

INTRODUCTION

Our vision: A New Zealand where no one is killed or seriously injured in road crashes.

'Vision Zero' is founded on the Safe System approach and educators are an integral part of the Safe System. They are responsible for building a safety culture where people not only accept but expect road safety interventions. This is achieved through ongoing initiatives which positively influence people's behaviour and attitudes on our roads.

Designing effective interventions that impact on behaviour is complex. This guide is designed to assist anyone delivering road safety programmes to ensure the work they do has a positive impact and keeps people safe on our roads.

People working in the road safety space do so with professionalism, passion and commitment. This guide lays out each step required to plan and implement a good practice road safety education initiative and is designed for all users. There will be varying needs among road safety coordinators as to which parts of this document are useful.

It is intended to be used in conjunction with the Research summary: effective school and community based road safety for young people.

Planning

Research shows effective programmes include the following steps:

Clearly define the problem

- > Use evidence from statistics (for example, the **Communities at risk register** or the **Crash Analysis System**) or community groups and other agencies working in the road safety space to identify the most important areas of risk (problem) for your community. Care should be taken when interpreting the Crash Analysis System data at a local level particularly if the numbers reported are small.
- > Be as specific as you can about the problem (see example 1 on page 11).
- > Consider the context describe how the problem links with the national road safety strategy priorities (link to **Road to Zero** and **Government Policy Statement on Land Transport**).
- > Identify the causes of the problem. Information from evidence and statistics (link to research summary, Ministry of Transport crash facts, AA Research Foundation) can be helpful to show what is causing the problem. A problem tree diagram is a great way to visually show your understanding of the problem, what causes it and what the effects are (see example 2 on page 11).
- > Don't underestimate the importance of talking to the target audience (see example 3 on page 12).

Define the intervention

- > Identify the goal and objectives (what you want to achieve) of the intervention. Make sure your objectives are SMART (specific, measurable, achievable, realistic and time-bound). The problem tree can be flipped to a solution tree to help create your plan (see example 2 on page 11).
- > Identify the target audience (the group of people your intervention is aimed at) and if applicable the secondary target audience (people with a lot of influence over the target audience).
- > Identify strategies along with evidence these strategies work.
- > Avoid re-inventing the wheel! First, look for existing national programmes and campaigns that support the behaviour change you want to achieve (see the section below on what content to include). Leveraging off existing campaigns means some of the hard work has been done.
- > If there is no evidence available, you can pilot (trial) your strategies and document what you learn. Work with your target audience to adapt national campaigns and co-design your strategies.

Use a behaviour change theory

- > Use a theory of behaviour change to explain how/why your strategies will result in change (see example 4 on page 12).
- > Where appropriate, include behaviour change techniques that are known to work specifically with children and young people (see example 5 on page 13).

Watch out for!

- > Beware of simple solutions, sometimes it is the system, not the individual that needs to change. The move to the graduated driver licensing system (GDLS) is a good example of a system change. This single legislative change had an immediate positive impact on death and injury rates for young drivers.
- > Think carefully about your target audience half the people killed and harmed on our roads did not contribute to the crash they're passengers, pedestrians, on bicycles, or drivers who have been hit by others.
- > Make sure you are clear about the cause of the problem New Zealand data show that about 30% of serious crashes and 47% of fatal crashes are caused by risk-taking and deliberate violations, and the rest are caused simply by errors of judgement.
- > Changing complex behaviour takes time! A lack of knowledge is rarely the only cause of a complex behaviour choice. Giving people information is one of the simplest and least effective strategies in complex behaviour change. It can take years for factors such as social norms to change. However, examples such as the Smokefree movement show with concerted collective effort over many years, attitudes and norms about risky behaviour can change.

Useful guides:

Behaviour change theory

RSPA (2017) Designing evidence based road safety interventions: a practioner's guide

Behaviour change techniques

Fiona Fylan (2017) Using behaviour change techniques: guidance for the road safety community

Evaluation

Different types of evaluation are used for different purposes (see example 6 on page 13).

Create an evaluation plan at the start of the programme/intervention to match the stage of planning you are doing. This could be:

- > a plan to fully understand the problem (formative evaluation)
- > a plan to work with the target audience, understand more about them and involve them in the design of a programme (formative evaluation)
- > a plan to test, learn and adapt a programme before it is rolled out on a larger scale (formative evaluation)
- > a plan showing how the programme's effectiveness will be measured (summative evaluation).

Useful guides for evaluation include:

Evaluating road safety education, training and publicity projects: a practitioner's guide RoSPA (2016)

This guide is specific to road safety education and would suit beginners in evaluation.

Results based accountability: guidelines and resources MSD (2017)

A useful framework for evaluation - used widely across NZ government agencies.

Making sense of evaluation SUPERU (2017)

This guide is New Zealand specific and would be great for people wanting to expand their evaluation thinking.

EXAMPLES OF EVALUATION

RRISK: Reduce Risk – Increase Student Knowledge (NSW, Australia) is a good example of a road safety programme based on evidence. Check out the process evaluation (looking at how well the programme is implemented) and the published papers.

Check out the learnings from the evaluation of **X-ROADS Teen Road Safety Expo**. The evaluation concluded X-ROADS was not the most effective use of resources to achieve the intended outcome, of keeping teens safe on the road. However, there were positive changes in teens' beliefs and intended behaviours in relation to road safety risks and other beneficial outcomes including:

- > three more Hutt Valley schools established SADD groups
- > stronger connections were formed among the organisations that collaborated to create the XROADs experience
- > the group gained important insights on designing more effective initiatives in the future, including:
 - start with a high-level vision and key outcomes, then purposefully designing the best approach to make those happen
 - connect any major event to an ongoing programme of education and learning in schools and the community.

CHECKLIST FOR PLANNING AND EVALUATION

- ✓ There is good evidence to support the need for this programme.
- ✓ The problem is clearly defined.
- ✓ The plan has a goal and objectives, a target audience, strategies and a theory of change.
- ✓ There is evidence (from other programmes, theory or from the target audience) the programme strategies are likely to work.
- ✓ There is an evaluation plan.

Supporting a community approach

Community programmes engage directly with young people, their parents, whanau and community groups or settings important in young people's lives.

CHECKLIST

- ✓ Use a comprehensive approach (multiple actions integrated into an overall plan and delivered over time), not one-off activities.
- ✓ Include evidence-informed content (find more in the Waka Kotahi Research summary: Effective school and community based road safety for young people).
- ✓ Use a coordinated approach across multiple agencies (Waka Kotahi, SADD, AA, Police, ACC).
- ✓ Use the Waka Kotahi **Snapshot** to stay up-to-date with what is happening.
- ✓ Increase the impact by leveraging off national initiatives using the road safety calendar.
- ✓ Take a Safe System approach to addressing behaviour (safe road use and safe speeds) and environment (safe roads and roadsides and safe vehicles).
- ✓ Follow the Waka Kotahi Advertising guidelines.

What content to include?

Some ideas are suggested below – make sure you refer to the evidence for effective programmes and strategies in the Research summary: effective school and community based road safety for young people.

THE GRADUATED DRIVER LICENSING SYSTEM (GDLS)

- > Promote the Drive website to young people, their parents and whānau.
- > Support learner and restricted drivers to undertake supervised driving practice, stick to the conditions and progress through the GDLS.
- > Support parents/whānau to be good road safety role models, and to develop strategies to reduce the risks their children face as road users.
- > Support Community Driver Mentor Programmes for young people.

DISTRACTION AND FATIGUE

- > Promote key messages in the Waka Kotahi driver distraction advice in particular to ensure young drivers do not breach the restriction on using mobile phones.
- > Help novice drivers to develop good decision-making strategies and form the supportive peer relationships they need to be a safe driver.
- > Help novice drivers with evidence-based strategies to resist peer pressure and manage distractions.

DRUGS, ALCOHOL AND SPEED

- > Support all drivers under 20 with strategies to comply with the zero-alcohol limit for young drivers.
- > Leverage off relevant campaigns from the Police, Waka Kotahi and HPA.
- > Focus on drink driving through mechanisms to reduce access to alcohol among young people and mechanisms to discourage unsafe driving practices in the community.
- > Work with other partners locally such as the District Health Board, Public Health Service or the Community Action on Youth and Drugs (CAYAD team).

SAFER VEHICLES

- > Help drivers learn about the importance of choosing a safe vehicle and keeping it well-maintained.
- > Promote the Right Car website.

Supporting a whole school approach

Schools are an obvious setting to promote the safety and wellbeing of young road users (whatever their mode of transport).

As experts in road safety you can introduce schools to the wide range of tools and resources Waka Kotahi has developed to support road safety. You can also identify and support road safety champions within schools.

Champions could be individual teachers, parents, students or groups such as the Board of Trustees, PTA or Students Against Dangerous Driving (SADD) group.

What content to include?

The most effective approach to support road safety in schools is a whole of school approach including (i) curriculum (ii) school ethos and environment (iii) family and community partnerships and student-led peer to peer approaches.

Support local schools to adopt a whole of school approach to road safety using **Waka Kotahi school resources**. Check out the Drug Foundation's whole of school programme **Tūturu for schools**.

Some ideas are suggested below – make sure you refer to the evidence for effective programmes and strategies in the Waka Kotahi Research summary: effective school and community based road safety for young people.

CHECKLIST

- ✓ Build an ongoing relationship with schools via the Principal, Board of Trustees, Parent Teachers Association (PTA) or through the SADD group.
- ✓ Find out what the school is currently doing to support road safety and help them to build towards a whole school approach.
- ✓ Direct teachers to the Waka Kotahi guidance on assessing road safety initiatives. Encourage teachers to use the Waka Kotahi curriculum resources and the Road Map resource.
- ✓ Encourage school champions to develop a road safety education policy and establish a school traffic safety team
- ✓ Encourage schools to work with their local Police School Community Officers.
- ✓ Support schools to set up a SADD group.
- ✓ Work with schools to identify road safety issues and advocate for infrastructure changes, for example enhanced safety and accessibility of footpaths, safe drop off/pick up zones, bus parking areas, bike lanes or cycleways.

Approaches that don't work when educating young people up to the age of 24

There is research evidence to suggest that some approaches are not likely to be effective for young road users up to the age of 24.

Please refer to the Research summary: effective school and community-based road safety for young people for the full details.

- * Short-term strategies, for example, one-off events or teaching sessions.
- * Personal accounts or testimonies of people who have 'been there'.
- **x** Fear tactics, punitive or zero tolerance approaches.
- **★** Curricula that provide information only on dangers.
- * Moral/shaming appeals to avoid undesirable behaviours.
- * Curricula that only promote self-esteem or growth with no skill development.
- * Programmes that only gather high risk youth together (may facilitate or amplify unhealthy attitudes and behaviours).
- Programmes that do not involve families/whānau, schools and communities in behaviour change.
- * Driving skills programmes that rely only on teaching handling skills on off-road tracks or circuits.
- ➤ Poor quality driver simulation or alcohol impairment Goggles (beer goggles) to simulate the effects of being drunk.

TEMPLATES AND EXAMPLES

Plan on a page

If you are new to planning, here is an example of a programme planning template.

| | | PROGRAMME PLAN |
|---------------------------|--|----------------|
| Definition of the problem | Evidence this is a problem | |
| | Context (bigger picture) Link to national/local strategy | |
| | Cause of the problem | |
| Plan | Goal and objectives (what you want to achieve) | |
| | Target audience (group your intervention is aimed at) | |
| | Strategies (what you plan to do) | |
| Theory | If you plan to change behaviour – what theory or techniques will you use | |
| Evaluation | Needs assessment | |
| | Formative | |
| | Summative | |

Good practice frameworks

| ASSESSING COMMUNITY-BASED ROAD SAFETY PROGRAMMES - WHAT DOES GOOD LOOK LIKE? | | | | |
|--|----------------------|---|---|--|
| | COMPONENT | EXCEPTIONAL | ACCEPTABLE | INCOMPLETE |
| Definition of the problem | Evidence | The problem is clearly defined using evidence from statistics and local experts (community groups and other agencies working in the road safety space) and specific details are included using the 5Ws: | The problem is clearly defined using evidence from statistics and local experts (community groups and other agencies working in the road safety space). | The problem statement is vague with no reference to evidence. |
| | | 1. What is your specific problem | | |
| | | 2. Who's involved | | |
| | | 3. What do we know about them | | |
| | | 4. When is this happening | | |
| | | 5. Where is it happening. | | |
| | Context | The link to national and local strategy is clearly explained and referenced. | The link to national and local strategy is clearly explained and referenced. | There is no context provided about the problem in terms of national or local strategic priorities. |
| | | A partnership approach with other agencies or groups nationally and/ or locally has been used to define the problem. | | |
| | Cause of the problem | The causes of the problem have been fully explored and documented using evidence from statistics and from the target audience. | There is some evidence about possible causes of the problem from statistics or from the target audience. | The causes of the problem have not been identified. |
| | | A visual depiction of the causes is provided, for example as a problem tree. | | |

| Definition of the intervention | Goal and objectives | The goal and objectives are clearly defined and meet all SMART criteria. There is a clear link to the causes of | The goal and objectives are clearly defined and linked to the cause of the problem. | The goal and objectives are not clearly defined and/or there is no link to causes of the problem |
|--------------------------------|---------------------|---|--|--|
| | | the problem. | Some but not all of the SMART criteria are present. | |
| | Target audience | The target audience is clearly and specifically defined. | A broad target audience is defined. | The target audience is not well defined. |
| Evidence informed strategies | | Strategies are clearly linked to objectives and are part of an ongoing programme using evaluation to refine and improve them and Are clearly evidence informed or Based on a national campaign or | Strategies are clearly linked to objectives and | Strategies are described but there is no information about how/why they will work. |
| | | | Are clearly evidence informed or Based on a national campaign or There is a clear plan to develop and test strategies with the target audience. | |
| | | | | |
| | | There is a clear plan to develop and test strategies with the target audience. | | |
| Behaviour change theory | | An appropriate behaviour change theory has been used to design the intervention. | Aspects of theory are identified (for example the programme goes beyond information provision and also includes a focus on changing beliefs/attitudes/social norms). | There is no evidence of theory underpinning the intervention. |
| Programme content | | The programme content is consistent with the evidence of good practice and has been adapted for the local context. | The programme content is consistent with the evidence of good practice. | The programme content contains strategies known to be ineffective. |
| Evaluation | | Evaluation is comprehensive and ongoing. | There is some evaluation of specific programmes/initiatives. | There is no evaluation. |

| ASSESSING COMMUNITY-BASED ROAD SAFETY PROGRAMMES - WHAT DOES GOOD LOOK LIKE? | | | | |
|--|-------------------------------------|---|--|--|
| | COMPONENT | EXCEPTIONAL | ACCEPTABLE | INCOMPLETE |
| Relationships | | A strong ongoing relationship has been established with the school/s. | A relationship is being built with the school/s. | The programme is a one-off event/programme. |
| | Support for schools/teachers | There is a planned approach offering support to schools/teachers | Support is offered to schools/teachers to develop a whole school approach to road safety if requested. | Support is not offered to schools or teachers to develop a whole school approach to road safety. |
| | Partnering with other organisations | There is an ongoing partnership approach to road safety with other organisations. | There is evidence of involvement from other organisations. | There is no involvement from other organisations. |
| | Student involvement | Students are involved in leading road safety initiatives. | Work is underway to involve students in road safety initiative. | There is no student involvement in leading road safety initiatives. |
| Whole school approach | School ethos and environment | There is a comprehensive commitment to road safety across the school environment and the school has a Road Safety Education Policy. | There is an emerging interest in road safety at the school and some aspects of the school environment support road safety (for example there is a School Traffic Safety Team). | The school has no interest in promoting a positive road safety environment. |
| | Family and community partnerships | Whānau and wider community are actively involved as champions for road safety. | Opportunities are provided for community and whānau to engage with road safety. | There is no whānau or community engagement occurring for road safety. |
| | Curriculum | Road safety is integrated into the Curriculum using Waka Kotahi resources across all years | Some teachers have integrated road safety into the Curriculum using Waka Kotahi resources. | Road safety is not integrated into any Curriculum areas. |

Example 1

Be as specific as you can when defining the problem

Rather than saying 'we have a problem with young drivers', be as specific as you can:

- > What do we mean by young? Is there an age group that is specifically at risk? Is it just young drivers, or does it include novice drivers of any age?
- > Is there any particular time of day that is high or low risk?
- What about location is the problem worse in any particular region or on any particular road type?
- > Is there any particular journey that is more risky, for example coming home late at night or going to work early in the morning?
- > Is there any specific demographic at greater risk maybe students?
- > What particular driving behaviour seems to underlie the problem? For example, is it using a mobile while driving? Performing unsafe manoeuvres? Fatigue? Not wearing a seatbelt? And so on.

(Adapted from Behaviour change techniques Fiona Fylan (2017) Using behaviour change techniques: guidance for the road safety community (https://www.racfoundation.org/research/safety/behaviour-change-techniques-guidance-for-the-road-safety-community)

Or use the 5 Ws to guide you:

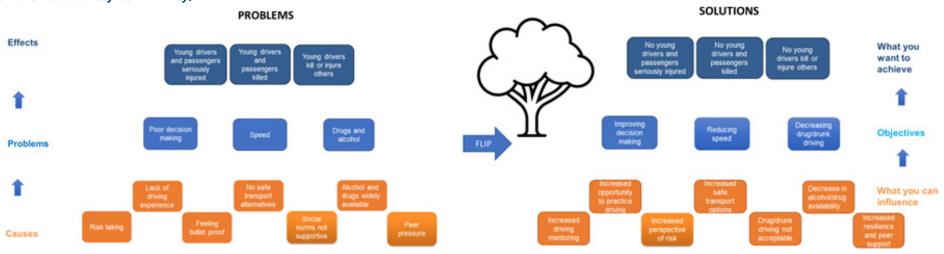
- 1. What is your specific problem
- 2. Who's involved
- 3. What do we know about them
- 4. When is this happening
- 5. Where is it happening

Example 2: problem tree

A problem tree is a useful tool to help understand a problem. It helps to systematically think through the cause and effect relationships and identify where and how to intervene. Co-creating a problem tree with a group of students would be a great way to involve them in the design of a programme. Involving the target audience gives more insight into the real causes of behaviour.

A clever trick, once you've worked out your problems, is to flip your thinking and show it as a solution or an objectives tree. Poor decision making (the problem) becomes improving decision making (the objective).

Adapted from: *Making sense of evaluation: a handbook for everyone*, page 13, SUPERU (2017) (https://dpmc.govt.nz/publications/making-sense-evaluation-handbook-everyone)



Example 3: Involve the target audience

Making assumptions about the cause of young people's behaviour may lead to the wrong solution.

The PTA at a local primary school noticed during the summer term students were playing at lunch time either not wearing hats or wearing hats that were not offering adequate sun protection. The PTA decided to solve the problem by providing every student with a new Cancer Society approved hat. They raised the money to purchase hats for every student and the hats were distributed.

The following week they held a lunch at the school to celebrate. They noticed the students at lunch time not wearing hats or wearing hats that were not offering adequate sun protection.

They questioned some of the students – where are the new school hats? Turns out the problem was not a lack of hats in the first place. The problem was students didn't like the bucket style hats – they were not cool and they didn't want to wear them.

The PTA assumed the cause of students not wearing appropriate hats was a lack of hats. Not knowing the cause means not knowing the solution.

Check out these design thinking approaches to problem-solve road safety issues and involving your target audience developed by the Waka Kotahi Education Team and SADD https://sadd.org.nz/design-your-own

https://education.nzta.govt.nz/case-studies/case-studies-of-teaching-and-learning/students-against-dangerous-driving-reboots-student-led-campaigns/



HOW PROGRAMMES ARE OFTEN PLANNED

Programmes are often designed on the assumption that providing information will increase knowledge and based on this knowledge people will change their behaviour. Designing an educational intervention without any guiding theory is like designing a medical intervention without an understanding of physiology. Just as it cannot be assumed that aspirin reduces the chances of a heart attack without evidence, intuition and what seems plausible cannot tell us how much delivering road safety workshops on seatbelt use will modify behaviour (RSPA, 2017).



Be Safe

in the Sun

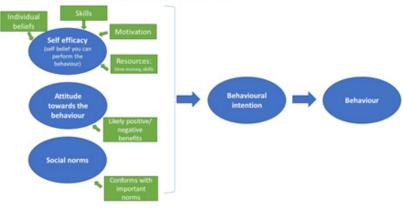
USING THEORY TO PLAN A PROGRAMME

Using theory gives us a roadmap for behaviour change. For example, in the theory of planned behaviour we see it is self belief about performing the behaviour (self efficacy), attitude toward the behaviour and social norms that are important.

The theory shows the importance of intervening to increase motivation, providing access if resources are limited, assisting people to consider the positive benefits of behaviour change and long term efforts to change unhelpful social norms.

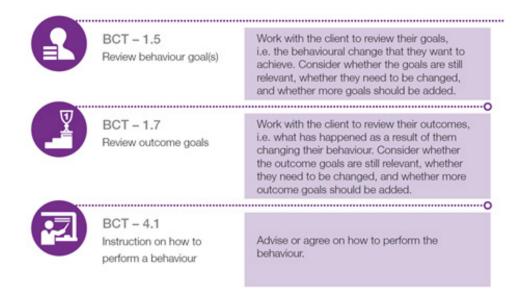
Using this theory one strategy could be to change social norms and attitudes about seatbelt wearing (link to Belted Survivors Campaign).

Theory of planned behaviour



Example 5: behaviour change techniques

BEHAVIOUR CHANGE TECHNIQUES THAT ARE MORE EFFECTIVE FOR TEENAGERS



BEHAVIOUR CHANGE TECHNIQUES THAT ARE MORE EFFECTIVE FOR CHILDREN



Source: Fiona Fylan (2017) Using behaviour change techniques: guidance for the road safety community

Example 6: Types of evaluation

(Adapted from Patton, M.Q. (2014). *Evaluation flash cards: embedding evaluative thinking in organizational culture*. St. Paul, MN: Otto Bremer Trust.)

| | SITUATION | QUESTIONS ANSWERED | |
|----------------------|---|--|--|
| Formative evaluation | Formative evaluation supports programme improvement. The emphasis is on forming, shaping, | What works and what doesn't? | |
| | | What are the programme's strengths and weaknesses? | |
| | and improving, thus the term formative. | What's the feedback from participants in the programme about what should be improved? | |
| | | How can outcomes and impacts be increased? | |
| | | How can quality be enhanced? | |
| Summative evaluation | Summative evaluation judges the overall merit, worth, and | Does the programme meet participants' needs effectively and efficiently? | |
| | significance of a project. At the end of a programme or initiative when key decisions about its future are going to be made. When judging the model's merit or worth for continuation, expansion, going to scale, or other major decisions. | Is the model well specified and standardised so that the resources needed, services delivered, and outcomes attai are clear? | |
| | | What are the key factors that support success? What key contextual factors affect outcomes? | |
| | | To what extent can outcomes be attributed to the intervention? Is the programme theory clear? | |
| | | What unanticipated outcomes have been found? With what implications? | |

