

# SAFER YOUNG DRIVERS

*A GUIDE TO BEST PRACTICE EDUCATION*



NATIONAL ROAD SAFETY COMMITTEE



SASTA  
SAFE AND SUSTAINABLE  
TRANSPORT ASSOCIATION  
NEW ZEALAND



Driver Education Foundation

The National Road Safety Committee comprises:

The Chief Executive of the Ministry of Transport

The Commissioner of Police

The Chief Executives of: Land Transport New Zealand, Transit New Zealand,  
The Accident Compensation Corporation and Local Government New Zealand

The Secretary of Labour, the Secretary for Justice, the Secretary for Education and the  
Director-General of Health are associate members of the Committee.

June 2008

ISBN: 978-0-478-07229-7

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## Introduction

‘For the purposes of clarity, “young drivers” are drivers aged between 15 to 24 years. “Young novice drivers” refers to people within this group who are in their first two years of learning to drive.’

### Purpose of these guidelines

These guidelines aim to summarise what research and road safety experts – both here and overseas – consider best practice in terms of road safety education for young novice drivers. Their purpose is to disseminate this knowledge to everyone with an interest in road safety education.

The guidelines are a key part of implementing the *Road Safety Education Strategic Framework* that was released by the National Road Safety Committee in December 2006.

They are intended as a resource for training providers, schools and community groups to use in developing or modifying courses. For organisations that fund road safety education, such as territorial authorities and community trusts, they offer guidance as to the standards that training programmes and providers should be aiming to meet to be considered suitable for funding.

By disseminating best practice, the guidelines seek to help:

- raise the overall quality of road safety education, particularly that offered to young novice drivers;
- increase the likelihood of young novice drivers enjoying a greater level of road safety; and
- ensure that the valuable government and community resources invested in road safety education are directed to where they are likely to give the highest social returns.

For the purposes of clarity, ‘young drivers’ are drivers aged between 15 to 24 years. ‘Young novice drivers’ refers to people within this group who are in their first two years of learning to drive.

The terms ‘training’ and ‘education’ are used interchangeably in the guidelines i.e. no distinction is made between them. In this way, the guidelines are relevant to people and organisations who are primarily involved in delivering technical, skills-based training, as well as those running broader road-safety education programmes.

### What is ‘road safety education’?

New Zealand’s *Road Safety Education Strategic Framework* was developed to help everyone in the community understand the contribution education can make to improving road safety. It states that the primary expectation, or role, of road safety education is to raise awareness of road safety as a personally relevant issue and to increase knowledge and improve skills. The *Framework* envisages road safety education positively influencing behaviour in the wider road environment by:

- promoting and developing appropriate knowledge and understanding of traffic rules and road safety concepts;
- prioritising, developing and improving appropriate skills of all road transport network influencers, providers and users;

## **‘Male drivers aged 15 to 19 years are approximately seven times more likely to crash than their 45 to 49 year-old counterparts.’**

- strengthening and improving appropriate community attitudes towards risk awareness and optimum transport system use, personal safety and individual responsibilities for the safety of ourselves and others, cultural values (such as care, courtesy and consideration for others), life-skills, survival techniques; and
- promoting support for road safety related activities.

Within this context, these guidelines have a specific focus on the road safety courses or programmes of learning that equip young novice drivers with the skills, knowledge, motivation and attitude to use the roads safely. The guidelines cover pre-driver and driver training courses, as well as other road safety education that supports young drivers as they learn to drive and progress through the Graduated Driver Licensing System.

As the guidelines are concerned with assisting young people to learn to drive safely, they have a heavy focus on young novice driver education and training. This is because learning to drive a motor vehicle safely and gaining a driving licence are typically the key motivator for young drivers’ participation in road safety education.

The guidelines do not apply to education initiatives that disseminate information and road safety messages without personal interaction, such as advertising campaigns.

As well, it is recognised that the age range of 15 to 24 years includes some young people who are not ‘novice drivers’ such as police officers and army personnel and people working in the transport industry. The guidelines still have relevance to the training that is delivered to these people. It needs to be recognised, however, that these people will have specific training needs in terms of acquiring advanced technical skills and skills on the higher levels of the GDE matrix (see section 4, page 17).

### **Why focus on young novice drivers?**

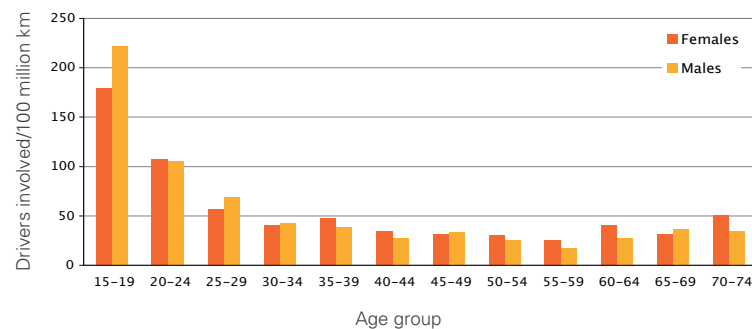
Young people pay too high a price for the opportunity to drive. Traffic crashes are the single greatest killer of 15 to 24 year olds in New Zealand and the leading cause of permanent injury for that age group.

As a group, young drivers are significantly over-represented in road crashes. In 2006, young drivers aged between 15 to 24 years represented 16 percent of all licensed drivers, but they were involved in 34.8 percent of the fatal traffic crashes, 38 percent of the serious injury crashes and 42.8 percent of the minor injury crashes. Of these crashes young drivers were at fault around 77 percent of the time.

The total social cost of crashes where 15 to 24-year-old drivers were at fault in 2006 was nearly \$1 billion. This is almost one third of the social cost associated with all injury crashes.

## **‘Female drivers aged 15 to 19 years are approximately six times more likely to crash than female drivers in the 45 to 49 year-old age group.’**

**Figure 1 - Number of drivers involved in injury crashes per 100 million km driven, by gender**

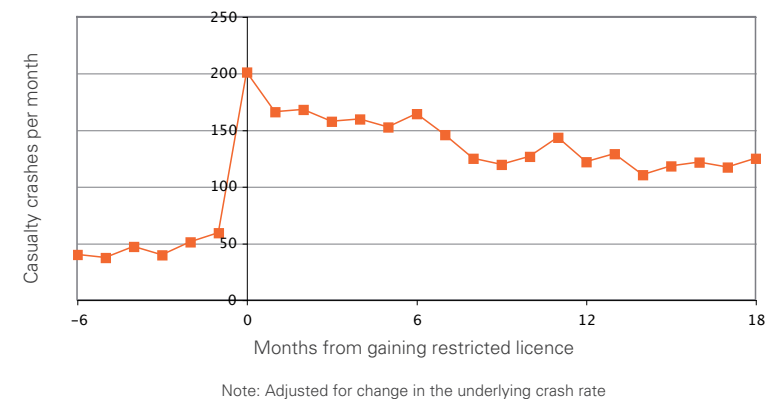


As can be seen from figure 1<sup>1</sup>, male drivers aged 15 to 19 years are approximately seven times more likely to crash than their 45 to 49 year-old counterparts. Although female drivers aged 15 to 19 years have a lower crash rate than males of the same age, they are still approximately six times more likely to crash than female drivers in the 45 to 49 year-old age group.

Young drivers aged 20 to 24 years are approximately three times more likely more likely to crash than 45 to 49 year-olds.

It is generally accepted that the relatively higher crash rate for young drivers is partly an effect of lack of knowledge, insight, risk awareness and experience and partly an effect of age-related factors such as lifestyle, peer groups and maturity<sup>2</sup>.

**Figure 2 - Crash profile of new drivers<sup>3</sup> (showing drivers who held a restricted licence for 18 months or more)**



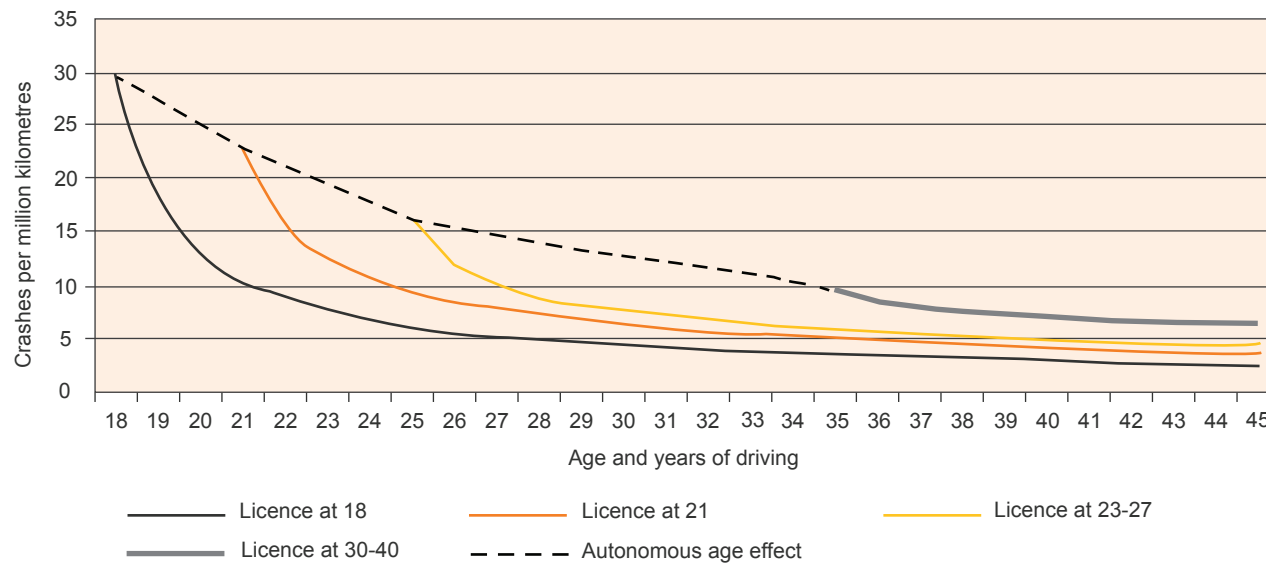
As can be seen from figure 2, the greatest risk period for young novice drivers is in the first six months of solo driving i.e. in the first six months of gaining a restricted licence. This suggests that if education is to make greater safety gains for young drivers, we need to focus on improving the quality and relevance of the training that is delivered during the learner phase. This includes the training that is given to a young person's driving coach or supervisor.

<sup>1</sup> From Young Drivers Crash Factsheet 2007. Ministry of Transport, Wellington, 2007.

<sup>2</sup> Engstrom, I, Gregersen, N.P., Hernetkoski, K., Keskinen, I & Nyberg, A. (2003): Young novice drivers, driver education and training. Literature review. VTI-report 491A. Linköping, VTI. See also OECD (Organisation for Economic Co-operation and Development) (2006) *Young Drivers The Road to Safety* pp 67 - 114, OECD, Paris.

<sup>3</sup> Based on Lewis-Evans, B. Lukkien, C. (2007) Crash Profile of New Zealand Novice Drivers, Ministry of Transport, Wellington, New Zealand available at [http://www.roadsafetyconference2007.com.au/Presentation/Lukkien\\_Carolina.pdf](http://www.roadsafetyconference2007.com.au/Presentation/Lukkien_Carolina.pdf)

**Figure 3 Age and driving experience - crashes for drivers who attain licences at ages 18, 21, 23-27 and 30-40 the Netherlands 2003**



Source: Vlakveld, 2004

The risk of crashing declines significantly during the first few years of driving but overseas research, as can be seen from figure 3<sup>4</sup>, suggests that the learning curve to achieve the risk profile of, say an average 30 year old, is long, taking more than 10 years to finally level off.

<sup>4</sup> Vlakveld, W.P. (2004) in OECD (2006) op cit p38. This graph shows results for novice drivers in the Netherlands in 2003. New Zealand research confirms these results for the first few years of driving. There is, however, no longer term New Zealand research that replicates the Dutch research.

### The role that road safety education can play

As discussed, the primary role of road safety education is to raise awareness of road safety as a personally relevant issue and to increase knowledge and improve skills. By doing so, effective road safety education can be a way to fast track young people through the riskiest phase of the ongoing process of learning to driving safely by equipping them with the skills, knowledge, experience, attitude and motivation to be competent and safe drivers.

Indeed, road safety education is one of the three pillars that New Zealand is relying on to achieve the *Road Safety to 2010* strategy of no more than 300 deaths and 4,500 hospitalisations by 2010. The other two mechanisms are engineering and enforcement activities. As the *Road Safety to 2010* strategy and the *Strategic Framework* make clear, the intention is for engineering, enforcement and education initiatives to be aligned and mutually reinforcing.

Working alongside engineering and enforcement initiatives, driver education has the potential to make a significant contribution to road safety. This is because not only does it equip people with the skills and knowledge to be competent and safe drivers, but it also focuses on creating and changing attitudes so that young drivers are motivated to be safe and socially responsible drivers.

Despite this potential, there is evidence that some types of training such as skid training may increase the likelihood of crash involvement for some young drivers <sup>5</sup> if inappropriately carried out. This could occur, for example, where training is delivered to participants who are not at the correct skills acquisition level. Or where the delivery of the training has not taken a participant-centred and/or whole of driver approach (see sections 3 and 4, pages 14 and 15).

Similarly, poorly developed and/or delivered road safety education, apart from being unlikely to successfully impart skills and knowledge,

will struggle to motivate young people to be safe drivers.

We need to ensure that all road safety education that is available to young novice drivers is well targeted to participant need and follows best practice in aiming for long-term behaviour change. When a young novice driver has participated in a road safety course, they should be able to enjoy a greater level of ongoing safety on the roads.

### Structure of these guidelines

To help achieve this goal, these guidelines outline the factors researchers and road safety experts see as key to the provision of effective road safety education. In summary, a road safety training course is likely to be effective where it:

- builds on and complements other road safety training that the young person has participated in;
- is tailored to meet the needs of individual participants;
- takes a participant-centred approach to teaching and learning;
- educates the 'whole' driver i.e. the course goes beyond technical skills to also focus on a young person's attitudes and motivation, and achieves behavioural change;
- is responsive to the needs and realities of young people;
- uses an appropriately qualified trainer;
- has effective delivery methods – this includes taking steps to proactively avoid any unintended training effects e.g. causing over-confidence in technical skills that can lead to young drivers driving beyond their capabilities;
- promotes synergies between road safety and environmental education; and

<sup>5</sup> For example skid training see CIECA (2002): The EU ADVANCED Project: Description and Analysis of Post Licence Driver and Rider Training. Rijswijk, CIECA pp 123 – 124.



- is run by a provider who has a culture of continuous quality improvement. This includes having systems of regular course and trainer evaluation, as well as regularly updating course content and delivery methods in light of new knowledge and advances in road safety education.

As discussed earlier, these guidelines are intended to be a resource for training providers, schools and community groups to use in developing or modifying courses. As such, they do not need to be read in sequence. Each section can be read as a standalone section.

### **How can these guidelines assist organisations that fund road safety education?**

The guidelines are also intended to help organisations that fund road safety education, such as territorial authorities and community trusts, identify which courses should be prioritised for public funding or other public endorsement.

The basic premise is that if a course meets the best practice standards outlined in these guidelines, then it is likely to contribute to developing competent and safe young drivers. As such, it will represent a good investment in terms of the public and private resources invested in it, and should be eligible for public funding or other endorsement.

As resources for road safety initiatives are limited, eligible courses also need to be prioritised in terms of the contribution they are likely to make to the 'network of road safety education' as a whole. This is discussed further in section 1.

'No printed word, nor spoken plea can teach young minds what they should be. Not all the books on all the shelves – but what the teachers are themselves.'

Rudyard Kipling

## Summary checklist

This checklist summarises the key characteristics of what research and road safety experts, both here and overseas, consider best practice in terms of road safety education for young novice drivers. It is intended as a tool that providers and funders can use as a final check that training has been developed and/or modified in line with best practice.

- |    |                                                                                                                                                                 |                          |    |                                                                                                                                                                                                                                   |                          |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| 1  | The training builds on and complements other road safety education that is available regionally (see pages 8-12)                                                | <input type="checkbox"/> | 11 | An appropriately qualified trainer will deliver the training (see pages 24-25)                                                                                                                                                    | <input type="checkbox"/> |
| 2  | The training builds on and complements other road safety education that the young people have participated in (see page 9)                                      | <input type="checkbox"/> | 12 | If role models are being used they will be credible and effective from the participants' perspective (see page 25)                                                                                                                | <input type="checkbox"/> |
| 3  | The training is embedded in a New Zealand context (see pages 10-11)                                                                                             | <input type="checkbox"/> | 13 | Steps are taken to involve and empower parents (or supervisors) (see pages 26-27)                                                                                                                                                 | <input type="checkbox"/> |
| 4  | If the training is a 'one off' event, e.g. it's a one day course, steps have been taken to increase its effectiveness (see page 11)                             | <input type="checkbox"/> | 14 | As far as possible, a mix of training environments or delivery methods will be used (see page 28)                                                                                                                                 | <input type="checkbox"/> |
| 5  | The training has been tailored to meet the needs of individual participants (see page 13)                                                                       | <input type="checkbox"/> | 15 | The exact mix of training environments or delivery methods is determined by the learning objectives of the training and the learning needs of participants (see pages 28-33)                                                      | <input type="checkbox"/> |
| 6  | The training applies a participant centred approach to teaching and learning (see page 14)                                                                      | <input type="checkbox"/> | 16 | Steps are in place to minimise the likelihood of causing unintended effects e.g. causing over-confidence and increasing unnecessary risk-taking behaviour (see pages 29-31)                                                       | <input type="checkbox"/> |
| 7  | The training educates the whole driver i.e. it considers and influences a young driver's motivation and attitude as a way to affect behaviour (see pages 15-21) | <input type="checkbox"/> | 17 | If 'scare tactics' or a confrontation approach are to be used, the training (or event) has been designed to provide participants with a positive learning experience that achieves an on-going learning outcome (see pages 29-30) | <input type="checkbox"/> |
| 8  | The training has learning goals in addition to participants gaining their driver licences (see page 21)                                                         | <input type="checkbox"/> | 18 | Training messages are simple and clear (see pages 31-32)                                                                                                                                                                          | <input type="checkbox"/> |
| 9  | The training appeals to young people (see pages 22-23)                                                                                                          | <input type="checkbox"/> | 19 | Discussion and feedback sessions have been built into each exercise to check for and correct any unintended messages (see page 32)                                                                                                | <input type="checkbox"/> |
| 10 | The safety content relevant for young novice drivers is included (see page 23)                                                                                  | <input type="checkbox"/> | 20 | The training includes or promotes 'eco-driving' and alternative transport choices (see page 34)                                                                                                                                   | <input type="checkbox"/> |
|    |                                                                                                                                                                 |                          | 21 | The training provider has a strong organisational focus on quality and a culture of continuous improvement (see page 36)                                                                                                          | <input type="checkbox"/> |

### Contribution to the existing network of road safety education provision

Funding agencies and community groups who are considering supporting a particular training course or initiative need, alongside the characteristics outlined above, to also consider the value that it would add to the existing network of road safety education provision.

Funding agencies and community groups need to be satisfied that funding or supporting the course or provider will:

- 1 raise the overall level of outcomes achieved by young drivers in terms of their level of competence and safety; and/or ☐
- 2 raise the overall quality of the network by e.g. offering a course that is more up-to-date in terms of new knowledge and advances in road safety research and education; and/or ☐
- 3 raise the overall level of responsiveness to the needs of young people by e.g. attracting high-risk young people who typically do not participate or succeed in formal training; and/or ☐
- 4 increase access to road safety education by e.g. expanding provision in areas or regions that currently have little or no provision; and/or ☐
- 5 maintain or build capability that is important to the network of road safety education provision over the longer term. ☐

## 1 Building on other road safety education

### Our collective challenge

Ideally all young people would participate in a structured and comprehensive programme of road safety education that builds on the education they received as children. This programme would transition them from being safe pedestrians, cyclists and passengers to being fully competent and safe young drivers.

Currently, however, there is no structured and comprehensive curriculum, or set of co-ordinated training, available for any group. Instead the education that is available tends to be one of three broad types:

- pre-driver education that builds on road safety skills young people have already acquired through walking and cycling and aims to instil positive road safety attitudes and motivation as passengers and 'pre-drivers' e.g. *Changing Gears* within the Road Safe Series provided by the New Zealand Police Youth Education Service; or
- driver training and licensing courses that focus on building the practical skills, motivations and decision making capability to be a technically competent and safe driver, e.g. this includes beginners drivers courses, as well as advanced courses such as the New Zealand Automobile Association's mainly theory based *Defensive Driving Course* and special purpose practical advanced driver skills courses; or
- other road safety education that supports young people as they learn to drive and progress through the Graduated Driver Licensing System e.g. *Drive Qual* within the *Road Safe* series provided by the New Zealand Police Youth Education Service and *Practice*.

Young peoples' access to this range of education tends to be ad hoc. Whether it is available or not is highly dependant on the individual decisions about provision that are made by schools, community groups, commercial operators, territorial authorities and government

agencies. Where road safety education is available, a young person's participation sometimes depends on their (or their parents'), motivation and often on their ability to pay.

Achieving a structured, comprehensive and equitable network of road safety educators for young drivers within our decentralised system, requires everyone involved to be actively creating a network through the decisions they make about what education initiatives will be developed, funded and delivered.

Providers are central to this because they determine the **potential** scope and comprehensiveness of what could be available for young drivers. Creating an effective network of road safety education requires providers to work in partnership with other providers, including schools. It also involves providers making what will sometimes be hard decisions. For example, choosing to develop and deliver what is missing from the network of provision rather than opting to deliver what is easy and relatively inexpensive. Or choosing not to provide a course that evaluation suggests achieves poor outcomes for young drivers.

Funding agencies, such as territorial authorities and community trusts, are the other critical ingredient in creating a structured and comprehensive network of road safety education. This is because their funding decisions ultimately determine the actual scope and comprehensiveness of the road safety education available. Their decisions also strongly influence the quality and responsiveness of the overall network of providers.

### The contribution providers can make

The contribution that providers can make concerns their decisions about what particular educational role or niche they will fill, what courses they will deliver and how they will work with other providers. Specifically, providers need to ensure they:

- develop courses that build on and complement other road safety education courses, rather than duplicate what is already available in their region <sup>6</sup>;
- routinely evaluate their courses and only offer those they know achieve good outcomes for young drivers;
- regularly review and update their courses in light of new knowledge and advances in road safety research and education;
- develop courses likely to build on a young person's existing skills, knowledge and behaviour, e.g., building on road safety skills young drivers have already acquired as pedestrians and cyclists <sup>7</sup>. This increases the likelihood that the course will be effective as it takes advantage of prior learning and it will start at an appropriate point in a young person's understanding and development of road safety skills;
- work in partnership with other providers, schools, road safety co-ordinators and agencies such as the New Zealand Police, the Accident Compensation Corporation and Land Transport New Zealand. A partnership approach is more likely to ensure that gaps in provision are filled, resources and expertise are better utilised, and there is more exchange on good practice, new knowledge and new approaches;
- support young drivers to access the full range of road safety education they need by actively advising and guiding them on other complementary road safety education that is available; and
- where they are working with schools, ensure their courses fit within the New Zealand curriculum in the learning area of health and physical education (see page 10) and they also complement other initiatives schools may be involved in across the curriculum. To do this, providers and community groups need to work with the respective school when they are first developing their programmes to decide how this is best achieved.

<sup>6</sup> Providers could contact their Local Road Safety Co-ordinator to find out the full range of road safety education available in their region.

<sup>7</sup> There is evidence that the development and acquisition of perceptual motor skills such as visual timing judgements (e.g. determining the time available for crossing a road) and the co-ordination of information about traffic approaching from different directions is a bottom-up learning process. That is, these skills progress from learning in specific contexts to more generalised conceptions. See, for example, Thomson, J.A. et al, *Child Development and the Aims of Road Safety Education: A Review and Analysis*, Road Safety Research Report No.1, Department of Transport, United Kingdom 1996.

Road safety education for adolescents has the best fit with the curriculum taught in New Zealand's schools in the area of health and physical education. The *New Zealand Curriculum* defines this learning area in the following way:

#### **The New Zealand Curriculum — Health and Physical Education**

In health and physical education, the focus is on the well-being of the students themselves, of other people, and of society through learning in health-related and movement contexts. Four underlying and interdependent concepts are at the heart of this learning area:

**Hauora**<sup>8</sup> – a Māori philosophy of well-being that includes the dimensions taha wairua, taha hinengaro, taha tinana, and taha whānau each one influencing and supporting the others.

**Attitudes and values** – a positive, responsible attitude on the part of students to their own well-being; respect, care, and concern for other people and the environment; and a sense of social justice.

The **socio-ecological perspective** – a way of viewing and understanding the interrelationships that exist between the individual, others and society.

**Health promotion** – a process that helps to develop and maintain supportive physical and emotional environments and that involves students in personal and collective action.

For further information on this learning area and the New Zealand curriculum, go to: [www.tki.org.nz/r/nzcurriculum](http://www.tki.org.nz/r/nzcurriculum)

<sup>8</sup> In health and physical education, the use of the word hauora is based on Mason Durie's Te Whare Tapa Whā model (Durie, 1994). Hauora and well-being, though not synonyms, share much common ground. Taha wairua relates to spiritual well-being; taha hinengaro to mental and emotional well-being; taha tinana to physical well-being; and taha whānau to social well-being.

### **Embed your course in a New Zealand context**

Internationally there are many good examples of successful and innovative road safety education courses that providers and community groups can draw on when they are planning, developing, or modifying their courses<sup>9</sup>. To be successful for young New Zealanders though, a course has to be firmly embedded in a New Zealand context.

The importance of matching the cultural context of a course to its intended participants can not be over emphasised. For instance, one road safety expert observed some young people dismissing a course's safety messages because the participants concluded: "Well, that happens in Australia but it won't happen here".

Where international course material or delivery approach is to be used, course developers must first interpret and embed them within a New Zealand context. As New Zealand's communities are diverse, course developers and deliverers need to tailor each course to ensure that participants will readily identify with the context.

### **Increase the effectiveness of 'one-off' events**

Road safety is no different to any other educational subject in that an extended timeframe is needed for substantive learning to occur<sup>10</sup> and content needs to be repeated to have a lasting effect. In fact, the need for time and repetition may be greater for road safety education because not only are providers aiming to impart new knowledge and skills but, more importantly, they are seeking to influence motivation and future behaviour.

Despite this, many road safety courses are currently delivered as short 'one-off' or isolated events. They do not build on a young person's prior learning, nor do they provide a link to other courses and learning opportunities.

It is acknowledged that 'one-off' events are often a reality because of limited resources. International best practice<sup>11</sup> suggests that the effectiveness of 'one-off' events can be increased by:

- having an in-depth debriefing of the learning that has occurred in previous and subsequent sessions with participants being actively involved and engaged in the debriefing. Debriefing creates a way of extending the duration of the learning and allows safety messages to be reinforced; and
- integrating issues related to road safety in other subjects in schools.

To be able to do this, providers offering 'one-off' events should work in partnership with others and should have thoroughly considered where their event adds value, in terms of the network of road safety education providers.

### **The contribution funding agencies can make**

As discussed earlier, funding agencies such as territorial authorities and community trusts are critical to creating a structured and comprehensive network of road safety education. Their funding decisions also strongly influence the quality and responsiveness of the provision that is available.

<sup>9</sup> See for example the European Commission's Rose25 project: Inventory and Compiling of a European Good Practice Guide on Road Safety Education Targeted at Young People. Available at: [http://ec.europa.eu/transport/rose25/documents/deliverables/final\\_report.pdf](http://ec.europa.eu/transport/rose25/documents/deliverables/final_report.pdf). Or the European Commission's SUPREME project that publishes best practices in road safety in the European Union, as well as in Switzerland and Norway. For the latest results, see the SUPREME website at [http://ec.europa.eu/transport/supreme/index\\_en.htm](http://ec.europa.eu/transport/supreme/index_en.htm)

<sup>10</sup> Timperley H et al, Teacher Professional Learning and Development Best Evidence Synthesis Iteration Programme, University of Auckland, p 15. Available at: <http://educationcounts.edcentre.govt.nz/goto/BES>

<sup>11</sup> Rose 25 Booklet Good Practice Guide on Road Safety Education, EuropeanCommission, 2005, p 48

It is suggested that such agencies have a two-part decision making process that:

- first, considers the merit of a particular course. For example, to what extent does this particular course meet the standards of best practice?
- second, considers the value that a particular course or provider would add to the network of road safety education relative to other courses and providers seeking funding.

Critical to this second decision would be an assessment of the extent to which funding the course or provider would:

- raise the overall level of outcomes achieved by young drivers in terms of their level of competence and safety;
- raise the overall quality of the network by e.g. offering a course that is more up-to-date in terms of new knowledge and advances in road safety research and education; and/or
- raise the overall level of responsiveness to the needs of young people by e.g. attracting high risk young people who typically do not participate or succeed in formal training; and/or
- increase access to road safety education by e.g. expanding provision in areas or regions that currently have little or no provision; and/or
- maintain or build capability that is important to the road safety education network over the long-term.

It would be expected that all decisions would be based on robust evidence of past provider performance, especially evidence of the outcomes achieved for students. Where a course is new and/or there is no robust evidence of outcomes, any application for funding support would need to be accompanied by a good evaluation proposal.



## 2 Meeting the needs of individual participants

To achieve successful learning and safety outcomes, providers need to be responsive to the skill and learning needs of each participant. They need to tailor the contents and delivery of their training to suit the individual needs of the young people participating.

Flexibility is needed because young people are not a homogenous group. The differences important here are in terms of their technical driving skills, learning style, learning skills e.g. literacy and communication skills, risk-profile, attitude, self-awareness and confidence in their own skills (both under and over-confidence).

These differences mean that the same course can have different effects or outcomes for different participants <sup>12</sup>. To increase the likelihood that all participants have positive learning and safety outcomes, it is important that a course is structured but also has a degree of flexibility so that the range of issues and questions that participants may raise can be addressed.

International best practice suggests that trainers need to differentiate between participants in the following ways <sup>13</sup>, to distinguish:

- those participants who are either over-confident or under-confident in their abilities. The trainer needs to adapt their training strategies accordingly to correct these imbalances. This includes providing individual attention where appropriate;
- participants who can learn more independently and those who need more constant guidance from the trainer;
- passive individuals to encourage them to participate in the group process;
- participants who are motivated to take part in the course and those who need encouragement to become motivated. Trainers need to be aware and capable of providing the motivation necessary to stimulate passive, disinterested or difficult participants and must recognise the influence such individuals

can have on the group process and be able to deal with it;

- participants with learning difficulties e.g. poor literacy skills. Trainers need to be able to take measures to address learning difficulties and to actively check whether the message has been understood by such participants.

One way to go about assessing participants is to get each participant at the outset of the training (e.g. during introductions and in the first exercise) to reflect on and recount her/his motivations, needs, experience and attitudes.

### Don't forget geographical differences

Another difference commented on by a road safety training expert is the difference in skills and driving experience of young drivers in urban areas versus young drivers in rural areas. Perhaps not surprisingly, young drivers in urban areas tend to be relatively better at urban driving situations and negotiating motorways. Young drivers in rural areas may have started to drive earlier than their urban counterparts and tend to be relatively better at driving on open state highways. These differences reflect the driving experiences that the different groups of young people commonly encounter.

This situation can not easily be changed. Ideally though, a provider will draw this to the attention of the young driver and her/his parent/guardian. Then they are aware that they need to plan their driving practice to encompass the full range of driving situations.

<sup>12</sup> See the discussion in CIECA (2002): The EU ADVANCED Project: Description and Analysis of Post-Licence Driver and Rider Training pp 118 - 119. Rijswijk, CIECA.

<sup>13</sup> Ibid p 130.

## 3 Taking a participant centred-approach

### Why a participant-centred approach matters

International best practice suggests that a participant-centred approach to teaching and learning is the most effective for young people and moreover for road safety education that is seeking to positively influence attitude, motivation and behaviour <sup>14</sup>.

A participant-centred approach is one where the trainer is essentially a coach who imparts knowledge, sets tasks and actively involves the participants, helping them to understand and evaluate their strengths and weaknesses related to driving. It recognises that people learn best by doing and envisages participants being actively involved in practical training or other experiences, discussions and feedback sessions. It begins by assessing where the participant is at and what their learning needs are. It then seeks agreement on this from the participant before proceeding.

This approach contrasts sharply with the traditional teaching approach where the instructor imparts knowledge and advice through presentations and 'participants' are passive recorders of information. This approach uses pre-set content and delivery styles regardless of the needs of participants.

Participant-centred learning is more likely to be successful for influencing young people to be safer drivers. This is because it avoids the risk that the trainer is perceived as preaching and/or patronising, which tend to undermine participant motivation to benefit from the training. Moreover, it encourages reflection on attitudes, motivations and capacities for self-evaluation (i.e. strengths and weaknesses) which are key to developing a commitment to safe driving behaviour. For example, a presentation to young people on drugs and driving, even a very well informed one, will achieve little if students are not given ways to fully engage with the material and to make the key messages their own.

### Discussion, self-evaluation and feedback are key

Further, although level 3 (Goals and context for driving) and level 4 (Broader goals) (on the Goals for Driver Education matrix as discussed in Section 4) can be raised through practical exercises on the lower levels, real analysis and the translation of these issues into lasting 'messages' can only be achieved through discussion, self evaluation and feedback afterwards. Discussion, self evaluation and feedback are core to a participant centred approach.

Best practice suggests that comprehensive feedback and discussion be carried out after each practical exercise. Participants should constantly be encouraged to discuss their experiences during the exercises and to identify any problems they have with them <sup>15</sup>.

Examples from best practice courses in Europe <sup>16</sup> suggest that a participant-centred approach can be taken prior to the training by encouraging participants, perhaps via a questionnaire, to think about their abilities, weaknesses and their particular needs that they would like addressed via training. Allowing participants to help shape the issues that are covered in a course helps ensure that the programme will be relevant to them.

<sup>14</sup> For a fuller discussion, see CIECA (2002) The EU ADVANCED Project: Description and Analysis of Post-Licence Driver and Rider Training pp 39 – 42, 79 - 87 and 212 – 217. Rijswijk, CIECA

<sup>15</sup> For further discussion, see CIECA (2002) p 120.

<sup>16</sup> See CIECA (2002) pp 82, 111, 120.

## 4 Educating the whole driver

### Influencing motivation and attitude

There has been a lot of research <sup>17</sup> on what should be included in an ideal programme of road safety education particularly in the area of driver training. The key conclusion from this research is **that being equipped with basic vehicle handling skills, knowledge of the traffic rules and skills to operate in traffic are not sufficient to become a competent and safe driver. This is because much of the driving task concerns personal decision-making based on situations, attitudes and values which are not directly-related to driving.**

Put another way, in most situations it is now recognised that driving behaviour is less dependent on technical competence and more dependent on a driver's gender, age, motives, goals, attitudes, personality and the context in which driving is performed.

For young people, this insight is borne out in the table on page 16 that shows driver contribution to fatal crashes by age group. As can be seen from the table, alcohol/drugs and speed are the major contributing factors for young drivers involved in fatal crashes. Young drivers involved in fatal crashes are more than two and half times as likely to have speed as a factor than drivers over the age of 25.

Alcohol/drugs and speed do not represent a lack of technical driving competence. They reflect those young drivers' motives, attitudes, personalities and the decisions they made about those specific driving trips that ended in fatal crashes.

Despite factors like driver motivation and attitude being so important, road safety education for young drivers has traditionally focused on

vehicle control and driving in traffic <sup>18</sup>. This is not surprising as these skills are the basis for competent and safe driving and they have to become routine behind the wheel.

Some road safety educators have already recognised the need to widen training to incorporate training on where risks in traffic may occur and how they can be avoided, for example, through safety margins and hazard perception training.

This is an essential development that needs to be built on so that road safety education goes beyond technical skills and traffic risks. This is because the contribution of road safety education to improving safety outcomes for young drivers is likely to be significantly reduced, if it does not also equip them with an ability to:

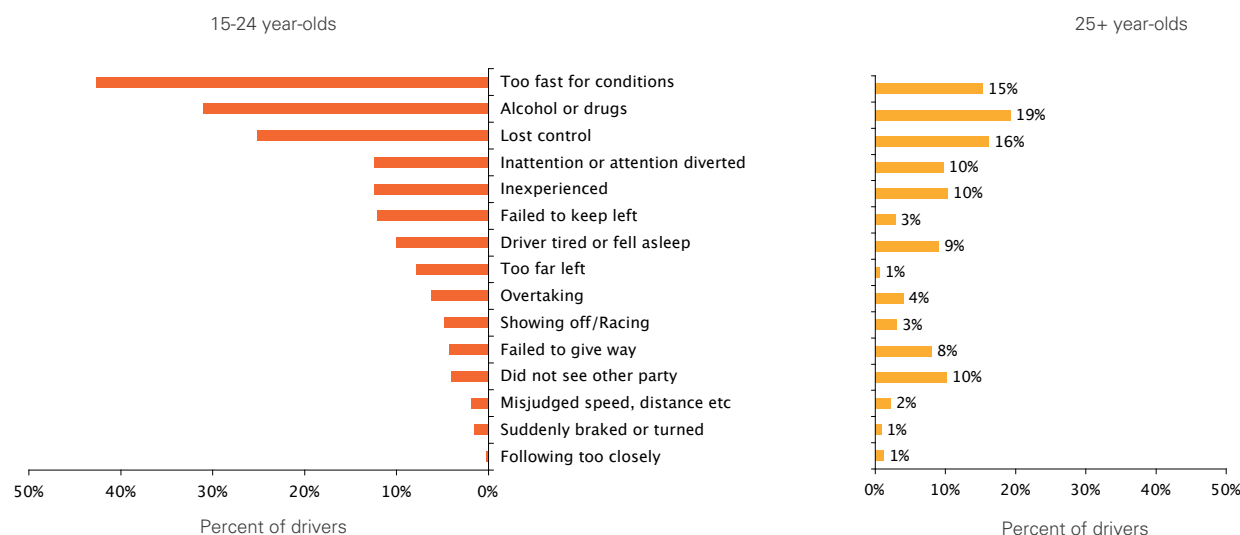
- realistically evaluate their own driving skills and to be aware of what motives and preferences govern their own driving behaviour and choices;
- decide when to avoid driving, for example, when under the influence of alcohol, drugs or fatigue;
- plan trips safely in terms of mode, route and decisions about with whom; and
- manage the social context of driving, for example, driving safely with peer passengers.

Indeed, reviews in other jurisdictions <sup>19</sup> suggest that the key risk with programmes with a heavy focus on technical skills is that they can be counterproductive for some young drivers.

<sup>17</sup> See, for example, Engstrom, I, Gregersen, N.P., Hernetkoski, K., Keskinen, I & Nyberg, A. (2003): Young novice drivers, driver education and training. Literature review. VTI-report 491A. Linköping, VTI. See also OECD (Organisation for Economic Co-operation and Development) (2006) Young Drivers The Road to Safety pp 67 - 114, OECD, Paris.

<sup>18</sup> For example, see Senserrick, T.M. and Swinburne, G.C., Evaluation of an insight driver-training program for young drivers, Monash University Accident Research Centre, 2001 p1.

<sup>19</sup> See, for example, CIECA (2002): The EU ADVANCED Project: Description and Analysis of Post-Licence Driver and Rider Training. Rijswijk, CIECA.

**Figure 4 - Driver contribution to fatal crashes during 2004-2006 by age group (NZ Police-reported data)**

They can result in young-drivers who are over-confident in their technical driving skills. Such drivers tend not to avoid difficult conditions or take on more demanding driving situations such as driving at higher speed <sup>20</sup>.

As well, there is New Zealand evidence <sup>21</sup> that higher level skills training, done correctly in terms of taking a 'whole of driver' approach, decreases over- confidence and improves attitudes regarding speeding, close following and overtaking. In comparison, traditional vehicle control skills training did not change significantly any of the confidence and attitude measures.

In summary the content of road safety education for young drivers

has to be holistic. In addition to vehicle handling and traffic skills it has to actively consider and influence wider factors like motivation and attitude that combine to determine driving behaviour. Simply focusing on vehicle control and traffic participation is not enough to equip young drivers with the competencies they need.

### Incorporating motivation and attitude in courses

The Goals for Driver Education matrix <sup>22</sup> (the GDE matrix), see next page, offer a practical way of incorporating motivational and attitudinal factors into road safety education for young drivers. Essentially this matrix captures all the competencies needed to drive safely. The matrix was developed from an assessment of the risk factors leading to young driver crashes and from the key findings

<sup>20</sup> Senserrick and Swinburne op cit p 1.

<sup>21</sup> Isler, R.B., Starkey, N., and Drew, M., The 'Frontal Lobe' Project, University of Waikato, 2007.

<sup>22</sup> This matrix was developed within an EU driver safety research project. It is widely endorsed by road safety experts and road safety authorities. A fuller discussion of the GDE matrix can be found in Engstom (2003) op cit pp 54 – 59.

from the research on young driver behaviour.

### Goals and content of driver education (The 'GDE' Matrix)

|                                                        | <b>Knowledge and skills driver has to master</b>                                                                                                                         | <b>Risk-increasing factors driver must be aware of and be able to avoid</b>                                                    | <b>Self evaluation/assessment</b>                                                                                                         |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Life goals and life skills</b>                      | Knowledge about, and control over, how lifestyle and personal tendencies affect driving behaviour e.g. age, group, culture, social circumstances.                        | Knowledge about, and control over, risks connected with behavioural style, peer pressure, substance abuse etc.                 | Awareness of personal tendencies regarding motives, impulse control, etc.                                                                 |
| <b>Goals for and context of driving (trip-related)</b> | Knowledge about the various needs of different trips e.g. being able to plan and choose routes, evaluate driving time and evaluate the necessity of the trip.            | Understanding the impact of alcohol, fatigue, mood, social context and competing motives etc.                                  | Self evaluation/awareness of personal planning skills, typical goals of driving, typical risky driving motives, etc.                      |
| <b>Driving in traffic</b>                              | Mastering traffic rules, hazard perception, safety margins. Automating elements of the driving process. Co-operating with other drivers, etc.                            | Understanding the risks associated with disobeying rules, close-following, vulnerable road users and difficult conditions etc. | Self evaluation/awareness of basic traffic skills and skills for hazard situations, personal driving style, personal safety margins, etc. |
| <b>Vehicle control</b>                                 | Basic vehicle handling skills e.g. braking, shifting gears, keeping the car under control, etc. Knowledge of injury preventative systems such as seat belts and airbags. | Understanding risks associated with non-use of seat belts, worn-out tires, breakdown of vehicle system, etc.                   | Self evaluation/awareness of strengths and weaknesses regarding basic driving skills, manoeuvring in hazardous situations, etc.           |

The matrix's underlying rationale is that, in real life, factors such as peer pressure, a driver's physical and emotional condition, and personal tendencies (e.g. being risk-keen) significantly impact on driving behaviour and greatly influence the sorts of driving situations that the driver will be in. To be effective, road safety education for young drivers needs to cover these factors.

Internationally the matrix is strongly recommended as best practice as a framework for developing, evaluating and reviewing road safety education programmes.

The matrix outlines four interdependent levels of driving behaviour and the competencies needed at each level for safe driving.

The four levels of driving behaviour are:

- the driver's broader goals (Level 4). This refers to personal motives and tendencies e.g. being risk-keen or sensation-seeking. This level reflects the fact that lifestyle, age, gender and other individual preconditions have an influence on attitudes, driving behaviour and crash involvement.
- the reasons for and the context of driving (Level 3). This level relates to the purpose of the trip and concerns the why, where, when and with whom driving is carried out e.g. day time/night time, rush-hour, decisions to drive under the influence of alcohol, fatigue or emotional stress.
- mastery of traffic situations (Level 2). This concerns the driver's ability to adjust her/his driving in response to changes in traffic e.g. approaching intersections, overtaking, and encountering vulnerable road users. The ability to identify potential hazards in traffic is also in this level.
- vehicle handling skills (Level 1). This concerns being able to use a car (knowing how to start, change gears, etc) as well as more complex manoeuvres such as emergency braking. The benefits and functioning of injury prevention systems such as seat belts and airbags also belong here.

The levels of driving behaviour are hierarchical in that level 4 factors determine the choices that are made on level 3 and how the car is driven on levels 2 and 1.

For each of these levels the matrix outlines three broad competencies necessary for safe driving behaviour, i.e. knowledge and skills (column 1), risk awareness (column 2), and self-evaluation (column 3).

#### **Column 1 - Knowledge and skills**

Column 1 describes the knowledge and skills that a driver needs for driving under normal circumstances. For levels 1 and 2, this equates to how to manoeuvre the car, how to drive in traffic and what traffic rules must be followed. At levels 3 and 4, the column concerns how trips should be planned and how personal characteristics may influence behaviour and safety.

#### **Column 2 - Risk awareness**

Column 2 is related to the first but emphasises particular knowledge and skills related to factors that increase or decrease risk. For level 1, this may be worn tyres or poor brakes. For level 2 this could be poor hazard perception. For levels 3 and 4, it could be increased risk in driving at night time, excessive speeding and driving while under the influence of drugs.

#### **Column 3 - Self evaluation/self assessment skills**

Column 3 concerns self evaluation (self assessment) skills i.e. an individual's ability to assess at each of the four levels their strengths, weaknesses, personal characteristics and decision-making abilities and understand how they impact on their driving.

Self-evaluation is a critical skill for a young driver. A driver who is aware of her/his tendency not to be able to resist peer pressure, or who knows the limitations of her/his skills on a slippery road, may be able to take this into consideration and adapt her/his driving accordingly. As well, facilitating the development of strong self-evaluation skills in young drivers is a key way of avoiding young people becoming over-confident in their technical driving skills.

#### **The matrix condenses the latest research on driving competencies**

Taken together, the matrix's levels and columns define the competencies needed to be a safe driver. The matrix can be used to set goals for road safety education programmes for young people and for developing the content within those programmes. By using

the matrix, the latest research concerning young drivers and the competencies they need to be safe can easily be integrated into education programmes.

The matrix can also be used by funders to help them understand the coverage of the courses being offered as a network in their area and the coverage that any one course provides.

The matrix represents a very different way of thinking about the goals and content of driver education programmes. For example, consider hazard perception. In a traditional course, hazard perception only refers to actual 'road hazards'. But with the matrix, the notion of potential risk extends beyond the road to encompass risks related to the type of trip, driver motive and the behavioural tendencies of the driver.

The other key insight that the matrix brings is the need for courses or a group of linked courses to achieve an appropriate balance between equipping young drivers with technical skills, risk awareness skills and self evaluation skills.

It also provides a useful way of thinking about how the delivery of training should be structured through time. Ideally a young person would receive training at all levels of the matrix before commencing the first six months of driving solo (i.e. before they progress into the restricted phase of the GDLS).

It is acknowledged that it is easier to successfully equip young drivers with skills at levels 1 and 2 than at levels 3 and 4. The latter requires a successful change in attitudes and motivations that have been developed over a number of years. At the very least, however, it is important that providers not just address levels 1 and 2. They need to raise awareness of the higher level risks and personal limitations and the impact they have on driving behaviour and safety outcomes.

### Example of a course based on the GDE Matrix <sup>23</sup>

| Level of driver behaviour              | Suggested content                                                                     | Risk awareness/skills training |
|----------------------------------------|---------------------------------------------------------------------------------------|--------------------------------|
| <b>4 Driver's broader goals</b>        | Understanding the effects of one's own habits and motives in relation to safe driving | Risk awareness                 |
| <b>3 Trip-related factors</b>          | Moods e.g. being tired or preoccupied and their effect on driving ability             | Risk awareness                 |
|                                        | Peer pressure – friends as passengers                                                 | Risk awareness                 |
|                                        | Context of driving – recreation                                                       | Risk awareness                 |
| <b>2 Mastery of traffic situations</b> | Hazard perception – identification of and action to avoid risk in traffic             | Risk awareness                 |
|                                        | Road positioning - speed regulation and safe distances                                | Risk awareness                 |
| <b>1 Vehicle control</b>               | Braking technique                                                                     | Skills training                |
|                                        | Braking distances – in relation to speed, surface, load and reaction times            | Risk awareness                 |
|                                        | Sitting position – seat belt, head rest, etc                                          | Risk awareness                 |

<sup>23</sup> From CIECA (2002) op cit p 218.



### Goals beyond gaining a licence

Courses aimed specifically at supporting young people to obtain a driving licence form the predominant part of the road safety education that is available for young drivers. This is not surprising, as learning to drive and gain a driving licence is typically the key motivator for young peoples' participation in road safety education.

Clearly we have a responsibility to help ensure that young people gain their driving licences. Alongside this, though, we have a responsibility to equip young drivers with the wider risk awareness skills and self evaluation skills that they require to be safe drivers.

In other words, it is important not to make gaining a licence the sole aim or goal of a course. A course limited to equipping young drivers with basic vehicle handling skills, knowledge of the traffic rules, and skills to operate in traffic will be enough to enable someone to gain a driver's licence. The course will not be sufficient, however, to ensure a young driver has the attitudes, motivations and behaviours to be a competent and safe driver through their life.

As well, having a sole focus on gaining a licence tends to contribute to publicly reinforcing the false perception that a newly licensed driver is by definition a safe driver. For young drivers, particularly those newly on a restricted licence when crash risk is at its greatest, this can be a dangerous perception.

To avoid this misperception and moreover to ensure course content goes beyond technical skills, the prime aim or goal of any driver education course should be to help equip people with the knowledge, motivations and skills needed to be technically competent and safe drivers. The objective of helping young drivers gain their driver licences should only ever be a secondary goal.

## 5 Being responsive to the needs and realities of young people

### Design your course to appeal to young people

For training to be effective, its contents and delivery have to be designed with a clear understanding about what teenagers want and need. One research marketing company summarises well what, in general, New Zealand teenagers want – they are seeking to:

- create a self identity as an independent individual;
- connect with others as an independent individual;
- be creative;
- be older than they are;
- have fun;
- be informed about what interests them;
- have freedom <sup>24</sup>.

Moreover, to be effective, the contents and delivery of a course have to be deliberately designed to appeal to young people and to be responsive to their training needs and their realities and values <sup>25</sup>.

This includes:

- having content that has personal relevance for young people and is based within their peer group's world view e.g.:
  - the strong motivation to impress or please peers is taken as a given, rather than a fault to be corrected, and the safety messages in the training build on the positive side of peer influence such as a desire for friends to be safe;
  - promoting things that are 'cool' and consistent with safe driving such as having friends, status and fun and highlighting things that are 'uncool' and consistent with unsafe driving such as risking your friends' lives and social isolation <sup>26</sup>.
- basing the programme within a cultural context that the young people most identify with. This not only means within youth

culture but also within the culture of the social and ethnic communities to which they belong. So, for example, the cultural environment for a programme for young people living in rural Canterbury will need to differ from that of a programme for young people in Manukau;

- having trainers who can relate well to young people on equal but different terms. So that the young people view the trainer as credible, respectful of them as adults, and open to challenge and debate from a young person's perspective;
- making sure that the learning content builds on prior knowledge and experience;
- ensuring that the learning experience is a positive one. For example, most young people prefer active involvement rather than being recipients of passive one-sided lecturing;
- the delivery package is exciting and dynamic, for example, the course uses creative approaches such as debates, songs, competitions, inter-active media, as well as practical experience-based exercises. In particular, there is value in considering the importance of technology to young people and how technology can enhance the appeal of the learning experience <sup>27</sup>.

Based on these factors, providers can ask themselves whether what they are creating will appeal to teenagers <sup>28</sup>. For instance, does the training promise/deliver independence? Does it foster connection and interaction with peers? Does it allow for creativity? Does it help teens grow up and be older than they are? Is it fun? Does it make teens more informed? Does it allow/increase freedom? Does it connect with other experiences they want/know? Does it utilise key youth market channels which youth 'control'? Does it look and feel like an

<sup>24</sup> Mobius Research and Strategy Limited, Marketing with Teens – Not at Them, A discussion paper for the Practice Programme, prepared for Land Transport New Zealand and the Accident Compensation Corporation (2007).

<sup>25</sup> For further information, see Harre, N. *The Psychology of Youth Driving*, Department of Psychology, University of Auckland. A useful education based resource is the *Iterative Best Evidence Synthesis Programme* which can be found at: <http://educationcounts.edcentre.govt.nz/goto/BES>

<sup>26</sup> Harre, N. Op cit.

<sup>27</sup> See, for example, the discussion on the use of pod casts at: <http://www.education.vic.gov.au/teacher/Global/podcasting.htm>

<sup>28</sup> Ibid p 8.

## ‘...the safety messages in the training build on the positive side of peer influence such as a desire for friends to be safe...’

experience that youth want in their busy lives?

But perhaps the best test of whether the approach, content and delivery will work for young people is to ask them before the programme goes ‘live’. This can be done through the use of focus groups, for example.

### Include the safety content that’s most relevant

In terms of content, within the framework of the GDE matrix, the consensus internationally points to the need to target the factors or situations that are known to be related to crash involvement. For young drivers, the key causal factors are inexperience in driving or skill deficiencies, age-related factors such as increased risk taking and physical immaturity and the combination of these two main factors.

So for young drivers the following are the relevant topics <sup>29</sup>:

- technical vehicle control, hazard perception and general situational risk awareness;
- identifying own skills and limitations of own skills e.g. reaction time, stopping distances and poor weather conditions;
- lack of experience, overestimation of one’s skills and underestimation of crash risk – generally and specifically when alcohol and/or drugs are involved;
- sensation and thrill seeking, including denial of risks or acceptance of risks and speeding;
- driving with peer passengers, handling peer pressure and making their own choices, including assessing situations wisely when being offered a lift by another young driver;
- alcohol, drugs and driving;
- driving when tired;

- night time driving; and

- distraction when driving e.g. cell phone use.

As far as possible, road safety education for young and novice drivers should be linked to the relevant unit standards on the National Qualifications Framework. It is expected that these guidelines will always inform the development and modification of those unit standards.

<sup>29</sup> From Rose 25 Booklet *Good Practice Guide on Road Safety Education*, European Commission, 2005 p 42.

## 6 Using an appropriately qualified trainer

**‘A good trainer can make a poorly constructed course a success, but a poor trainer cannot succeed in doing this, even if the course is perfectly designed.’<sup>30</sup>**

### The quality of the trainer is a major success factor

The quality of the trainer is one of the most important determinants of the strength of the outcomes achieved in any road safety education programme. The better the trainer, the more they will positively influence the driving behaviour of young people.

The European MERIT Project (Minimum European Requirements for Driving Instructor Training)<sup>31</sup> provides thorough recommendations for the standards that road safety educators should meet. To summarise those recommendations, a quality trainer for young people:

- has the necessary technical skills and knowledge;
- has an understanding and awareness of the higher level factors (i.e. levels 3 and 4 of the GDE matrix) that control driving style and behaviour;
- can assess and understand the different abilities, needs and motivations of participants and can adjust her/his course accordingly
- has strong facilitation skills, coaching skills, knowledge of group dynamics and experience in working with young people;
- chooses delivery methods based on the skill and learning needs of the course participants;
- adopts a participant-centred approach to teaching and learning - including being an effective coach/mentor;
- is comfortable working in a variety of cultural contexts;

- is able to establish equal and positive relationships with participants and is respectful of the realities and values of young people.

The MERIT report is available at:

[http://www.cieca.be/downloads\\_en.pp](http://www.cieca.be/downloads_en.pp)

It is recognised that some parts of the road safety education sector are dependant on part-time trainers rather than full-time professionals. So it is probably unrealistic to expect all trainers to have the full skill set. Every effort needs to be made, however, to raise the capability of trainers to the best practice standard.

For instance, sometimes if a would-be trainer has the necessary technical skills and knowledge and is keen but inexperienced or ineffective as a trainer, he/she may need some training before proceeding further. For them, participating in a ‘train the trainer’ course can be a cost effective way of acquiring the full set of skills and competencies they need to be an effective trainer. Such courses can enable them to quickly understand how to apply the training approaches and methods now seen as best practice and become good trainers.

There will be instances, however, where providers and funding agencies have to choose between having no training and having a course delivered by a poor quality trainer. Given the negative impact that poor quality trainers can have on outcomes for young people, the preference should be to err on the side of choosing no training.

<sup>30</sup> From CIECA (2002) The EU ADVANCED Project: Description and Analysis of Post-Licence Driver and Rider Training p 126. Rijswijk, CIECA.

<sup>31</sup> The MERIT report is available at: [http://www.cieca.be/downloads\\_en.pp](http://www.cieca.be/downloads_en.pp).

### Role models have to be credible and effective

Many road safety initiatives use a role model, such as a well known sports personality or a charismatic reformed offender, to confront young people with the consequences of road crashes and to influence them to make safer choices in the future. In a road safety context, role model based-education attempts to change the motivation and behaviour of young drivers by exposing them to specific attitudes, lifestyles, and outlooks through an individual in which these particular characteristics are embodied.

Role models can be a powerful educational tool because they essentially bridge the gap between ideas and practice<sup>32</sup>. As well, the learning process itself is experiential which appeals to a broad range of young people. That is, participants learn about the role model's life and how they embody the values they are exploring and trying to pass on.

Where a provider is considering using a role model approach, best practice suggests they need to be completely confident the role model they intend using will be credible and effective. Role models who lack credibility are unlikely to achieve the course's intended learning goals and safety outcomes. This is because of the risk that young people will dismiss the safety messages of their training session or even of the provider's entire course. This risk is likely to eventuate where the role model is perceived by course participants as:

- being patronising or perceived as preaching at them;
- being inconsistent in their overall message including the unspoken messages. For example, 'It's okay for me (the role model) to have done this in the past but it isn't okay for you';
- not being personally completely convinced of the need to always drive safely in accordance with the driving conditions and traffic rules; and

- lacking integrity in another aspect of their lives, for example, have faced criminal charges in the past regardless of conviction particularly charges of assault, disorderly behaviour or fraud.

All of these risks are heightened with role models who present themselves as reformed drivers<sup>33</sup>. They are probably less likely where role models present themselves as a victim of a serious road crash.

As with the guidance provided in section 8 on the use of 'scare tactics' or confrontational approaches, a training session involving a role model needs to:

- not be a one-off event but be embedded within a structured series of safety education activities;
- have both a preparatory and debriefing phase with a lot of group discussion and feedback; and
- ensure participants are given tools to deal with their emotions and to guide them towards self-reflection and self-evaluation so they see the experience as being relevant to their own situations.

As well, if the person acting as the role model is also facilitating the training session, the provider or responsible community group needs to ensure they have the appropriate skills. They particularly need strong facilitation skills, coaching skills, knowledge of group dynamics and experience in working with young people.

The European Commission's Module CLOSE TO project is a helpful resource for providers considering having young offenders share with other young people about what they did and what the consequences were. The method outlined in the project is considered best practice in this type of emotional learning. It is available at:

<http://www.close-to.net>

<sup>32</sup> Rose, D. (2004) 'The potential of role-model education', the encyclopaedia of informal education, [www.infed.org/biblio/role\\_model\\_education.htm](http://www.infed.org/biblio/role_model_education.htm)

<sup>33</sup> See the critique of role model education in Rose, D (2004).

## 7 Empowering parents and supervisors

**‘International best practice recommends that young people gain 120 hours of supervised driving under a wide variety of different driving conditions and environments before they start driving solo <sup>35</sup>.’**

Parents play a crucial role in road safety education and are key to reducing the elevated crash risk that young drivers face in the first six months of solo driving. Often, however, parents fail to appreciate the risk that their young people face and the important role they can play in reducing this risk.

As discussed in section 1, road safety is no different to any other educational subject in that an extended timeframe is needed for substantive learning to occur <sup>34</sup> and content needs to be repeated to have a lasting effect. In fact, the need for time and repetition may be greater for road safety education because not only are we seeking to impart new knowledge and skills, but more importantly we are seeking to influence motivation and future behaviour. Supervised practice is key to this.

### **Encouraging more supervised practice**

International best practice recommends that young people gain 120 hours of supervised driving under a wide variety of different driving conditions and environments before they start driving solo <sup>35</sup>. Currently our level of self-reported supervised practice for learner drivers is much lower than this at around 40 hours on average. <sup>36</sup> We also know from focus groups with parents that they tend to significantly underestimate how many ‘practice hours’ are required for their teenagers to become safe and competent drivers <sup>37</sup>.

Providers can assist this by making sure parents are aware of the best practice standard of 120 hours and that their young people need

to experience a wide variety of conditions and environments. It is also desirable that parents know that driver education is not a substitute for supervised practice. Participation in driver education is the best way for young people to learn to drive. Driver education can facilitate and accelerate the acquisition of skills needed by inexperienced beginners. Only supervised practice over a long period of time, however, can provide the diverse driving conditions and circumstances that young people need to experience to become competent and safe drivers.

**‘My dad drives at 140 kilometres and hasn’t had a crash. He’s a safe driver.’ <sup>38</sup>**

### **Helping parents equip themselves with the skills and knowledge they need**

Apart from duration, the quality of the supervision that young people receive from their parents or supervisors is important to reducing the high crash risk that they face in the first six months of solo driving. Experience suggests that a parent’s driving style, habits and attitudes to road safety will influence a young person’s driving behaviour <sup>39</sup>. Indeed, parents probably influence a young person’s driving behaviour before a young person has even begun the process of learning to drive.

<sup>34</sup> Timperley H et al, Teacher Professional Learning and Development Best Evidence Synthesis Iteration Programme, University of Auckland, p 15. Available at: <http://educationcounts.edcentre.govt.nz/goto/BES>

<sup>35</sup> OECD (2006) Young Drivers: The Road to Safety p 135 OECD, Paris.

<sup>36</sup> LTSA (July 2000). *Novice Driver Survey*, p 9

<sup>37</sup> From the *Practice* programme review commissioned by Land Transport New Zealand and the Accident Compensation Corporation.

<sup>38</sup> Ibid.

<sup>39</sup> See the summary review of the literature in OECD (2006) Young Drivers: The Road to Safety, p 154 OECD, Paris.

It is important that parents are equipped to fulfil their role as supervisors in a way that promotes safe driving behaviour. Ideally, the competencies and safety messages that road safety professionals have instilled will be reinforced by parents.

Parents also need to be able to structure the practice moving over time from simpler driving situations to complex and more demanding driving situations. For example, starting practice on familiar residential streets before progressing to night time driving on unfamiliar roads with higher speed limits. We know, however, that parents tend to teach through informal and unstructured coaching sessions rather than structured sessions focused on specific skills and driving situations <sup>40</sup>.

A key challenge for road safety educators then is to link with parents and encourage them to access the information and training they need to be competent supervisors. A key role for funders/government agencies is to assist with providing material and resources to assist parents in their role.

For some providers, this may involve delivering training to parents. For others it will be making sure that the parents of the young people enrolled with them are well aware of the training resources available, like the Practice programme, and are encouraged to access the training they need.

For parents who are seeking providers who are considered to meet the standards of these guidelines, a useful point of first contact is your local road safety co-ordinator. Road safety co-ordinators can be contacted via your local or regional territorial authority or by visiting the Road Safety Co-ordinators website at:

<http://www.crsp.net.nz/groups/coordinators/index.php>.

'I trust my son more than many of his friends.'<sup>41</sup>

#### **A caution about parental overconfidence**

Lastly it is important to be aware that participation in driver education can lead to parental overconfidence in the driving skills of their teenagers <sup>42</sup>. So parents perceive less need for additional driving practice outside of the formal driver training. Indeed, some parents see this as a reason for enrolling their teenagers in driver education.

As well, there is evidence that parents tend to have more confidence in the driving skills and attitudes of their own teenagers than in others <sup>43</sup>. That is, parents prefer to have their teenager doing the driving, rather than having their teenager be a passenger with a peer driver. Indeed this can be the motivation for parents to assist their teenagers to gain a drivers' licence.

Providers can help mitigate parental overconfidence by facilitating an effective three-way partnership between themselves, the parent and the young driver. Providers can do this by giving parents information so they know about the elevated crash risk that their teenagers will face over the first six months of solo driving. Alongside this information, as discussed above, parents need to be reassured that the best way they can create a safe learning environment for their teenagers is by combining formal driver education with supervised practice.

Government agencies and funders can support this partnership by making information available to providers, parents and young drivers.

<sup>40</sup> Ibid.

<sup>41</sup> Ibid.

<sup>42</sup> Mayhew, D.R., Simpson, H.M., Singhal, D., & Desmond, K. (2006). *Reducing the crash risk for young drivers*. Washington, DC: AAA Foundation for Traffic Safety.

<sup>43</sup> From the *Practice* programme review commissioned by Land Transport New Zealand and the Accident Compensation Corporation.



## 8 Offering effective delivery methods

### Providing a mix of training environments

Best practice suggests that an ideal programme of road safety education for a young person would use a mix of training environments, for example, on-road, track and classroom-based training experiences. Having a mix of environments is important because each setting has its own advantages and limitations. If used collectively, however, their individual limitations are offset, giving the young driver the best chance to acquire the broad range of knowledge and skills needed to be a competent and safe driver.

Specifically <sup>44</sup>:

- on road courses are preferable for technical hazard perception and anticipatory driver training. They are also ideal for raising awareness of the different road and traffic situations that will be encountered in real-life. As well, they offer a high level of individual attention and can provide an opportunity for participants to learn by watching other participants drive. The key limitation with on-road courses, however, is that they cannot give young drivers a full appreciation of certain risks as dangerous situations cannot be experienced 'on demand'. As well, an on-road environment is not conducive to considering the range of issues and motivations, such as peer pressure, that ultimately determine driving behaviour;
- track-based courses, if done well, can be preferable for enabling participants either to directly experience risk in safe simulated conditions, or to watch demonstrations of risk. They can be an effective way of convincing participants that what they have learnt in theory about physical forces is actually true in reality. As the training is more likely to be done in groups, track-based training also allows participants to become more aware of how different strengths and weaknesses, personalities and attitudes impact on driving. Track-based courses though have a number of

limitations. The key one being that they can not give young drivers experience of a wide variety of real life driving situations, such as the experience of the actions of other road users. As well, compared with the other training environments, there is greater risk that track-based training will be counterproductive in terms of influencing young people to be safer drivers and particular cautions about track-based training are outlined below;

- classroom activities can be effective in consolidating on practical exercises, communicating and training risk awareness, and imparting knowledge but if used in isolation, learning outcomes may be limited for individuals who tend to learn more through hands-on experience; and
- e-learning and simulation e.g. on-line simulations or simulator vehicles. And other new technologies e.g. use of electronic in-vehicle-driver-monitoring- equipment. These tools can be a way of creating an attractive learning environment for young people. They can provide a risk-free means of allowing young people to practise and receive feedback on their driving skills, such as anticipatory driving and hazard detection skills. Indeed there is evidence that anticipation skills can be significantly improved by using simulation techniques <sup>45</sup>. Simulators should be employed, however, as an adjunct to, rather than as a replacement for, other training methods. They are not a substitute for practical experience gained under safe conditions and in real on-road and traffic situations.

As far as possible then there should be a mix of training environments within a course with the exact balance being determined by the learning objectives and the skill and learning needs of the participants.

Obviously the ability to provide a mix of training environments will be limited by the amount of resources available for a particular course.

<sup>44</sup> For further information see the discussion in CIECA (2002) The EU ADVANCED Project, pp 89 – 101.

<sup>45</sup> McKenna, F.P., and Crick, J. (1994) *Hazard perception in drivers: A methodology for testing and training* TRL Report 313). Crowthorne, United Kingdom: Transport Research Laboratory.



As discussed in section 1, a good way this can be resolved is by: having strong working relationships with other providers; actively guiding participants to other available road safety education; and making make sure that your own course builds on and complements other training.

### A caution about track-based training

It is important that track-based training courses be deliberately designed and delivered to minimise the likelihood of unintended training effects, especially causing over-confidence and increasing risk-taking behaviour. International best practice tends to advocate <sup>46</sup>:

- leaving out highly technical emergency reaction training for young novice drivers e.g. regaining control of a skidding car (see the discussion later in this section);
- having the focus of an exercise skewed more towards highlighting risk factors e.g. more on the effects of slippery road conditions and speed on braking distance, and less on improving vehicle manoeuvring skills;
- making sure exercises are true to life. They should be varied and set up so that participants can relate to real life scenarios with all the normal constraints e.g. a lack of space to manoeuvre and a lack of time to react;
- following practical exercises with proper analysis, feedback and discussion between participants and the trainer. This is to reinforce and contextualise the experience, as well as to allow the trainer to reinforce the safety message and to check and correct for any unintended messages;
- taking specific measures, including the above, to avoid over-confidence in participants (see the discussion later in this section).

### Care with using 'scare tactics' or confrontation

A frequently used delivery method in road safety education is to confront young people with a shocking fatal road incident, or to use visualisations about the consequences of a fatal crash. The aim is to create an emotional shock that triggers, for participants, a desire to make safe driving decisions. While a great deal can be learnt from real life crashes, care and sensitivity is needed to ensure that this approach does not raise ethical concerns and goes beyond being a 'short-lived' experience to provide positive and on-going learning outcomes.

Where a provider, or community group, is considering using a confrontational approach it is important to be satisfied that the prime aim of the event is to influence safe driving behaviour and that the learning goals are likely be achieved. Rather than, for instance, the event being a 'vehicle for healing' for a survivor of a fatal crash or for a remorseful driver.

Studies indicate that often young people when they experience these events mentally shut themselves out and do not identify with the traffic victim or with the actions that lead to the crash. Or worse, they strongly resist the idea that it could happen to them <sup>47</sup>.

If 'scare tactics' or confrontational approaches are used, international best practice suggests that <sup>48</sup>.

- they are not one-off events but are embedded within a structured series of safety education activities;
- the event has both a preparatory and debriefing phase with a lot of group discussion and feedback; and
- students be given tools to deal with their emotions and to guide them towards self-reflection and self-evaluation so that they see the experience as being relevant to their own situations. One

<sup>46</sup> CIECA (2002) op cit p 96.

<sup>47</sup> ROSE 25 Booklet Good Practice Guide on Road Safety Education, pp 43 - 44. European Commission 2005.

<sup>48</sup> Ibid.

way to do this is to explore via a small group discussion the participants' views on the training they have just experienced. Do they consider it relevant to them? What have they learnt from the exercise? What does it mean for their driving in their future and/or for the role they will play as peer passengers?

Two examples of good practice that use a confrontational approach can be found in *Survival Team/Denmark and Don't Drink and Drive/Sweden* see ROSE 25 *Inventory and Compiling of a European Good Practice Guide on Road Safety Education Targeted at Young People*, European Commission, 2005 pgs 152 – 162 <sup>49</sup>.

As well, the European Commission's Module, *close to*, is a helpful resource for providers considering having young offenders share with other young people about what they did and what the consequences were. The method outlined in the project is considered best practice in this type of emotional learning. It is available at: <http://www.close-to.net>

### Proactively avoid any unintended effects

#### Reduce the likelihood of over-confidence

The key risk with driver education is that for some young drivers the training can be counter-productive <sup>50</sup>. Through the initial training period, young drivers acquire an amount of knowledge and a number of skills and thus a certain level of actual driving ability. There is evidence that some young drivers have a rather poor perception of their actual ability <sup>51</sup>. Subjectively they overestimate their ability behind the wheel.

This over-estimation of driving skills, combined with certain risk factors such as risk seeking and peer pressure, can lead to unsafe driving behaviour and higher crash rates. Indeed, some research has found that the more skilful drivers believe themselves to be, the faster they intend to drive <sup>52</sup>. As well, New Zealand research suggests that many teenage drivers rate their driving skills as higher than the average driver and a high level of confidence in driving skills is strongly related to unsafe driving attitudes, particularly speeding. <sup>53</sup>

Studies of driver education programmes indicate that over-confidence is more likely to occur <sup>54</sup>.

- in training where there is considerable emphasis on exercises involving vehicle manoeuvring skills and coping with danger, which is not balanced by adequate risk awareness training (including risks associated with the higher levels (3 and 4) of driver behaviour);
- where practical exercises are not properly supported by post-exercise discussion and feedback to consolidate the intended message of the exercise, to reinforce the learning process and to check for any unintended messages; and
- where the training is delivered to participants who are not at the right skill level.

The GDE matrix illustrates why advanced technical skills training can be counterproductive for some individuals. Learning advanced

<sup>49</sup> Available at: [http://ec.europa.eu/transport/rose25/documents/deliverables/final\\_report.pdf](http://ec.europa.eu/transport/rose25/documents/deliverables/final_report.pdf)

<sup>50</sup> For a fuller discussion, see CIECA (2002): The EU ADVANCED Project: Description and Analysis of Post-Licence Driver and Rider Training pp 89 - 97. Rijswijk, CIECA.

<sup>51</sup> Engstrom, I, Gregersen, N.P., Hernetkoski, K., Keskinen, I & Nyberg, A. (2003): Young novice drivers, driver education and training. Literature review p 35 VTI-report 491A. Linköping, VTI.

<sup>52</sup> Horswill, M.S, Waylen, A.E., and Tofield, M.I. (2004) Drivers' rating of different components of their own driving skill: A greater illusion of superiority for skills that relate to accident involvement. *Journal of Applied Social Psychology*, 34, pp177-195.

<sup>53</sup> Isler RB, Starkey, N and Drew M, The 'Frontal Lobe' Project, pg 1, University of Waikato, 2007.

<sup>54</sup> CIECA (2002) op cit p 92.

**‘It is not the message which is delivered, but the message which is received by the participants that counts.’<sup>58</sup>**

techniques, such as emergency braking, may increase safety among drivers who are motivated (on level 3 and 4 factors) to increase their safety by using their new skills to increase their safety margins. The training could be counterproductive, however, for those drivers who have more dangerous preferences (on level 3 and 4 factors) such as being sensation seeking or having a strong need to impress peers by pushing limits<sup>55</sup>.

#### **Counter-measures to minimise over-confidence**

There are a number of ways<sup>56</sup> that courses can be designed to avoid the likelihood of causing over-confidence, including:

- accurately discriminating between course participants;
- demonstrating certain high risk situations or manoeuvres followed by discussion, instead of allowing participants to attempt the manoeuvres;
- having a predominance of risk awareness exercises and minimal technical skills-based training in a course;
- comparing the situation in exercises to situations which participants might meet on the road and making participants think about the extent to which a certain kind of manoeuvre is possible in real traffic situations; and

- openly discussing over-confidence with participants.

#### **The importance of personal limits**

Many driver courses stress the importance of having some experience of the physical limits beyond which it is impossible to maintain vehicle control. Typically this is done to provide young novice drivers with the actual experience of those limits. From a safety perspective, though, personal limits are just as important as the limits dictated by the laws of physics<sup>57</sup>.

This is why it is important that courses encourage young novice drivers to recognise their own personal limits – both psychological and physical – and to make driving decisions within those bounds, rather than only the bounds dictated by the laws of physics.

It is also important to be aware that some young novice drivers may take the physical limits literally; seeing them as absolutes that are not affected by their own personal limits.

#### **Keep training messages simple and correct any unintended messages**

Apart from over-confidence, international surveys<sup>59</sup> of driver education programmes indicate that a key reason why courses can lead to reduced safety outcomes is that participants commonly understand a different message from the one intended. This is the case even with risk awareness exercises, where the safety message

<sup>55</sup> See CIECA (2002) p 124.

<sup>56</sup> For further discussion see CIECA (2002) op cit p 123.

<sup>57</sup> See for example Katila

<sup>60</sup> Ibid.

is more obvious.

For example, from an actual survey of learners<sup>60</sup> an exercise showing how difficult it is to perform a manoeuvre on-road — totally impossible with worn or under-inflated tyres — led some participants to think 'As long as my tyres are new and at the right pressure, I'll be able to handle the manoeuvre'. Similarly, from the same survey, many students understood that driver training on slippery surfaces is supposed to allow them to drive, after the course, as quickly on slippery roads as dry ones. Others correctly understood that it is important to evaluate the road conditions and to drive to those conditions.

These examples illustrate the critical role that the trainer plays in getting the right message across and the importance of having active discussion and feedback after each exercise.

Indeed, best practice suggests that trainers need to:

- make sure the underlying safety message is kept simple, made clear and repeated through the exercise/training to ensure that it is understood and will be maintained over time;
- tailor their training to suit the learning needs of participants. This includes ensuring that the training and its messages are based within the cultural context that the participants most identify with;
- regularly check for and correct any unintended messages. The easiest way to do this is by having discussion and feedback (either individually or in groups) built into each exercise. For example, participants could be encouraged to discuss their views of the training and what they have learnt from an exercise so that

the trainer can assess whether the learning and safety goals have been achieved; and

- check that participants have made the link between training and real-life situations by asking questions such as: 'What does this mean for your driving in the future?'

#### **Avoid skid training**

In general, international studies of driver education for young novice drivers conclude that exercises which only aim to regain control of a skidding vehicle should be avoided<sup>61</sup> for this group as:

- skid training can result in over-confidence, particularly for young male drivers. It can give young drivers a false impression of their ability to cope with emergency situations, which has in some instances led to higher crash rates;
- proficiency in skid control cannot be developed in a short training course as it requires practice over a long period of time. Unless the manoeuvre is completely 'automatised' it is highly unlikely that it would succeed in a real-life emergency situation. This is because of the element of surprise in emergencies, the lack of room for the manoeuvre on a normal road; possibly poor weather and surface conditions, and the rarity of the situation;
- trainers who regularly practise skid control may tend to overestimate the ability of young drivers to master such a manoeuvre; and
- a heavy focus on skid control can lead to unintended messages being received by participants. One such message could be that coping with dangerous situations is more important than driving to the conditions, or leaving adequate safety margins, and/or driving defensively.

<sup>58</sup> CIECA (2002) op cit p 139.

<sup>59</sup> Gregersen, N.P. Evaluation of a new course syllabus for skid training, cited in The EU ADVANCED Project Final report September 30, 2002.

<sup>60</sup> Ibid.

<sup>61</sup> For example: *Young Drivers The Road to Safety*, OECD 2006 p. 135, Engstrom I, Gregersen, NP, Hernetkoski, K, Keskinen, I & Nyberg, A. (2003): Young Novice Drivers, Driver Education and Training. Literature Review. VTI-report 491A. Linköping, VTI. p. 65 and The EU ADVANCED Project 2002 p. 123 – 124. The European research is also confirmed by North American studies for example: Williams A F, (2006). Young driver risk factors: Successful and unsuccessful approaches for dealing with them and an agenda for the future. *Injury Prevention* 12(1) i4-i9.

It is preferable to show young drivers that skidding is the result of a driving mistake and that it is very difficult to execute a skid control manoeuvre in everyday situations. So the best approach is to avoid being in a situation where a mistake is likely to occur.

This section has touched on an issue that is well researched in the international literature – that not all road safety programmes or their delivery have a positive learning and safety effect for all young drivers. In fact, some types of training actually increase the likelihood of crash involvement for some young drivers. The key issue for providers is to make sure they proactively avoid any unintended effects by:

- having counter-measures in place to minimise course participants becoming over-confident in their skills;
- encouraging participants to recognise their own personal limits and to drive within those bounds;
- keeping training messages simple and clear and checking for and correcting any unintended messages; and
- avoiding skid training for young novice drivers.

## 9 Promoting 'eco driving' and alternative transport choices

Road safety education raises awareness of the impact that an individual's decisions have for their own and others' safety. Alongside the impact on road safety, however, it is likely that the current generation of young people, in comparison with previous generations, will also have to consider the impact that their transport decisions have on the environment.

This suggests that, increasingly, road safety education will need to be expanded to include environmental education. This is common practice now in many developed countries including 16 European countries<sup>62</sup> and in Oregon in the United States. As well, the Canadian Automobile Association includes environmental considerations within its driver education courses. In all these jurisdictions, participating in environmental driver education is a key part of learning to drive and gaining a driver's licence.

Fortunately there are many synergies between road safety and environmental sustainability. Many decisions that are taken to increase safety also reduce the negative impact of motor vehicles on the environment. For example, slowing down to an appropriate speed to meet the conditions and having an anticipatory driving style have obvious safety advantages but also use less fuel and contribute less to climate change.

Research suggests that New Zealanders place a high priority on environmental sustainability. Based on a July 2007 Research New Zealand-Clemenger BBDO poll examining public attitudes towards environmental sustainability, currently 83% of New Zealanders see sustainability as important. Only one in four New Zealanders, however, feel they are in a good position to make an impact. This suggests that for many young people the motivation to want to contribute to improving the environment can be 'piggy backed' on in terms of increasing their safety on the roads.

Road safety providers need to consider increasing the awareness of young people about these synergies. This could be done by focusing on three areas.

### The choice of alternative transport modes

The first area is exploring the value of alternative transport modes. It is well known that about one-third of all car journeys are less than two kilometers and the relative costs of owning, maintaining and using a vehicle are high.

Young people can be encouraged to think about the value that other modes of transport such as public transport, cycling and walking have for improving their safety and contributing to environmental sustainability.

Useful resources for providers are available on the following websites:

Travel Wise: <http://www.travelwise.org.nz> which will be particularly useful for Aucklanders as will the MAXX website <http://www.maxx.co.nz>

In Canterbury a useful site is <http://www.gosmarter.org.nz>;

EECA's website: <http://www.eeca.govt.nz/transport>.

Land Transport New Zealand's feet-first website: <http://feetfirst.govt.nz>

Sustainable living website: <http://www.sustainableliving.org.nz/>

### Looking at the impact of a vehicle

The second area is the impact that the vehicle can have in terms of both road safety and on the environment. Within New Zealand's

<sup>62</sup> England, Sweden, Finland, Norway, Netherlands, Iceland, Estonia, Latvia, Greece, Austria, Belgium, Poland, Czech Republic, France, Spain, Ireland.

current vehicle fleet, there are significant differences in safety features and fuel efficiency. Helpful on-line resources that providers can use within courses to demonstrate these differences can be found on the:

- Fuel saver website see: <http://www.fuelsaver.govt.nz/>; and
- Rightcar website see <http://www.rightcar.govt.nz>

Alongside the choice of vehicle, there are a number of things that a driver can do to ensure a vehicle operates as efficiently as possible. These include engine maintenance, having the correct tyre pressure, improving the vehicle's aerodynamics (e.g. removing roof-racks, keeping windows wound up on open roads) and reducing unnecessary vehicle weight (e.g. taking the golf clubs out of the boot).

Useful on-line resources for providers can be found on the:

- Fuel saver website see: <http://www.fuelsaver.govt.nz/>
- Ministry of Transport's website see the Choke the Smoke campaign <http://www.transport.govt.nz/campaign/>
- Sustainable living website: <http://www.sustainableliving.org.nz/>

### **Encourage an 'eco driving style'**

The last area to explore is the impact of driving style. Gentle acceleration, defensive driving, driving at slower speeds, engine braking and changing to higher gears earlier at lower speeds (among others) all reduce the amount of fuel it takes to do the same trip and are consistent with increased road safety.

The other advantage that can be pointed out to young people is that an 'eco driving style' will personally save them money.

The three websites above are again useful on-line resources for providers.

## 10 Having a focus on quality and improvement

Young novice drivers are more likely to enjoy safer driving over the long-term when they have participated in training run by providers who have a strong organisational focus on quality and a culture of continuous improvement. At a minimum, this includes the provider:

- keeping an attendance record for all participants that includes name, date of attendance and contact address. This is important for a range of reasons, including being able to evaluate courses, to support students to achieve and to guide them to other training that they may need;
- setting clear objectives or goals for its courses and for the individual exercises within them in terms of what learning objectives the course intends to achieve and how they will be achieved. Without clear objectives, a course will be unfocused and evaluation impossible;
- evaluating each course based on the objectives or goals that were set and responding to identified areas where improvements can be made;
  - a helpful resource for providers and community groups for developing course evaluations can be found in: *The EU Advanced Project: Description and Analysis of Post-licence Driver and Rider Training, Final Report* September 30, 2002 (p.g. 141 – 155). Available at: [http://www.cieca.be/advanced\\_en.pp](http://www.cieca.be/advanced_en.pp)
  - another good evaluation resource is the *Guidelines for Evaluating Road Safety Education Interventions* that were published by the UK Department of Transport in August 2004. These guidelines are available on the Department website: <http://www.dft.gov.uk>
- evaluating trainers regularly, investing in their development and refreshing their skills;
- having learning environments and equipment that are fit for purpose; and
- regularly updating course content and delivery methods in light of new knowledge and advances in road safety education.

Funders also have a role to play in facilitating increases in quality improvement. As discussed in Section 1, they need to ensure that their funding decisions positively influence the quality and responsiveness of the provision that is available. They need to consider the value that a particular training initiative or provider would add to the network of road safety education. They also need to be confident that the training that they have chosen to fund will raise the overall level of driving competence and road safety achieved by young novice drivers.



## Appendix - useful resources

### Overview of key issues affecting young drivers and the role of road safety education

Engstrom, I, Gregersen, N.P., Hernetkoski, K., Keskinen, I & Nyberg, A. (2003): *Young novice drivers, driver education and training. Literature review*. VTI-report 491A. Linköping, VTI.

OECD (Organisation for Economic Co-operation and Development) (2006) *Young Drivers: The Road to Safety* pp 67 - 114, OECD, Paris.

### Young New Zealand drivers and crash involvement

*Young Drivers Crash Factsheet 2007*. Ministry of Transport, Wellington, 2007. Available at: <http://www.transport.govt.nz/assets/NewPDFs/Young-Driver-Crash-Factsheet-July-07-.pdf>

Lewis-Evans, B. Lukkien, C. (2007) *Crash Profile of New Zealand Novice Drivers*, Ministry of Transport, Wellington, New Zealand [http://www.roadsafetyconference2007.com.au/Presentation/Lukkien\\_Carolina.pdf](http://www.roadsafetyconference2007.com.au/Presentation/Lukkien_Carolina.pdf)

### Best practice road safety education

CIECA (2002): The EU ADVANCED Project: Description and Analysis of Post Licence Driver and Rider Training Final Report September 30, 2002. Rijswijk, CIECA. Available at: [http://www.cieca.be/advanced\\_en.pp](http://www.cieca.be/advanced_en.pp)

European Commission (2005) Rose25 Project: *Inventory and Compiling of a European Good Practice Guide on Road Safety Education Targeted at Young People*. Available at: [http://ec.europa.eu/transport/rose25/documents/deliverables/final\\_report.pdf](http://ec.europa.eu/transport/rose25/documents/deliverables/final_report.pdf)

European Commission (2007) SUPREME Project Thematic Report: Driver Education, Training and Licensing. Available at [http://ec.europa.eu/transport/supreme/index\\_en.htm](http://ec.europa.eu/transport/supreme/index_en.htm)

European Commission (2005) EU MERIT Project: Minimum Requirements for Driving Instructor Training, Final Report. Available at: [http://www.cieca.be/downloads\\_en.pp](http://www.cieca.be/downloads_en.pp)

### Involving young offenders in road safety education

European Commission (2004) and (2007) CLOSE TO Project. Available at: <http://www.close-to.net>

### Evaluation

CIECA (2002) *The EU Advanced Project: Description and Analysis of Post-licence Driver and Rider Training*, (p.g. 141 – 155). Available at: [http://www.cieca.be/advanced\\_en.pp](http://www.cieca.be/advanced_en.pp)

*Guidelines for Evaluating Road Safety Education Interventions*, UK Department of Transport 2004. Available on the Department website: <http://www.dft.gov.uk>

### Resource for parents

[www.practice.co.nz](http://www.practice.co.nz)



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**[www.transport.govt.nz](http://www.transport.govt.nz)**



#### THE NATIONAL ROAD SAFETY COMMITTEE

The National Road Safety Committee comprises:

The Chief Executive of the Ministry of Transport

The Commissioner of Police

The Chief Executives of: Land Transport New Zealand,

Transit New Zealand, the Accident Compensation Corporation  
and Local Government New Zealand

The Secretary of Labour, the Secretary for Justice, the Secretary for Education  
and the Director-General of Health are associate members of the Committee.