

CREATIVE AND CRITICAL LEARNING BY SECONDARY STUDENTS

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ABOVE: Map created by Aotea College students to see how their journey to school intersects with other road users.

education.nzta.govt.nz

Students study TV ads and write to persuade

Aotea College year 9 students in English class studied road safety ad campaigns, then went on to write persuasive letters about safety around the school gate.

Teacher Avalon Retter gave copies to the school trustees and principal Kate Gainsford, who used the letters when meeting Porirua Mayor Nick Leggett about planning measures for nearby streets.

Avalon adapted a curriculum resource written by educator Karen Melhuish-Spencer, and released by the NZ Transport Agency: Safer roads: how can adverts make us think 'people', not 'cars'? This is aimed at years 9-10.

The resource builds student capacity to think and act around three questions:

- How and why are road safety advertisements trying to change what people do on the roads?
- What impact do the advertisements have on me, and people around me?
- How can I turn what I have learned into actions that make a difference to the way my community and I travel?

Student engagement was evident from written feedback:

- "I loved the bit when we shared our ideas about after school. It really made me think."
- "I enjoyed doing the persuasive letter because we could change and help improve our roads."
- "I enjoyed writing the persuasive letter and coming up with things to improve society."

Aotea College students analysed the Drive Social campaign, which aims to help people see driving as a social experience in which we share the road with others.

The year 9 students then discussed and wrote about their own experiences dealing with congestion at the school entrance, says Avalon. She then gave them a challenge.

"I asked them what they are going to do about it? We've got all these problems we've have identified. How could we as year 9 students at Aotea College attempt to make a difference?"

She let the students choose the audience for their letters. The students came up with ideas including moving the location of the bus bay, having a pedestrian crossing leading to the bus stop, a school zone with a lower speed limit and changes to main roads and intersections further along their routes to school.

ENGLISH, MEDIA STUDIES, DRAMA RESOURCES

Secondary teachers can freely download curriculum resources that get students thinking about the reasons behind campaigns such as Mistakes and Legend ('Ghost Chips'). English, media studies and drama are included.

Resources include NCEA internal assessments quality-assured by NZQA. These include achievement standards 90052: Produce creative writing, 91107: Analyse aspects of visual and/or oral text(s) through close viewing and/or listening, supported by evidence, 91250: Demonstrate understanding of representation in the media, and 91214: Devise and perform a drama to realise an intention.

education.nzta.govt.nz/resources/secondary

STUDENTS APPLY DATA VISUALISATION TO ROAD SAFETY

Digital technologies students have mined New Zealand crash data to map out factors behind safe road use.

Computers were crunching big data sets of up to 30,000 records as year 13 students at St Bede's College, Christchurch ran investigations into road crashes.

They were using real data from a publically available source, the NZ Transport Agency's Crash Analysis System (CAS).



Students saw the opportunity and the challenge that using this data was giving them.

Gerard MacManus,
digital technology teacher



Teacher Gerard MacManus says CAS provided his students with accessible data with enough depth to develop their own lines of inquiry. He showed them how to access and interpret the data, and gave them a brief to create a story that would inform a website user about relationships found within the information.

Gerard says the technology curriculum is about letting students explore user stories and solutions inside a guided process.

"I tried to keep it as open as possible. I don't like restricting the students about what they might find interesting. When you open it up and get them thinking about some of the aspects you get a whole different array of answers and a whole array of experiences for the students."

One student looked at the relationship between weather conditions and crashes, another looked at the influence of drugs and alcohol, while a third investigated the extent of crashes involving animals and made recommendations about the setting of rural speed limits.

"Everyone hears about crashes but until you start seeing where the crashes are and whether there's been alcohol or inexperienced drivers involved you may not understand what the causes are. You need to drill down into the data," says Gerard.

This project contributed to assessment for Level 3 achievement standard AS 91633, though Gerard says he would probably adapt the project to align with NCEA Level 2 if he uses the CAS data again. Gerard starts his new position at Hobsonville Point Secondary School in 2015.



What students did

- › Downloaded the data: www.nzta.govt.nz/resources/crash-analysis-system-data/index.html
- › Used Excel to examine the data, choose a line of inquiry and clean up incomplete records.
- › Put the data into MySQL open source database and ran queries.
- › Used the Linz coordinate converter to reformat location data.
- › Created data visualisations in CartoDB web-based mapping application.
- › Wrote a summary of what they found out.

Download technology curriculum resources

Gerard's unit was of his own devising. However, technology teachers can freely download, use and modify other technology curriculum resources for years 9-10 and for NCEA level 1 (Achievement Standard 91073: Implement basic procedures to produce a specified digital media outcome).

These resources give students scope to create digital artifacts which communicate road safety messages to a target audience.

 [education.nzta.govt.nz/
resources/secondary](http://education.nzta.govt.nz/resources/secondary)

GOOD DECISIONS COME FIRST FOR YOUNG DRIVERS

Decisions about managing risk are something teenagers need to make before getting into a car as driver or passenger, says a leading road safety researcher.

Keeping in touch with friends is very important to young people, so temptation remains to answer calls and texts, despite the law on drivers using mobile phones.

Someone may typically guess if the lights will stay red long enough to finish a text, says Associate Professor Samuel Charlton, chairperson of the University of Waikato's School of Psychology and member of its Traffic and Road Safety Research Group.

"The safest option is not to get into that guessing game," he says.

"They need to get into the habit of using an app that sends an automatic message that says I'm driving right now. The other thing they can do is turn off the phone."

Samuel says distracted drivers are not paying attention to their driving so remain unaware of what they're doing wrong. This holds true even if they're aware of how other motorists drive when distracted. People don't make the connection to their own behaviour.

He says young people have done well in recent years to reduce drink-driving, an attitude supported by the rule of

zero alcohol for drivers under 20, and by the popularity of choosing a designated sober driver.

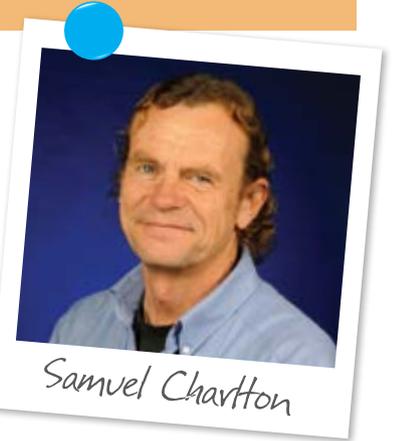
"I wanted to give young drivers a pat on the back, they have taken that to heart, and they've done well in using the concept of designated drivers - they can actually be role models for their parents for a change," he says.

"The 'Ghost Chips' ad, the strength of that is in part because young drivers have taken on board that it's not safe to drive late at night with alcohol in the system."

An experiment that supported the zero alcohol rule showed people can't judge how drunk they are getting, with similar guesses coming from people with different blood alcohol levels.

Conclusion? Young people need to learn how to make good decisions in advance of travel, in order to stay safe, says Samuel.

"All these decisions need to be made right at the start, before you get in the car; otherwise the decision becomes too hard."



WATCH: THE DIFFERENCE BETWEEN LIFE AND DEATH

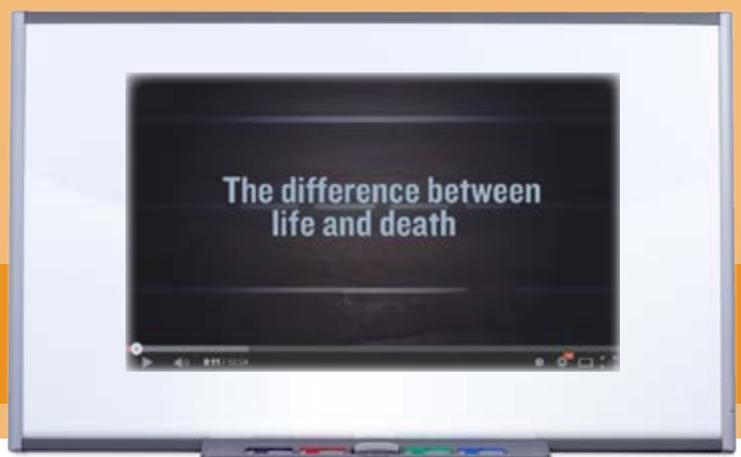
Get students thinking about all the people and factors that contribute to safer roads. This 20 minute video explains the safe system approach used in New Zealand. This approach recognises that people make mistakes and are vulnerable in a crash. Associate Professor Samuel Charlton is among the experts who speak. He says:

"No one wants to be a bad driver, but we all make mistakes from time to time...the safe system approach is about people. It takes what we know about how people think and how they behave and puts it at the centre of how we design and operate our road transport system."

www.saferjourneys.govt.nz/about-safer-journeys/the-safe-system-approach#video

Use the video as a primer before your students make their own investigations into a safe road system. Secondary curriculum resources to support secondary students:

education.nzta.govt.nz/resources/secondary



Finding the right car can be a topic for students

The choice of car is important for young drivers, says road safety researcher Associate Professor Samuel Charlton, Waikato University. They may turn to family for help to purchase a car, and too often that is any old car.



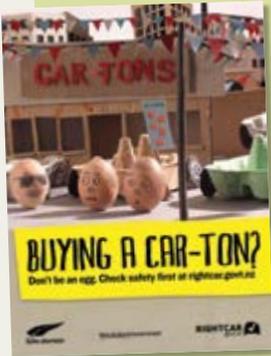
"It should really be a four or five-star car in terms of safety rating. Starting off with a good car when drivers are at their greatest risk is important. Maybe the parents should get the second car, and the kids get the high-quality car. That's something they could talk about with their parents and they might get a surprise," he says.



Students can check ratings here:

rightcar.govt.nz/used-car-safety-ratings.html

LITERACY AND NUMERACY CURRICULUM RESOURCE



The Right Car website and the Road Code feature in a secondary literacy and numeracy resource called *Practising active citizenship* through safer journeys.

Pam Hook wrote this resource to give students a contextualised learning programme to help meet NZQA literacy and numeracy requirements. Learning activities

hook into student interest in cars and can provide evidence for unit standards 26622 to 26627.

An example activity is 2.2.6: Before you get behind the wheel: thinking about the consequences.



Students work with a qualified mechanic to check on the safety and roadworthiness of a number of second-hand vehicles in a price bracket students see as affordable. Students also use Right Car to assess vehicle safety.

They can share strategies for young people to make smart choices and create a resource that guides others through this process.

Download the free curriculum resource:

education.nzta.govt.nz/resources/secondary/literacy-and-numeracy

New and upcoming teacher resources

School Traffic Safety Team Manual



This is the guide for New Zealand schools operating school patrols, school wardens and bus wardens. It has been revised for 2015. Read it online or download a PDF.

It covers training procedures, equipment, legal requirements and how responsibility is shared. Schools can

also download a template letter to parents, a traffic infringement report and a training sheet.

Click the *Quick Link* to School Traffic Safety Teams Manual:

education.nzta.govt.nz

Memorial Park virtual field trip



Join preparations for Anzac Day 2015, the centenary of the Gallipoli landings.

A section of State Highway was put underground in Wellington. On this trip, students will see the final stages of the National War Memorial Park being built above.

The Learnz teachers will be on hand with videos, images, diaries and audioconferences with experts. Help students explore ideas around national identity, history, technology, design, engineering, and roads as a community space.

When: Term 1, from 24 March 2015.

Find out more:

education.nzta.govt.nz/field-trips

LATEST RESOURCES ON PINTEREST

Search our pinboard for links to the latest road safety education resources, articles and research. Updated regularly with NZ and overseas content.

