver eLearning module for additional information.

Resource 1: Driving scenarios

(Note: Cut these up and distribute **one per group** – pick whichever scenarios you think are most interesting and relevant for your students)

An L-plate driver is on one of their first drives with their supervising driver, and the supervising driver wants the learner to self-navigate to their destination. The L-plater needs to discuss how they will drive and how to listen to the supervising driver and navigate to their destination.

An L-plate driver is driving and their supervising driver is speaking really loudly on the phone, making it hard for the driver to concentrate.

An L-plater is driving a car with their supervising driver in the front seat and two other passengers in the back seats. There is a robust conversation that is bordering on an argument about a reality TV show. The level of noise is becoming overwhelming and distracting to the learner driver.

An L-plater is stopped at a busy roundabout, waiting for a chance to enter. They are nervous about selecting a safe gap. The supervising driver is getting increasingly frustrated that the learner is missing opportunities to enter the roundabout. The learner is unsure how to proceed.

A P1-plater is driving their new girlfriend home from school. They are going too fast around corners and she is starting to get very uncomfortable. He nearly loses control– although he manages to not skid off the road. She is getting increasingly scared and decides to ask him to slow down.

Resource 2: Communication techniques worksheet

*Directions: This worksheet looks at four elements of communication that can influence stress and anxiety. For each of these elements of communication, brainstorm with your group examples of how each element could **increase** stress and anxiety, and how it could **decrease** stress and anxiety.*

For example, you might say that 'volume of speech' can increase stress by being very loud and overbearing, and can decrease stress by being soft and calm.

It will be useful to come up with real-world examples from your own experience.

| Element of communication | Description | Ways it can <u>increase</u> stress | Ways it can <u>decrease</u> stress |
|--------------------------|---|------------------------------------|------------------------------------|
| Volume of voice | How loud or soft someone speaks, sometimes called 'dynamics' | | |
| Tone of voice | The 'quality' of someone's voice. For example, a voice can be 'angry', 'soothing' or 'calming' | | |
| Choice of words | The words people use to make a point. Different words can make the same point feel different, and change how people react | | |
| Body language | The way people use their hands (gestures) and their body (for instance, standing very close or far away) | | |

Resource 3: Stressful driving

The following excerpt is taken from the VicRoads Learner Kit - Guide for Learners. Read it when asked by your teacher and then be ready to answer some questions.



Thinking about stress

Most learners and supervising drivers find there are occasional angry outbursts and stressful situations in the car. It's not surprising – learning to drive can be stressful.

Expect a little anxiety sometimes because learning to drive safely is far more complex than most people realise. It's relatively easy to start, stop and steer but developing and applying safe driving skills in complex situations is very difficult.

Don't turn driving into an unpleasant chore. Keep the following in mind:

- If stress or anger affects you or your supervising driver, stop the car and take a short break.
- If the driving conditions become worse and your supervising driver is uncomfortable, stop the practice session and let them drive. Driving sessions should never place you at risk of crashing and learners shouldn't drive beyond their ability.
- You should both be very proud of your decision to work together. Keep reminding yourselves that a few mistakes will happen sometimes, but there will also be lots of progress.



Road Smart Teacher Toolkit

Lesson Plan 7 - Rights of way: On-road rights and responsibilities (Part 1)

February 2018

Lesson 7 - Rights of way: On-road rights and responsibilities (Part 1)

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Student Outcomes

Students will be able to:

- Demonstrate understanding of the rights and responsibilities of different types of road users
- Describe how the rights and responsibilities of different types of road users impacts on individual users

Timing

45 – 50 min

Materials and Preparation

- Devices with internet access for each group of students so they can access the relevant online materials referenced in this lesson plan.
- A computer and projector, and/or digital projector for the teacher to show the opening video (where necessary).
- Print-outs, for each group, of *Resource 1: Know the rules* worksheet and the *Resource 3: Empathy map* worksheet from this document (and writing implements to complete them with).

Lesson Description and Background

The activities and scenarios in this lesson are designed to build students' understanding of the rights and responsibilities of different road users, the responsibilities that all road users share and an appreciation of the consequences of individual road users' actions.

This lesson focuses on pedestrians as road users.

Students first explore the responsibilities of road users through the '*Know the Rules*' enquiry-based learning activity (Resource 1), and have an opportunity to discuss differences in interpretations of road users' responsibilities using the evidence they have found during the activity.

Then, students use an '*Empathy Map*' (Resource 4) to explore a scenario from the perspective of different road users. Students learn how perspectives of different road users can change perceptions of a situation.

Key Terms

Rights and Responsibilities are the legal rights and responsibilities of all road users when they are using the road or road-related areas (e.g. footpaths) as well as those determined by cultural and personal ethics.

Road Users are pedestrians, cyclists, passengers and drivers. Although not mentioned in this resource, motorcyclists, heavy vehicle and bus drivers and, in general, people of all ages are also included in the term 'road users'.

Empathy Map is a tool that is used to help people understand what another person is experiencing. It allows the user to immerse themselves into the environment being discussed

Interactions are the reciprocal actions or influences and their effects between road users, e.g. a car stopping at a pedestrian crossing for a pedestrian to cross the road is an interaction.

Coaching Tip

Road safety is a shared responsibility, and everyone needs to be thinking of others and looking out for each other in order to make the road a safe place.

Curriculum Mapping

Health and Physical Education

Content Description

- Plan, rehearse and evaluate options (including CPR and first aid) for managing situations where their own or others' health, safety and wellbeing may be at risk ([VCHPEP144](#))

Achievement Standard (excerpt only)

By the end of Level 10, students ... compare and contrast a range of actions that could be undertaken to enhance their own and others' health, safety and wellbeing.

Ethical Capability. Content Description

- Distinguish between the ethical and non-ethical dimensions of complex issues, including the distinction between ethical and legal issues ([VCECU021](#))

Lesson Part 1 – Introduction (5 minutes)

1. Show students the TAC video Space to ride. <https://www.youtube.com/watch?v=J-sHBJofCol>
(NB: If your students have already seen this video as part of another lesson, you are free to replay it if you wish, or skip to step three).
2. Ask students what is meant by the phrase “Drivers, give the space to ride safe”, which appears at the very end of the video. Explain that it means road safety is a shared responsibility, and that everyone needs to be thinking of others and looking out for each other in order to make the road a safe place.
3. Explain to students that in this lesson they will be learning about the rights and responsibilities of different road users. Introduce the idea that whilst road users have many responsibilities, the number one responsibility of every road user is to obey the law.
4. Explain to students that the scenarios will explore interactions between road users from different perspectives – enabling them to put themselves in others’ shoes and change the way they think about road safety.

Lesson Part 2 – Enquiry-based Learning – “Know the rules?” (15 minutes)

1. Divide students into groups of two or three.
2. Distribute the Know the Rules worksheet (Resource 1) to each group, and ask students to find solutions to each question or statement as written. Students should use the space provided to write a few words about why they’ve reached their conclusion. It is advised that students use the internet to complete this task. A sample completed template is included in this resource.
3. Ask each group to share their responses with the class. If there are any disagreements in answers from the class, ask two groups to share their rationale and their source. If you are located close to other states, look out for sources from outside the state of Victoria, or examples not specifically related to Victoria. The sample completed template has correct answers on it, including sources.

Lesson Part 3 – Scenario-based Learning – “A mile in their shoes...” (20 minutes)

1. In the same groups, ask each group to read the following scenario found in the Scenario Worksheet (Resource 2). Alternatively, you may like to project this onto a board in the room, or read the scenario aloud for the whole class.
2. Ask students to put themselves in the position of the people in the scenario, and imagine all the things going on in their head and in the environment. Get some initial reactions and responses from the class about what each person in the scenario might be thinking.

3. Hand out copies of the Empathy Map worksheets (Resource 3) to each group (see Appendix)
4. Ask students to complete the Empathy Maps for each road user in the scenario.
5. Have each group give a short description of their highlights for each part of the Empathy Map.
6. *(Optional)* If time allows, ask students to reflect on a time where they've been in a similar situation. Students can share their own scenarios and offer suggestions on what they could have done differently to reduce their risk in a similar scenario in the future.

Lesson Part 4 – Conclusion (5-10 minutes)

Conclusion

1. To finish, direct each group to answer two final questions based on the scenario and their Empathy Map:
 - a. What could each road user do differently to decrease the risk in the scenario?
 - b. What can you do to decrease your level of risk when using roads?
2. *(Optional)* Distribute a copy of the completed template to each student for future reference.

Resource 1: Know the rules worksheet

Directions: Using the road rules of Victoria, Find answers to the following 'TRUE or FALSE' questions. Use the internet to attempt to find answers to questions where you don't know the answer. In the 'source and evidence' column, indicate where you found your answer, and the evidence for why you think it is correct.

Road User: Pedestrians

| Statement | TRUE or FALSE (circle one) | Source and Evidence |
|---|--|---------------------|
| Pedestrians must give way to drivers when crossing a driveway | TRUE FALSE | |
| Pedestrians must use the shortest and most direct route of crossing the road | TRUE FALSE | |
| Pedestrians have right of way over drivers in Shared Zones | TRUE FALSE | |
| Pedestrians have right of way when crossing, a path which is for bicycles and wheeled devices (a path showing a 'Bicycle lane' sign). | TRUE FALSE | |
| Pedestrians must use a crossing to cross the road if within 20 metres of one | TRUE FALSE | |

Resource 2: Know the Rules worksheet (completed sample)

The highlighted answers below are correct, and we have included a link to the government source, VicRoads, for the answers at the bottom of the page.

| Statement | TRUE or FALSE (circle one) | Source and Evidence |
|---|----------------------------|--|
| Pedestrians must give way to drivers when crossing a driveway | TRUE FALSE | Road Rule 74 (1) A driver entering a road from a road related area, or adjacent land, without traffic lights or a stop sign, stop line, give way sign or give way line must give way to— (a) any vehicle travelling on the road or turning into the road (except a vehicle turning right into the road from a road related area or adjacent land); and (b) any pedestrian on the road; and (c) any vehicle or pedestrian on any road related area that the driver crosses to enter the road; and (d) for a driver entering the road from a road related area— (i) any pedestrian on the road related area; and |
| Pedestrians must use the shortest and most direct route of crossing the road | TRUE FALSE | Road Rule 230 (1) A pedestrian crossing a road— (a) must cross by the shortest safe route |
| Pedestrians have right of way over drivers in Shared Zones | TRUE FALSE | Road Rule 83 A driver driving in a shared zone must give way to any pedestrian in the zone. |
| Pedestrians have right of way when crossing, a path which is for bicycles and wheeled devices (a path showing a 'Bicycle lane' sign). | TRUE FALSE | Road Rule. 239 (1) A pedestrian must not be on a bicycle path, or a part of a separated footpath designated for the use of bicycles, |
| Pedestrians must use a crossing to cross the road if within 20 metres of one | TRUE FALSE | Road Rule 234 (1) A pedestrian must not cross a road, or part of a road, within 20 metres of a crossing on the road, |

Website reference: <https://www.vicroads.vic.gov.au/safety-and-road-rules/road-rules/a-to-z-of-road-rules/pedestrians>

Resource 3: Scenario worksheet

Directions: use the following scenario to explore as a class and to complete your Empathy Map worksheet.

This scenario may be printed and distributed to individuals, or projected for the class. You may also choose to have one or more students read the scenario out to the class to hear it together.

THE SCENARIO:

A pedestrian is walking down the footpath of a suburban residential area. It is 11 am on a sunny Saturday morning. The pedestrian is walking from their house to the local chicken shop to buy some food for lunch. The walk is about 800 m and takes the pedestrian down three separate streets, including the street their house is on and the street the chicken shop is on.

The pedestrian is listening to music through headphones at a high volume. The pedestrian is also using a Smartphone at the same time, looking down at the device and holding it in two hands while walking. By the halfway point of the trip, the pedestrian has bumped into one woman walking her dog and had two near misses, almost bumping into one pedestrian walking and another running.

As the pedestrian comes to the main road where the chicken shop is, they instinctively walk towards the white line markings of a pedestrian crossing. Music is still playing and they are still preoccupied, looking down at the Smartphone.

A driver living on the other side of the same suburb is headed to the local shops at the same time. The driver needs to pick up some wrapping paper from the newsagent. This suburb is classed as a 'built-up area' and the route from the driver's house to the shops is about one kilometre that takes a series of turns.

As the driver arrives at a pedestrian crossing, they notice the pedestrian walking toward the crossing with their head down, looking at a device and with headphones in their ears. It becomes apparent the pedestrian is not paying attention to where they're walking or what is going on around them. In accordance with the law, the driver slows to give way to the pedestrian to cross the street.

The pedestrian, upon stepping off the footpath and seeing the white lines of the crossing under foot, notices a flash out of the corner of their eye. It startles the pedestrian who immediately takes one hand away from the device, steps back, and looks up to see a driver giving way to them on the crossing.

After the pedestrian has crossed the road they continue the final 80 m to the chicken shop, with the volume on the headphones turned down lower and the device in the pocket.

The driver, after giving way to the pedestrian, drives slowly through the crossing and parks on the side of the street right outside the newsagent to complete their journey.

Resource 4: Empathy Map worksheet for scenario in Resource 3

Directions

1. Read the scenario as a group.
2. Use the questions in the boxes on the Empathy Map to help build a picture of both road user's perspective.
3. Discuss what you think the completed Empathy Map and the information on it means for the scenario and each road user.
4. Give a short description of your highlights for each road users' Empathy Map.

| | |
|--------------------------------------|--|
| What does your road user Hear? | What does your road user(s) Think and Feel during the scenario and afterwards? |
| ROAD USER: _____ | |
| What does your road user Say and Do? | What does your road user See? |



Road Smart Teacher Toolkit

Lesson Plan 8 - Rights of way: On-road rights and responsibilities (Part 2)

February 2018

Lesson Plan 8 - Rights of way: On-road rights and responsibilities (Part 2)

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Student Outcomes

Students will be able to:

- Demonstrate understanding of the rights and responsibilities of different types of road users
- Describe how the rights and responsibilities of different road user types impacts on individual users

Timing

45 – 50 mins

Materials and Preparation

- Devices with internet access for each group of students so they can access the relevant online materials referenced in this lesson plan.
- A computer and projector, and/or digital projector for the teacher to show the opening video (where necessary).
- Print-outs, for each group, of *Resource 1: Know the rules* worksheet and the *Resource 3: Empathy map* worksheet from this document (and writing implements to complete them with).

Lesson Description and Background

This lesson is designed to follow on from the lesson “Rights of Way: On-Road Rights and Responsibilities (Part 1)”, however it can also be delivered as a stand-alone lesson.

The activities and scenarios in this lesson are designed to build students’ understanding of the rights and responsibilities of different road users, and an appreciation of the consequences of individual road users’ actions.

In this activity students focus on cyclists as road users. Students first explore the responsibilities of road users through the ‘*Know the Rules*’ enquiry-based learning activity (Resource 1), and have an opportunity to discuss differences in interpretations of road users’ responsibilities using the evidence they have found during the activity.

Then, using an ‘*Empathy Map*’ (Resource 4) applied to a specific scenario, students will explore how individual perspective of interactions between road users changes the situation can be perceived.

Key Terms

Rights and Responsibilities are the legal rights and responsibilities of all road users when they are using the road or road-related areas (e.g. footpaths) as well as those determined by cultural and personal ethics.

Road Users are pedestrians, cyclists, passengers and drivers. Although not mentioned in this resource, motorcyclists, heavy vehicle and bus drivers and, in general, people of all ages are also included in the term ‘road users’.

Empathy Map a tool that is used to help people understand what another person is experiencing. It allows the user to immerse themselves into the environment being discussed.

Interactions are the reciprocal actions or influences and their effects between road users. e.g. a car stopping at a pedestrian crossing for a pedestrian to cross the road is an interaction.

Coaching Tip

Road safety is a shared responsibility, and everyone needs to be thinking of others and looking out for each other in order to make the road a safe place.

Curriculum Mapping

Health and Physical Education. Content Description

- Plan, rehearse and evaluate options (including CPR and first aid) for managing situations where their own or others’ health, safety and wellbeing may be at risk ([VCHPEP144](#))

Achievement Standard (excerpt only)

- By the end of Level 10, students ... compare and contrast a range of actions that could be undertaken to enhance their own and others’ health, safety and wellbeing.

Ethical Capability. Content Description

- Distinguish between the ethical and non-ethical dimensions of complex issues, including the distinction between ethical and legal issues ([VCECU021](#))

Achievement Standards (excerpt only)

By the end of Level 10, students ... examine complex issues, identify the ethical dimensions and analyse commonality and difference between different positions.

Lesson Part 1 – Introduction (5 minutes)

1. Show students the TAC video Space to ride. <https://www.youtube.com/watch?v=J-sHBJofCol> (NB: If your students have already seen this video as part of another lesson, you are free to replay it if you wish, or skip to step three).
2. Ask students what is meant by the phrase “Drivers, give the space to ride safe”, which appears at the very end of the video. Explain that it means road safety is a shared responsibility, and that everyone needs to be thinking of others and looking out for each other in order to make the road a safe place.
3. Explain to students that in this lesson they will be learning about the rights and responsibilities of different road users. Introduce the idea that whilst road users have many responsibilities, the number one responsibility of every road user is to obey the law.
4. Explain to students that the scenarios will explore interactions between road users from different perspectives – enabling them to put themselves in others’ shoes and change the way they think about road safety.

Lesson Part 2 – Enquiry-based Learning “Know the rules?” (15 minutes)

1. Divide students into groups of two or three.
2. Distribute the Know the Rules worksheet (Resource 1) to each group, and ask students to find solutions to each question or statement as written. Students should use the space provided to write a few words about why they’ve reached their conclusion. Students should use the internet to complete this task. A sample completed template is included in this resource.
3. Ask each group to share their responses with the class. If there are any disagreements in answers from the class, ask two groups to share their rationale and their source. Look out for sources from outside the state of Victoria, or examples not specifically related to Victoria. The sample completed template has correct answers on it, including sources.
4. *(Optional)* Distribute a copy of the completed template to each student for future reference.

Lesson Part 3 – Scenario-based Learning “A mile in their shoes...” (20 minutes)

1. In the same groups, ask each group to read the scenario found in the Scenario Worksheet (Resource 3). Alternatively, you may like to project this onto a board in the room, or read the scenario aloud for the whole class.
2. Ask students to put themselves in the position of the people in the scenario, and imagine all the things going on in their head and in the environment. Get some initial reactions and responses from the class about what each person in the scenario might be thinking.
3. Hand out copies of the Empathy Map worksheets (Resource 4) to each group (see Appendix)
4. Ask students to complete the Empathy Maps for each road user in the scenario.
5. Have each group give a short description of their highlights for each part of the Empathy Map.
6. *(Optional)* If time allows, ask students to reflect on a time where they've been in a similar situation. Students can share their own scenarios and offer suggestions on what they could have done differently to reduce their risk in a similar scenario in the future.

Lesson part 4 – Conclusion (5-10 minutes)

Conclusion

1. To finish, direct each group to answer two final questions based on the scenario and their Empathy Map:
 - a. What could each road user do differently to decrease the risk in the scenario?
 - b. What can you do to decrease your level of risk when using roads?

Resource 1: Know the rules worksheet

Directions: Using the road rules of Victoria, Find answers to the following 'TRUE or FALSE' questions. Use the internet to attempt to find answers to questions where you don't know the answer. In the 'source and evidence' column, indicate where you found your answer, and the evidence for why you think it is correct.

Road User: Cyclists

| Statement | TRUE or FALSE (circle one) | Source and Evidence |
|---|--|---------------------|
| Cyclists may use a mobile phone when riding | TRUE FALSE | |
| Cyclists may ride without a helmet while riding on bicycle paths | TRUE FALSE | |
| Cyclists need a minimum of one light on their bikes when riding at night | TRUE FALSE | |
| Cyclists are allowed to ride a bike in bus lanes | TRUE FALSE | |
| Cyclists must ride on the left side of a left indicating and left turning vehicle | TRUE FALSE | |

Resource 2: Know the Rules worksheet (completed sample)

The highlighted answers below are correct, and we have included a link to the government source, VicRoads, for the answers at the bottom of the page.

| Statement | TRUE or FALSE (circle one) | Source and Evidence |
|---|----------------------------|---|
| Cyclists may use a mobile phone when riding | TRUE FALSE | Using a mobile phone is allowed to make or receive a phone call or to use its audio/music functions provided the phone: <ul style="list-style-type: none"> is secured in a commercially designed holder fixed to the bicycle, or can be operated by the rider without touching any part of the phone, and the phone is not resting on any part of the riders' body but can be in a pocket |
| Cyclists may ride without a helmet while riding on bicycle paths | TRUE FALSE | When you are riding a bike you and any passengers must wear a properly fitting and fastened helmet unless you are riding on private property. |
| Cyclists need a minimum of one light on their bikes when riding at night | TRUE FALSE | If you are riding a bicycle at night you must have a: <ul style="list-style-type: none"> white light (flashing or steady) on the front red light (flashing or steady) on the back red reflector on the back. |
| Cyclists are allowed to ride a bike in bus lanes | TRUE FALSE | From 1 July 2017 cyclists can ride in a bus lane unless otherwise signed. |
| Cyclists must ride on the left side of a left indicating and left turning vehicle | TRUE FALSE | You must not overtake a vehicle: <ul style="list-style-type: none"> on the left if it is turning left and indicating left |

<https://www.vicroads.vic.gov.au/safety-and-road-rules/road-rules/a-to-z-of-road-rules/bicycles>
<https://www.victorialawfoundation.org.au/road-rules-bike-riders>

Resource 3: Scenario worksheet

Directions: use the following scenario to explore as a class and to complete your empathy map worksheet.

This scenario may be printed and distributed to individuals, or projected for the class. You may also choose to have one or more students read the scenario out to the class to hear it together.

THE SCENARIO:

A mountain bike rider is on the return leg of a training ride, about 8 km from town. It is 8:30 am on a Thursday morning. The ride has taken the cyclist a total of 80 km distance on an out-and-back course from their country town to some fire trails and a dam circuit and back again. This is a regular training route for this cyclist and is popular with other cyclists in the region. Although there is very little traffic for most of the ride, with the majority of it being in national parkland, 10 km at the beginning and 10 km at the end of the round trip (20 km total) is on a mix of suburban streets in a built-up area (in town) and rural gravel highway. There is a very small shoulder along the two-way gravel road and poor line markings.

Heavy vehicles often use the gravel highway in and out of town, especially during weekday mornings and evenings. The roads in the area are in the process of being upgraded and today, there are road works 8 km from town – along the cyclist's route home. The road works create an environment of grooved roads, loose gravel and debris. Large vehicles are often parked on the small shoulder of the road.

A light commercial truck, working on the road upgrade, travels past the cyclist at the same time they're passing the first part of the road work area. The truck is loaded up with tools and equipment and contains the driver and three other passengers. Shortly after passing the cyclist, the truck starts to slow down and pulls over to the side of the road to park. The truck come to a complete stop about 100 m from where it first passed the cyclist. The truck has not moved very far off the road and is taking up most of the narrow shoulder.

The cyclist, now in the road works zone, is forced to ride very close to the faded solid line that marks the shoulder from the traffic lane. To avoid some of the small potholes, the cyclist is required to ride on very loose gravel. The cyclist is approaching the truck and is observing the situation by paying close attention to the truck, which has begun reducing its speed. As the cyclist comes within 15 m of the truck, the rear passenger door very quickly swings wide open and one of the passengers starts to get out of the truck.

The cyclist is unable to stop quickly enough due to the short distance and loose surface. Instead, to avoid a collision with the passenger or the truck's door, the cyclist veers to the right into the traffic lane. Luckily for the cyclist, there was no other vehicle nearby at the time and they were able to veer back to the left and onto the shoulder again after avoiding the passenger and truck door.

The cyclist, startled by what has just happened, slows down to catch their breath and process the event. The truck passenger is rattled and feels relieved that their actions didn't result in an injury to the cyclist or themselves. Ten minutes later, the cyclist is in town and safely back home.

Resource 4: Empathy Map worksheet

Directions

1. Read the scenario as a group.
2. Use the questions in the boxes on the empathy map to help build a picture of both road user's perspectives.
3. Discuss what you think the completed empathy map and the information on it means for the scenario and each road user.
4. Give a short description of your highlights for each road users' *Empathy Map*.

| | |
|--------------------------------------|--|
| What does your road user Hear? | What does your road user(s) Think and Feel during the scenario and afterwards? |
| ROAD USER: _____ | |
| What does your road user Say and Do? | What does your road user See? |



Road Smart Teacher Toolkit

Lesson Plan 9 - Rights of way: On-road rights and responsibilities (Part 3)

February 2018

Lesson Plan 9 - Rights of way: On-road rights and responsibilities (Part 3)

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Student Outcomes

Students will be able to:

- Demonstrate understanding of the rights and responsibilities of different types of road users
- Describe how the rights and responsibilities of different types of road users impacts on individual users

Timing

45 – 50 min

Materials and Preparation

- Devices with internet access for each group of students so they can access the relevant online materials referenced in this lesson plan.
- A computer and projector, and/or digital projector for the teacher to show the opening video (where necessary).
- Print-outs, for each group, of *Resource 1: Know the rules* worksheet and the *Resource 3: Empathy map* worksheet from this document (and writing implements to complete them with).

Lesson Description and Background

This lesson is designed to follow on from the lesson “Rights of Way: On-Road Rights and Responsibilities (Part 2)”. However, it can also be delivered as a stand-alone lesson.

The activities and scenarios in this lesson are designed to build students’ understanding of the rights and responsibilities of different road users, and an appreciation of the consequences on individual road users’ actions.

In this activity students focus on drivers as road users.

Students first explore the responsibilities of road users through the *Know the Rules* enquiry-based learning activity. They have an opportunity to discuss differences in their interpretations of road users’ responsibilities using the evidence they have found during the activity.

Then, students use an Empathy Map to explore a scenario from the perspective of different road users. Students learn how perspectives of different road users can change perceptions of a situation.

Key Terms

Rights and Responsibilities are the legal rights and responsibilities as well as those determined by cultural and personal ethics.

Road Users are pedestrians, cyclists, passengers and drivers. Although not mentioned in this resource, motorcycles, heavy vehicles and, in general, people of all ages are also included in the term ‘road users’.

Interactions are the reciprocal actions or influences and their effects between road users-- e.g. a car stopping at a pedestrian crossing for a pedestrian to cross the road is an interaction.

Empathy Map a tool that is used to help people understand what another person is experiencing. It allows the user to immerse themselves into the environment being discussed.

Coaching Tip

Road safety is a shared responsibility, and everyone needs to be thinking of others and looking out for each other in order to make the road a safe place.

Curriculum Mapping

Health and Physical Education. Content Description

- Plan, rehearse and evaluate options (including CPR and first aid) for managing situations where their own or others’ health, safety and wellbeing may be at risk (VCHPEP144)

Achievement Standard (excerpt only)

- By the end of Level 10, students ... compare and contrast a range of actions that could be undertaken to enhance their own and others’ health, safety and wellbeing.

Ethical Capability. Content Description

- Distinguish between the ethical and non-ethical dimensions of complex issues, including the distinction between ethical and legal issues (VCECU021)

Achievement Standards (excerpt only)

- By the end of Level 10, students ...examine complex issues, identify the ethical dimensions and analyse commonality and difference between different positions.

Lesson Part 1 – Introduction (5 minutes)

1. Show students the TAC video Space to ride. <https://www.youtube.com/watch?v=J-sHBJofCol> (NB: If your students have already seen this video as part of another lesson, you are free to replay it if you wish, or skip to step three).
2. Ask students what is meant by the phrase “Drivers, give the space to ride safe”, which appears at the very end of the video. Explain that it means road safety is a shared responsibility, and that everyone needs to be thinking of others and looking out for each other in order to make the road a safe place.
3. Explain to students that in this lesson they will be learning about the rights and responsibilities of different road users. Introduce the idea that whilst road users have many responsibilities, the number one responsibility of every road user is to obey the law.
4. Explain to students that the scenarios will explore interactions between road users from different perspectives – enabling them to put themselves in others’ shoes and change the way they think about road safety.

Lesson Part 2 – Enquiry-based Learning – “Know the rules?” (15 minutes)

1. Divide students into groups of two or three.
2. Distribute the Know the Rules worksheet (Resource 1) to each group, and ask students to find solutions to each question or statement as written. Students should use the space provided to write a few words about why they’ve reached their conclusion. Students should use the internet to complete this task. A sample completed template is included in this resource.
3. Ask each group to share their responses with the class. If there are any disagreements in answers from the class, ask two groups to share their rationale and their source. Look out for sources from outside the state of Victoria, or examples not specifically related to Victoria. The sample completed template has correct answers on it, including sources.
4. *(Optional)* Distribute a copy of the completed template to each student for future reference.

Lesson Part 3 – Scenario-based Learning – “A mile in their shoes...” (20 minutes)

1. In the same groups, ask each group to read the following scenario found in the Scenario Worksheet (Resource 3). Alternatively, you may like to project this onto a board in the room, or read the scenario aloud for the whole class.
2. Ask students to put themselves in the position of the people in the scenario, and imagine all the things going on in their head and in the environment. Get some initial reactions and responses from the class about what each person in the scenario might be thinking.
3. Hand out copies of the Empathy Map worksheets (Resource 4) to each group (see Appendix)
4. Ask students to complete the Empathy Maps for each road user in the scenario.
5. Have each group give a short description of their highlights for each part of the Empathy Map.
6. (Optional) If time allows, ask students to reflect on a time where they've been in a similar situation. Students can share their own scenarios and offer suggestions on what they could have done differently to reduce their risk in a similar scenario in the future.

Lesson Part 4 – Conclusion (5-10 minutes)

Conclusion

1. To finish, direct each group to answer two final questions based on the scenario and their Empathy Map:
 - a. What could each road user do differently to decrease the risk in the scenario?
 - b. What can you do to decrease your level of risk when using roads?

Resource 1: Know the Rules worksheet

Directions: Using the road rules of Victoria, Find answers to the following 'TRUE or FALSE' questions. Use the internet to attempt to find answers to questions where you don't know the answer. In the 'source and evidence' column, indicate where you found your answer, and the evidence for why you think it is correct.

Road User: Drivers

| Statement | TRUE or FALSE (circle one) | Source and Evidence |
|---|--|---------------------|
| Taking your eyes off the road for just 2 seconds or longer doubles your crash risk | TRUE FALSE | |
| Texting is safe as long as you keep looking up at the road | TRUE FALSE | |
| Drivers can drive through a yellow traffic light if it's safe to get through the intersection | TRUE FALSE | |
| The default speed limit is 60 km/h in a built-up area | TRUE FALSE | |
| Drivers cannot do a u-turn on roads with a single continuous line down the centre | TRUE FALSE | |

Resource 2: Know the Rules worksheet (completed sample)

The highlighted answers below are correct, and we have included a link to the government source, VicRoads, for the answers at the bottom of the page.

| Statement | TRUE or FALSE (circle one) | Source and Evidence |
|---|----------------------------|--|
| Taking your eyes off the road increases your crash risk | TRUE FALSE | Stat found in the <i>Navigation devices and GPS units</i> of the following website: ¹ https://www.vicroads.vic.gov.au/safety-and-road-rules/road-rules/a-to-z-of-road-rules/mobile-phones-and-driving |
| Texting is safe as long as you keep looking back at the road | TRUE FALSE | Texting increases your crash risk by 10 times regardless of how you do it. |
| Drivers can drive through a yellow traffic light if it's safe to get through the intersection | TRUE FALSE | Road Rule 57 ² (1) A driver approaching or at traffic lights showing a yellow traffic light must stop - (a) if there is a stop line at or near the traffic lights and the driver can stop safely before reaching the stop line—as near as practicable to, but before reaching, the stop line. |
| The default speed limit is 60 km/h in a built-up area | TRUE FALSE | Road Rule 25 ² (2) The default speed-limit applying to a driver for a length of road in a built-up area is 50 kilometres per hour. |
| Drivers cannot do a u-turn on roads with a single continuous line down the centre | TRUE FALSE | Continuous lane lines If you are in a lane with a continuous line between your lane and the next lane, you are not allowed to change lanes or cross over that line unless: <ul style="list-style-type: none"> • you are avoiding an obstruction • there is a sign saying you can • you are driving a special vehicle that is allowed in that lane (e.g. a bus). |

¹<https://www.vicroads.vic.gov.au/safety-and-road-rules/road-rules/a-to-z-of-road-rules/mobile-phones-and-driving>

²<https://www.vicroads.vic.gov.au/safety-and-road-rules/road-rules/a-to-z-of-road-rules/traffic-controls-at-intersections>

<https://www.vicroads.vic.gov.au/safety-and-road-rules/road-rules/a-to-z-of-road-rules/road-markings>

Resource 3: Scenario worksheet

Directions: use the following scenario to explore as a class and to complete your empathy map worksheet.

This scenario may be printed and distributed to individuals, or projected for the class. You may also choose to have one or more students read the scenario out to the class to hear it together.

THE SCENARIO:

A driver and a passenger are leaving a sports event on a wet Sunday afternoon. The game has finished and the local team won. There are approximately 500 people walking from the sportsground to the car park to head home after a good afternoon.

With hundreds of other vehicles trying to leave the venue, our passenger and driver find themselves in a complex driving environment. Here are some of the things happening in and around the vehicle as they're trying to make their way out of the car park:

1. Fans from both teams are waving flags, singing, talking and shouting and laughing in groups ranging from two to more than ten people.
2. The groups are filtering in between the parked cars in the car park and the line of traffic queueing to leave the car park.
3. The queue of cars is tightly packed – 'bumper to bumper' – and there are several lanes of traffic merging into two exit lanes from the car park.
4. The driver has turned on the stereo in the car and started to play music loudly enough that the passenger couldn't easily have a conversation if they wanted to.
5. There are drivers in other vehicles using their mobile phones illegally while in the line of traffic.
6. As the passenger and driver are exiting the car park onto the crowded street outside, the weather changes and the sky begins to darken. It begins to build from a light shower to heavy rain.

The driver notes that they're in a rush to get home for dinner with the family and comments on how long it took to get out of the car park due to the heavy traffic the weather is creating. The passenger begins to notice a more forceful use of accelerator and brake.

At that moment, the driver notices a gap in traffic in the lane next to them and in a very quick and forceful manoeuvre positions the car into the next lane without using their indicator or looking in their mirrors. Now in a clear lane, the driver quickly accelerates to get further up the road. About 50 m along the road, the driver is forced to apply the brakes very forcefully because another car pulls out in front of them in exactly the same way the driver did moments ago.

The passenger asks the driver to take it easy and drive to the conditions saying "We can't control the weather and the traffic, but you need to drive more carefully. If you're trying to get home for a specific time, let me call ahead for you and tell them we're going to be a bit late."

Resource 4: Empathy Map worksheet

Directions

1. Read the scenario as a group.
2. Use the questions in the boxes on the empathy map to help build a picture of both road user's perspective.
3. Discuss what you think the completed empathy map and the information on it means for the scenario and each road user.
4. Give a short description of your highlights for each road users' *Empathy Map*.

| | |
|--------------------------------------|--|
| What does your road user Hear? | What does your road user(s) Think and Feel during the scenario and afterwards? |
| ROAD USER: _____ | |
| What does your road user Say and Do? | What does your road user See? |



Road Smart Teacher Toolkit

Lesson Plan 10 - Rights of way: On-road rights and responsibilities (Part 4)

February 2018

Lesson 10 - Rights of way: On-road rights and responsibilities (Part 4)

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Student Outcomes

Students will learn to:

- Demonstrate understanding of the rights and responsibilities of different types of road users
- Describe how the rights and responsibilities of different types of road users impacts on individual users

Timing

45 – 50 min

Materials and Preparation

- Devices with internet access for each group of students so they can access the relevant online materials referenced in this lesson plan.
- A computer and projector, and/or digital projector for the teacher to show the opening video (where necessary).
- Print-outs, for each group, of *Resource 1: Know the Rules* worksheet and the *Resource 3: Empathy map* worksheet from this document (and writing implements to complete them with).

Lesson Description and Background

This lesson is designed to follow on from the lesson “Rights of Way: On-Road Rights and Responsibilities (Part 3)”, however can also be delivered stand-alone.

The activities and scenarios in this lesson are designed to build students’ understanding of the rights and responsibilities of different road users, and an appreciation of the consequences of individual road users’ actions. In this activity students focus on passengers as road users.

Students first explore the responsibilities of road users through the *Know the Rules* enquiry-based learning activity, and have an opportunity to discuss differences in interpretations of road users’ responsibilities using the evidence they have found during the activity.

Then, students use an Empathy Map to explore a scenario from the perspective of different road users. Students learn how perspectives of different road users can change perceptions of a situation.

Key Terms

Rights and Responsibilities are the legal rights and responsibilities as well as those determined by cultural and personal ethics.

Road Users are pedestrians, cyclists, passengers, drivers and motorcyclists. In general, people of all ages are also included in the term ‘road users’.

Empathy Map a tool that is used to help people understand what another person is experiencing. It allows the user to immerse themselves into the environment being discussed.

Interactions are the reciprocal actions or influences and their effects between road users --e.g. a car stopping at a pedestrian crossing for a pedestrian to cross the road is an interaction.

Coaching Tip

Road safety is a shared responsibility, and everyone needs to be thinking of others and looking out for each other in order to make the road a safe place.

Curriculum Mapping

Health and Physical Education. Content Description

- Plan, rehearse and evaluate options (including CPR and first aid) for managing situations where their own or others’ health, safety and wellbeing may be at risk ([VCHPEP144](#))

Achievement Standard (excerpt only)

- By the end of Level 10, students ... compare and contrast a range of actions that could be undertaken to enhance their own and others’ health, safety and wellbeing.

Ethical Capability. Content Description

- Distinguish between the ethical and non-ethical dimensions of complex issues, including the distinction between ethical and legal issues ([VCECU021](#))

Achievement Standards (excerpt only)

- By the end of Level 10, students ...examine complex issues, identify the ethical dimensions and analyse commonality and difference between different positions.

Lesson Part 1 – Introduction (5 minutes)

1. Show students the TAC video Driver think Rider, Rider think Driver.
<https://youtu.be/cDvuEZgLQQs>
(NB: If your students have already seen this video as part of another lesson, you are free to replay it if you wish, or skip to step three).
2. Ask students what is meant by the phrase “Driver think Rider. Rider think Driver”, which appears at the very end of the video. Explain that it means road safety is a shared responsibility, and that everyone needs to be thinking of others and looking out for each other in order to make the road a safe place.
3. Explain to students that in this lesson they will be learning about the rights and responsibilities of different road users. Introduce the idea that whilst road users have many responsibilities, the number one responsibility of every road user is to obey the law.
4. Explain to students that the scenarios will explore interactions between road users from different perspectives – enabling them to put themselves in others’ shoes and change the way they think about road safety.

Lesson Part 2 – Enquiry-based Learning – “Know the rules?” (15 minutes)

1. Divide students into groups of two or three.
2. Distribute the Know the Rules worksheet (Resource 1) to each group, and ask students to find solutions to each question or statement as written. Students should use the space provided to write a few words about why they’ve reached their conclusion. It is advised that students use the internet to complete this task. A sample completed template is included in this resource.
3. Ask each group to share their responses with the class. If there are any disagreements in answers from the class, ask two groups to share their rationale and their source. Look out for sources from outside the state of Victoria, or examples not specifically related to Victoria. The sample completed template has correct answers on it, including sources.
4. *(Optional)* Distribute a copy of the completed template to each student for future reference.

Lesson Part 3 – Scenario-based Learning – “A mile in their shoes...” (20 minutes)

1. In the same groups, ask each group to read the following scenario found in the Scenario Worksheet (Resource 3). Alternatively, you may like to project this onto a board in the room, or read the scenario aloud for the whole class.
2. Ask students to put themselves in the position of the people in the scenario, and imagine all the things going on in their head and in the environment. Get some initial reactions and responses from the class about what each person in the scenario might be thinking.
3. Hand out copies of the Empathy Map worksheets (Resource 4) to each group (see Appendix)
4. Ask students to complete the Empathy Maps for each road user in the scenario.
5. Have each group give a short description of their highlights for each part of the Empathy Map.
6. *(Optional)* If time allows, ask students to reflect on a time where they've been in a similar situation. Students can share their own scenarios and offer suggestions on what they could have done differently to reduce their risk in a similar scenario in the future.

Lesson Part 4 – Conclusion (5-10 minutes)

Conclusion

1. To finish, direct each group to answer two final questions based on the scenario and their Empathy Map:
 - a. What could each road user do differently to decrease the risk in the scenario?
 - b. What can you do to decrease your level of risk when using roads?

Resource 1: Know the Rules worksheet

Directions: Using the road rules of Victoria, Find answers to the following 'TRUE or FALSE' questions. Use the internet to attempt to find answers to questions where you don't know the answer. In the 'source and evidence' column, indicate where you found your answer, and the evidence for why you think it is correct.

Road User: Passengers

| Statement | TRUE or FALSE (circle one) | Source and Evidence |
|--|--|---------------------|
| Children aged 7-16 years must travel in either a booster seat or use an adult seatbelt | TRUE FALSE | |
| Motorcycle passengers can sit side-saddle | TRUE FALSE | |
| Pregnant women don't have to wear a seatbelt when in a car | TRUE FALSE | |

Resource 2: Know the Rules worksheet (completed sample)

The highlighted answers below are correct, and we have included a link to the government source, VicRoads, for the answers at the bottom of the page.

| Statement | TRUE or FALSE (circle one) | Source and Evidence |
|--|----------------------------|--|
| Children aged 7-16 years must travel in either a booster seat or use an adult seatbelt | TRUE FALSE | Road Rule 266 (1) The driver of a motor vehicle (except a bus or motor bike) that is moving, or is stationary but not parked, must ensure that: (a) each passenger in or on the motor vehicle who is under 16 years old is appropriately secured; |
| Motorcycle passengers can sit side-saddle | TRUE FALSE | Road Rule 271 (2) A passenger on a motor bike (except a passenger in a sidecar or on a seat designed for a passenger, other than a pillion seat) that is moving, or is stationary but not parked, must - (a) sit astride the pillion seat facing forwards |
| Pregnant women don't have to wear a seat belt when in a car | TRUE FALSE | Road Rule 265 (3) A passenger who is 16 years old or older and is in or on a motor vehicle that is moving, or that is stationary but not parked, must - (a) occupy a seating position that is fitted with an approved seatbelt; and (b) wear the seatbelt; and (c) must not occupy the same seating position as another passenger. |

vicroads.vic.gov.au/safety-and-road-rules/vehicle-safety/child-restraints/frequently-asked-questions-about-child-restraints

vicroads.vic.gov.au/safety-and-road-rules/vehicle-safety/buying-a-safe-car/seat-belts

Resource 3: Scenario worksheet

Directions: use the following scenario to explore as a class and to complete your empathy map worksheet.

This scenario may be printed and distributed to individuals, or projected for the class. You may also choose to have one or more students read the scenario out to the class to hear it together.

THE SCENARIO:

A vehicle is carrying two occupants – a driver and their carpool passenger – travelling to work at 7:00 am on a Tuesday morning. The route the vehicle takes runs from the suburb where they live, along a busy freeway and then into the inner-city road network to finally reach an office in the Central Business District (CBD).

The vehicle is currently driving in heavy traffic along a multi-lane road, just after exiting from the freeway. There is a stretch of approximately three kilometres where the vehicle is on this road. This road is also a common route used by other road users including motorcyclists and public transport, trams and buses. There is a high volume of pedestrians on the footpath and crossing at traffic signals. Many cyclists also use this route to get into the CBD.

The vehicle is in the middle lane of three. The lane to the left is a clearway used by buses and cyclists while the lane on the right has frequent traffic signals that help other drivers turn right onto other roads.

As usual, at this time of day vehicles are frequently stopping due to traffic congestion and traffic signals at intersections. During this morning's journey, a cyclist has been in approximately the same position on the road as the vehicle, with the vehicle and the cyclist moving between lanes frequently. For example, when the traffic is flowing, the driver will pass the cyclist because they are travelling faster and then, once the traffic stops due to congestion or signals, the cyclist will pass the car in the bus lane.

The passenger in the car is now aware of an increasing level of tension in the car, with the driver becoming more aggressive; braking and accelerating more abruptly as the cyclist continuously moves between lanes to get around buses and other vehicles. The driver is verbally abusing the cyclist through the open passenger window when they pass each other. The cyclist is paying more attention to the vehicle than to the road in front of them and is gesturing wildly while being shouted at. The passenger is becoming nervous about the exchange happening across them, and can see both road users steering their vehicles erratically; moving all over the lanes they're travelling in.

Nearing the end of this stretch of road, there is no longer a dedicated bus lane as the road narrows to two lanes. The cyclist now has to move into the more congested lane with the frustrated vehicle in it, as opposed to the bus lane they were able to ride in.

The passenger, becoming increasingly concerned about the aggressive driving, takes an opportunity at the next set of traffic signals where the vehicle stops to talk to the driver. The passenger tells the driver that the current situation is making them very uncomfortable and that they're not happy being in such a risky situation. The passenger asks the driver to focus on driving safely as they feel a crash may occur if the driving continues in this manner. Following up, the passenger requests that if the driver isn't going to change their behaviour to please take the next available, safe left turn and where appropriate, to let them out of the car so they can either walk or catch a tram. Due to the actions of the passenger the driver experienced a reality check. Realising that their behaviour was reckless and had the potential to cause harm to the cyclist.

Resource 4: Empathy Map worksheet

Directions

1. Read the scenario as a group.
2. Use the questions in the boxes on the empathy map to help build a picture of both road user's perspective.
3. Discuss what you think the completed empathy map and the information on it means for the scenario and each road user.
4. Give a short description of your highlights for each road users' *Empathy Map*.

| | |
|--------------------------------------|--|
| What does your road user Hear? | What does your road user(s) Think and Feel during the scenario and afterwards? |
| ROAD USER: _____ | |
| What does your road user Say and Do? | What does your road user See? |