

Forces lessons ramped up

Lincoln High School teachers trialled the NZTA's science unit with year 9 classes. Written by Pam Hook, the unit is a flexible plan about forces in the context of vehicle safety.

After teachers checked students' prior knowledge, they moved on to challenges like the ramp. In this activity, classes experimented with materials to slow down model cars on a long steep ramp, simulating real-life engineering solutions like road bumps.

'The link to road safety made learning about forces real,' said the teachers. Here's what else the Lincoln team said:

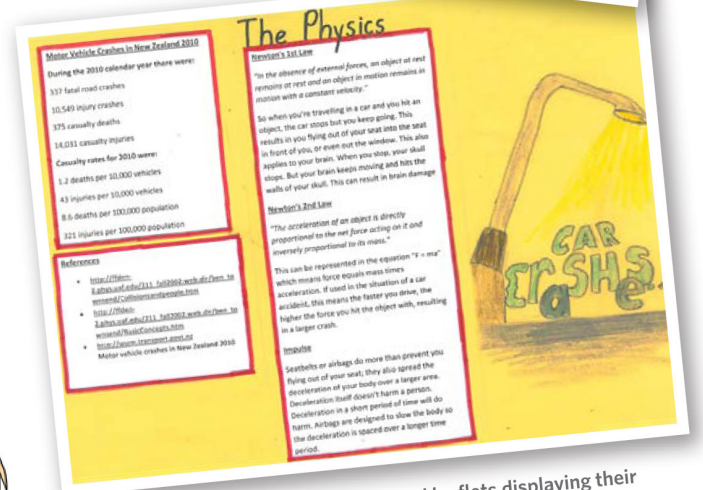
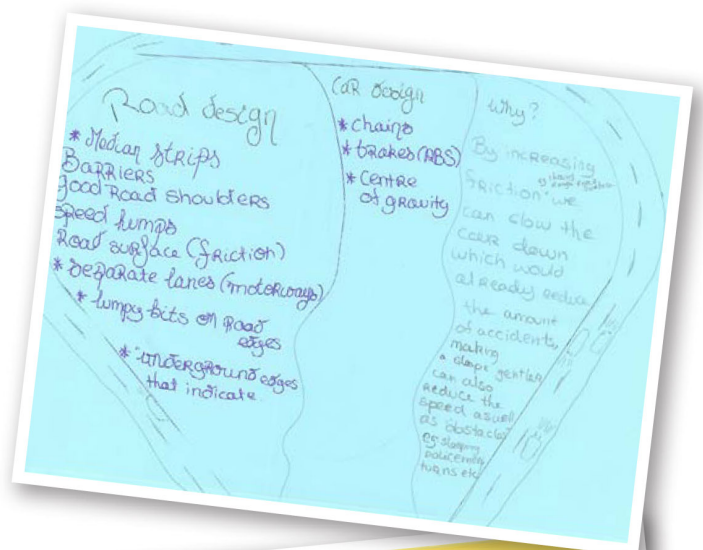
- 'We were surprised by the intensity of interest and how much the students got into this unit.'
- 'The unit worked because it allowed us to pick and choose objectives and activities to meet the needs of our students.'
- 'Our philosophy in teaching science is to help students make sense of the world around them and this topic helped. Science gives students the knowledge to make their own choices. We want our students to make decisions based on science and logic, rather than just remember rules.'
- 'Definitely, more students understand force and motion because we taught it this way. They understand it much better than if we had just put equations about forces on the board.'

Lincoln teachers said the trial of the NZTA resource has encouraged them to use more real-life contexts in science. Relevant contexts get students interested, help them understand key concepts, and lead into deeper learning.



All four trials exemplify the New Zealand Curriculum in action beautifully.

Education consultant Mary Chamberlain is evaluating trials of NZTA secondary curriculum resources in four schools. She says she was impressed during her visits.



Students created road safety posters and leaflets displaying their knowledge of forces.

Secondary teachers and students put NZTA curriculum resources through their paces during trials earlier this year.

Who? Lincoln High School

What? Road Safety – Science resource

Download

education.nzta.govt.nz/resources