

ScootSmart: A Case Study in Evaluation



Key Messages

Key Message 1

Understand the needs of your community.

Use as wide a range of information as possible, including accident information if available.

Key Message 2

Learn from others

See www.roadsafetyevaluation.com/reports/Default.aspx for recent evaluation reports posted by road safety practitioners.

Key Message 3

Establish clear aims and objectives for the intervention.

Without these there is no way to measure any changes which occur as a result of the work done. (See www.roadsafetyevaluation.com/evaluationtopics/howtoevaluate/aims-and-objectives.html for more information)

Key Message 4

Develop a logic model

(See www.roadsafetyevaluation.com/evaluationtopics/howtoevaluate/logic-model.html for more information.)

Key Message 5

Check that what you are actually doing matches your objectives.

Key Message 6

Make an evaluation plan, using the E-valu-it toolkit

(www.roadsafetyevaluation.com/login.aspx?returnurl=%2ftoolkit%2fdefault.aspx)

but don't be afraid to adapt the plan if circumstances change. Record what has changed and why, before continuing.

Key Message 7

Choose appropriate methods for your participants, and to suit your evaluation design. See www.roadsafetyevaluation.com/evaluationtopics/info/methods-table.pdf for advice on evaluation methods. Take particular care when choosing tools for school aged children. Consult teachers about reading ages and if teachers are collecting data, give them clear instructions

Key Message 8

Start where people really are, not where you think they are.

Analyse early baseline data and check against your expectations. If necessary adjust your intervention or SMARTen up your objectives

Key Message 9

When planning, or modifying your intervention it can be useful to think about your assumptions. If increasing knowledge does not have much impact on behaviour, what does? See www.roadsafetyscience.com/evaluationtopics/interventionplanning/behavioural-change-theories.html

Key Message 10

Build evaluation in from the beginning so you can improve your intervention, as well as show if it is working as expected.

Setting the Scene

In July 2013 Cambridgeshire's Road Safety (CRS) team met with the RoSPA road safety team to discuss evaluation support, made available with funding from the Department for Transport. The team members were very experienced road safety practitioners and had wide experience in commissioning evaluations and monitoring of activities. However, they did not have much experience of completing full evaluation reports themselves. Some members of the team had attended a training day in the use of E-valu-it, the road safety evaluation planning toolkit (See www.roadsafetyevaluation.com). The extra support available from RoSPA was seen as a good opportunity to develop the team's evaluation skills and help them to do more, better planned, evaluation in the future.

The team had three interventions which they wanted to evaluate, one of which was still at the early planning stage: ScotSmart (scooter training for 6-8 year olds). Since the planning stage offers the most potential for learning about evaluation, it was selected.

Jenny McWhirter, an experienced evaluator, supported two experienced road safety practitioners (Cheryl Morgan and Maree Richards) as they embarked on their first formal evaluation. Over the course of several face to face meetings and e-mail contact an evaluation plan was developed and put in place. The process has generated some useful learning which we hope will be useful to other novice evaluators.

In the beginning.....

The CRS team have a great deal of experience of working with schools to prevent injury on the road. They have previously developed a package of pedestrian training and playground based cycle training for primary schools which have been well received.

The school based training is delivered by volunteers who are recruited, trained and quality assured by the road safety team.

Recently there have been requests from schools for scooter training as many children use scooters to come to school.

The team has seen evidence of many scooters at primary schools and have already responded by providing grants for scooter 'pods' or shelters for some schools. The team expressed the following concerns about children using scooters to travel to school:

- Risks for children of unsupervised 'scooting'.
- Children's reported lack of awareness of others on the pavement e.g. pedestrians
- Children's low levels of hazard awareness e.g. driveways

Some of these concerns were based on their own observations, but also concerns expressed by teachers and members of the public. There was no evidence for injuries related to scooter use by children.

Key message 1

Understand the needs of your community. Use as wide a range of information as possible, including accident information if available.

Why now?

The team decided to base their intervention on the Scooter Smart scheme run by Derbyshire County Council. An evaluation of this scheme revealed that:

Most parents approved of the scooter training, which was fun.

Although some parents reported that they did not use their cars on Scooter Smart days, the majority of children used scooters as an alternative to walking to school, rather than travelling by car or public transport.

For parents, some of the barriers to regular scooting were having more than one child to supervise on the way to school and not having anywhere dry to store the scooters on arrival at school.

Parents reported that children were more confident after the Scooter Smart days but only a third said that the children were more aware of other road users.

Despite the almost universal approval of the Scooter Smart scheme from the Derbyshire parents, the design of the evaluation (following the training only) means that it was not possible to draw firm conclusions about safety or environmental benefits. However, parents' comments suggested that the children had more to learn about other road users.

The intervention

The CRS team planned to offer playground based scooter training for years 3 and 4 for schools from October 2013 onwards. The implementation included a long development phase. A pilot scooter training session was carried out and supporting resources were in development before the evaluation began. However, volunteers had not been recruited and trained.

There was strong support for road safety training in the community: 36 schools of a potential 40 had signed up for STARS (Sustainable Travel Accreditation and Recognition for Schools) which is linked to school travel plans. School travel plans are not obligatory but schools which are seeking to develop their sites must include a travel plan. Volunteers would be recruited from these schools in the first instance.

Key message 2

Learn from others

See

<http://www.roadsafetyevaluation.com/reports/Default.aspx>

for recent evaluation reports posted by road safety practitioners.

Several key features of the ScotSmart intervention suggested that what was planned was in line with good practice in safety education: (www.rospa.com/schoolandcollegesafety/teachingsafety/ten-principles.aspx)

- The session was to be practical and interactive and would typically include: a presentation; playground based training, follow up lesson plans and an activity book to take home to share with parents
- Parents would consent for the children to take part and agree to provide a scooter in good condition.
- Parents would be provided with information before and after the training so they can support the children's development as independent road users.
- Training would be delivered by local volunteers so that the training could be adapted to local conditions (e.g. urban vs rural).
- Most volunteers would be teaching assistants/teachers, able to adapt the resources to fit their own lesson plans.

Aims and objectives

Early on it was clear that, while the team had a good idea what their intervention would look like and how it would be delivered, they did not have fully developed aims and objectives for their intervention. This is not unusual in road safety education, training and publicity interventions.

The team described their role as 'promoting the development of safe road user behaviour, through a range of road safety education resources at appropriate developmental stages'.

The team is closely linked with Public Health, which aims to promote physical activity and sustainable travel options in the community.

Reflections on aims and objectives:

At the beginning it was difficult for the team to focus on the headline issues – what were the aims and objectives? It was agreed that the overall goal was to improve the health of the public by encouraging more active forms of travel to school. However there were other pressing concerns which included more sustainable travel (fewer cars on the road) and road safety, not only for the children with scooters but other road/pavement users.

Scooter riding is popular amongst 5-7 year olds, so this is their first experience of being a road user in any way other than as a pedestrian or passenger in a vehicle. There are certain hazards which children should be aware of, and conventions to follow, if the child and other people on the pavement and road are going to be safe.

Key message 3

Establish clear aims and objectives for the intervention. Without these there is no way to measure any changes which occur as a result of the work done.

(See <http://www.roadsafetyevaluation.com/evaluationtopics/howtoevaluate/aims-and-objectives.html> for more information)

After some deliberation, the following goals, aims and objectives were agreed:

Goal

To improve the health of the public by encouraging more active forms of travel to school

Aims

To promote, to both children and parents, a more healthy way of travelling to and from school.

To increase children and parents' awareness of the safety issues regarding scooter riding.

To increase children's skills and confidence when scooter riding

Objectives

- More children scooting to school more often (1%)
- Children will have improved scooter skills and be able to ride with confidence, keeping control and understand how and when to use the brake.
- Children and parents will understand the importance of consideration to other road users particularly pedestrians and understand that people who are walking have priority on the pavement
- Children and parents will be more aware of the hazards they need to look out for e.g. driveways, lamp posts, pedestrians etc.
- Children will be able to do a simple scooter check and understand the importance of having a scooter in good condition with a working brake.
- Children and parents will know the importance of keeping fit and staying healthy through exercise.
- Parents will feel more confident about allowing their child to scoot to school

These objectives could be 'SMART'er, by specifying how much change the team hoped to see and by when. The team worked on this in the next step which was to develop a logic model.

Logic model

A logic model consists of a one page summary of the goals, aims and objectives of the intervention, a list of inputs, activities and anticipated participation and a list of short, medium and long term outcomes.

A logic model also includes assumptions about what connects the aims and objectives to the outcomes and a summary of expected external factors over which practitioners and evaluators may have no control, such as weather, other local or national interventions etc.

Three versions of the logic model were developed before it was finalised (See Appendix 1).

Reflections on the logic model:

The first version of the logic model consisted of broad themes under each heading. For example under medium term outcomes the team recorded one word: confidence. This is a good way to start, placing markers in each section indicates what the focus of attention will be, but does not yet give enough information to enable an evaluation plan to be developed.

A second version of the logic model had much more clearly articulated aims and objectives and outcomes were SMART – i.e. the team was more specific about how much change they hoped to see in which target group (parents/volunteers/pupils) and by when. However the team realised that in this version, the objectives did not all match closely with the outcomes which were to be measured.

Once this was resolved the logic model began to make practical sense and the team could see how their evaluation could measure changes for a range of stakeholders including volunteers, parent and children. They could also see how some of the content was transferable to other projects e.g. pedestrian training which had some shared objectives and outcomes.

It is not unusual for a logic model to be developed in this way. The process itself can be very useful, especially where there are multiple partners involved in funding and/or delivering the intervention, ensuring everyone agrees what the objectives are and what the outcomes should be, as well as understanding the assumptions and constraints involved.

Key message 4

Develop a logic model

(See

<http://www.roadsafetyevaluation.com/evaluationtopics/howtoevaluate/logic-model.html>)

for more information.

Back to the intervention

Having developed the logic model the team wisely carried out another pilot of the ScotSmart training. They focussed on the key objectives and outcomes they planned to measure. The team spotted that although they had been concerned from the beginning about children being unaware of the hazards associated with crossing driveways, their playground session did not include a driveway scenario.

They also decided to introduce a role play, where children scooted up behind an adult pedestrian, talking on a mobile phone. Previously they had only talked about these hazards in the classroom session. Having clear aims and objectives, linked to unambiguous outcomes helped the team to improve their intervention.

The evaluation plan

www.roadsafetyevaluation.com was developed specifically to help practitioners to design and implement evaluation. It asks series of questions, and from the answers recommends evaluation designs to choose from. Once you have registered you can download a copy of the questions.

The team decided to use the first 9 schools as a pilot, and carry out a formative evaluation, focussing on the short and medium term outcomes for volunteers, the parents and the pupils. Longer term outcomes would be measured once the intervention had been modified and in place for a year.

Plans to evaluate the resources and their use were put on hold because of delays with commissioning the design and printing.

Key message 5

Check that what you are actually doing matches your objectives.

Key message 6

Make an evaluation plan, using the E-valu-it toolkit (<https://www.roadsafetyevaluation.com/login.aspx?returnurl=%2ftoolkit%2fdefault.aspx>) but don't be afraid to adapt the plan if circumstances change. Record what has changed and why, before continuing.

The evaluation tools

Many novice evaluators consider the evaluation methods they intend to use before having an evaluation plan. The rush to measure is understandable as the tools (questionnaires, interview schedules etc.) often have to be prepared well in advance of the first session or component of the intervention.

In some cases local authorities have standardised tools which teams are obliged to use to evaluate training sessions, but as they are generic, these do not always reflect the objectives of a road safety intervention.

This team was particularly concerned that tools they had used in the past or which they might devise for this intervention would not be appropriate for the age group of the children involved.

They were also concerned that parents would not return evaluation forms. These are familiar challenges for evaluation of Road Safety ETP interventions.

The team wanted to measure children's knowledge and understanding of hazards before and after their ScotSmart sessions (See Appendix 2).

The questionnaire had to be simple enough for children aged 6-8 years to read as well as quick and simple enough to be administered by class teachers.

The team also planned to measure changes for parents at just one time point using an 'after-then-before' or 'post-then-pre' questionnaire format (Appendix 3).

Data collection and analysis

The team asked teachers to administer questionnaires to the children, before the ScotSmart session. The volunteers would do a quick hands-up check of important information immediately after the session. The questionnaire would be repeated approximately 3 weeks after the session to see what had changed and how well the children had retained the information.

A quick check of the first questionnaires to be returned from schools revealed a surprising finding: most children attending the pilot schools were achieving relatively high scores, even before the ScotSmart session.

Key message 7

Choose appropriate methods for your participants, and to suit your evaluation design. . See

<https://www.roadsafetyevaluation.com/evaluationtopics/info/methods-table.pdf> **for advice on evaluation methods.**

Take particular care when choosing tools for school aged children. Consult teachers about reading ages and if teachers are collecting data, give them clear instructions

Key message 8

Start where people really are, not where you think they are. Analyse early baseline data and check against your expectations. If necessary adjust your intervention or SMARTen up your objectives

At first the team wondered if this was because the teachers were coaching the children to give the correct answers, but then they realised this could not be the case, as where answers were incorrect, they were the same from school to school.

Baseline data was not available before the ScotSmart session, so this was a really helpful finding. It also helped to revise the expectations of change, and focus the sessions even more on areas where the children's knowledge and understanding were shaky.

If the team had not carried out the questionnaire before the intervention, they might have been unaware that the children's road safety knowledge was already good.

It is worth remembering that just because people know something, it does not mean they always act on the information, so it is important to reinforce as well as extend children's knowledge.

Reflections on the evaluation so far

The team are still in the midst of their intervention and data collection (February 2014). When they have completed their work they will publish their findings on the www.roadsafetyevaluation.com website.

They have found the process really helpful:

'To be honest, at the beginning, I thought this was just going to be more work and we were already under pressure to deliver more in less time. Instead it turned out to be really helpful. Having clear aims and objectives made us really look at what we were doing and make sure it met the needs of the children in our schools. There is still more to learn about what volunteers, parents and teachers think about ScotSmart – and of course we hope the children will put their skills into practice, giving parents confidence to let them scoot to school.'

AND

'We will definitely follow this process again to show our managers and funders what we can achieve with their support.'

Key message 9

When planning, or modifying your intervention it can be useful to think about your assumptions. If increasing knowledge does not have much impact on behaviour, what does? See <http://www.roadsafetyevaluation.com/evaluationtopics/interventionplanning/behavioural-change-theories.html> for an introduction to theories of behaviour change.

Key message 10

Build evaluation in from the beginning so you can improve your intervention, as well as show if it is working as expected.

Appendix 1: ScotSmart Logic Model

ScotSmart logic model 26.11.2013

Aims

To promote, to both children and parents a more healthy way of travelling to and from school.

To increase children and parents awareness of the safety issues regarding scooter riding.

To increase children's skills and confidence when scooter riding

Objectives

More children scooting to school more often (1%)

Children will have improved scooter skills and be able to ride with confidence, keeping control and understand how and when to use the brake.

Children and parents will understand the importance of consideration to other road users particularly pedestrians and understand that people who are walking have priority on the pavement

Children and parents will be more aware of the hazards they need to look out for e.g. driveways, lamp posts, pedestrians etc.

Children will be able to do a simple scooter check and understand the importance of having a scooter in good condition with a working brake.

Children will know to wait for an adult before crossing the road.

Children will know to never scoot on the road.

Children and parents will know the importance of keeping fit and staying healthy through exercise.

Parents will feel more confident about allowing their child to scoot to school

**Assumptions: Schools and children will want to take part.
Volunteers will come forward to be trained
All new resources will be ready in time to start pilot scheme**

External Factors : Weather may be severe enough to prevent scootering for the majority of the winter.
Volunteers unwell or unable to attend the training. Playground not available
Resources not ready in time for beginning of pilot scheme.

ScootSmart: A Case Study in Evaluation

Inputs	Outputs		Outcomes -- Impact		
	Activities	Participation	Short	Medium	Long
<p>Publicity and Information Resources 2013/2014 £15 K Resources 2014/2015 £1K Resources</p> <p>Parents Time</p> <p>Volunteers/Instructors Time</p> <p>Money</p> <p>Staff salary 3 days per week SO1 (approx 16k per annum) Project Resources £15K Including design and print of resources</p>	<p>Letters/email to all primary schools in Cambridgeshire giving them information on scooter training.</p> <p>Information in the form of a leaflet with details about the course including a consent form.</p> <p>Questionnaires to all parents of the class that will be participating – (1) before any other information is received and (2) two weeks after the training has finished.</p> <p>Training volunteers 1 hour session.</p> <p>Training for pupils Whole class half an hour classroom session followed by 2 groups of 15 children per 2 Instructors for half an hour playground session.</p> <p>Evaluation questionnaire following volunteer training</p> <p>Parents leaflets/consent form Pupil Activity Books, Certificates</p>	<p>16 Volunteers trained by end of Feb 2014 8 schools (focused on a smaller number which is more manageable) Originally was going to be at 9 schools but one of the instructors was admitted to hospital.</p> <p>210 pupils trained</p> <p>To be given to parents before training starts. Pupils to be given activity books during training and certificates on completion.</p>	<p>Volunteers report the training has prepared them to run the sessions</p> <p>Volunteers believe their involvement has 'made a difference'</p> <p>Volunteers are observed to deliver the session to the standard required</p> <p>50% more of participating children and their parents can describe common hazards when using scooters on their way to school;</p> <p>50% more of participating children and their parents can describe the health benefits of scooting to school;</p> <p>30% more of participating children can demonstrate how to carry out a safety check on a scooter;</p> <p>75% more of participating children can demonstrate control of the scooter for example know when to use the brake.</p> <p>50% of children and parents understand the importance of consideration to other road users in particular pedestrians</p>	<p>10% parents report increase in confidence in their child's ability to use a scooter safely on their way to school at 2 week follow up</p> <p>15 % more children can demonstrate being able to carry out simple maintenance and safety checks on scooters</p> <p>At least half of this increase is retained at 3 week follow up</p>	<p>1% increase in parents choosing a sustainable mode of travel for children participating in the intervention after 1 year.</p>

Appendix 2a: ScotSmart Pupil Evaluation Form 1

Hello

What do you know about keeping safe on your scooter.

Please circle or colour the right answer face.

Yes 😊 No ☹️.

1. Do you need to check driveways before scooting across? 😊 ☹️

2. Is it safe to scoot down a steep hill? 😊 ☹️

3. Is it ok to whizz pass pedestrians? 😊 ☹️

4. What do you have to do before you cross the road with your scooter?

Tick the right answer ✓

A) You carry on scooting across the road

B) Stop at the kerb, wait for your grown up and WALK across the road when it is safe

Thank you for helping us

The Road Safety Team

Name.....

Name of School.....

Your Age

Appendix 2a: ScotSmart Pupil Evaluation Form 2

Hello



We would like to know what you think about the scooter training that you took part in recently at your school, your answers will help us make sure that all children enjoy the training.



Please circle or colour the face that you think is the right answer



Yes  No .


1. Did you enjoy the training?  

If no, why not?
.....

2. Did you understand the instructions?  

3. Do you need to check driveways before scooting across?  

4. Is it safe to scoot down a steep hill?  

5. Is it ok to whizz pass pedestrians?  

6. What do you have to do before you cross the road with your scooter?

Tick the right answer ✓

A) You carry on scooting across the road

B) Stop at the kerb, wait for your grown up and WALK across the road when it is safe

Thank you for helping us

The Road Safety Team

Name.....

Name of School.....

Your Age

Appendix 3: ScotSmart Parent Questionnaire

Recently your child took part in the ScotSmart training scheme, a new project developed by Cambridgeshire County Council's Road Safety Team.

Please complete this 5 minute questionnaire which will help us identify any changes that may need to be made.

Name of School

Age of child

Please circle the relevant number, **1** being not confident **5** being very confident

1. Before the course I was confident about my child scooting

Not confident 1 2 3 4 5 **Very Confident**

After the course I was confident about my child scooting

Not confident 1 2 3 4 5 **Very Confident**

2) How often did your child scoot to school **before** the ScotSmart training?

Please tick

Never

Everyday

Once or twice a week

Other, please state how often

How often does your child scoot to school now **after** the ScotSmart training?

Please tick

Never

Everyday

Once or twice a week

Other please state how often

3) Please tick any of the statements you agree with

My child really enjoyed the training

My child has increased confidence when scooting

My child now understands how to keep better control of the scooter

My child now understands how to use the scooter brake

I think that scooting is a great way to increase my child's physical activity

4) Can you name 2 hazards that children must consider when scooting?

Hazard 1

Hazard 2

5) Did you complete the activity book with your child, any comments about the book good or bad?

6) Any other comments?

Please return this completed questionnaire to your child's class teacher within a week of receiving it.

THANKYOU

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Bassingbourn Primary School



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