School Student Recognition of In-School Road Safety Education
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Abstract:
This paper explores a general understanding of, and recognition of road safety education programs delivered in NSW schools by students and recent former students. Whilst the program is delivered from Kindergarten through to Year 12 (K-12) in schools, the intention is to survey students currently in Years 9-12, plus young people who have left school (from Years 10 to 12) since 2007. The majority of the target group is aged 14-20 at the time of the interviews.

The primary focus of this research is to test whether the target group report that they recall receiving road safety education in school. It is also intended to be able to differentiate between the results for the three education sectors, NSW Department of Education and Training (DET), Association of Independent Schools, NSW (AIS) and the NSW Catholic Education Commission (CEC).

Road safety education is only one of the many competing social and health related content areas which schools must address. There are clearly different structures for supporting road safety education in the three education sectors. The extent and depth of coverage can vary considerably, and can ultimately depend largely on the level of interest, motivation and commitment from classroom teachers.

These factors make testing the extent to which students have actually been exposed to and recall road safety education a primary issue for evaluating road safety education in schools.

The methodology used in this research involved a combined telephone interview with an online follow up (respondents were invited to visit a website to complete the balance of the survey online) with a random, stratified sampling of 1,600 accessed from NSW White Page telephone directories.

Keywords
Education; Schools; Road Safety; Curriculum; Key Learning Area.

Introduction
To ensure that children and adolescents receive appropriate and timely road safety education, the NSW Government, through the New South Wales Centre for Road Safety (NSWCRS), Roads and Traffic Authority (RTA), funds the NSW School Road Safety Education program. This program, initiated in 1986, is based on formal Agreements between the NSWCRS/RTA and the following bodies:

- The Association of Independent Schools NSW (AIS)
- NSW Catholic Education Commission (CEC)
- NSW Department of Education and Training (DET)
- Early Childhood Road Safety Education Program (ECRSEP)

The program provides educational resources and professional development for teachers and child-care workers throughout NSW. The objectives of the program are to:

- produce behavioural change through programs and campaigns
- act as an advocate for children in road safety
- provide appropriate resources for teachers and students
- lobby for best practice

The road safety education program is conducted in the early childhood, primary school, secondary school, and tertiary education areas. It is based on a long term, educational strategy with the NSWCRS/RTA acting as the lead agency and funding body. The aim is to provide professional advice and support, develop and produce resources and undertake professional development opportunities for teachers.
The program advocates delivery of road safety education to students by classroom teachers. Road safety education is part of the formal school curriculum and is also included in pre-service training for teachers. Currently there are program resources developed and distributed for early childhood, primary schools and secondary schools.

As described previously the school system in NSW is divided into three agencies: the Department of Education and Training (DET), the Catholic Education Commission (CEC) and the Association of Independent Schools (AIS). Each agency receives proportionate funding from the NSW Centre for Road Safety/Roads and Traffic Authority (NSWCRS/RTA) to implement the NSW Road Safety Education Program in their agency schools across NSW. The funds pay for consultants to provide professional support and advice to classroom teachers on road safety education.

The NSWCRS/RTA also funds the development of road safety education resources for use by teachers and provides these free of charge to all NSW schools.

Road safety education is a mandatory and formal part of the school curriculum from Kindergarten through to Year 10 (K-10) within the Personal Development, Health and Physical Education (PDHPE) key learning area.

In primary (and infants) school road safety education is taught by teachers of all grades. While road safety education has the curriculum home of PDHPE, it is often integrated into other key learning areas as well. In secondary schools (Years7-10), road safety education is taught almost exclusively by PDHPE teachers. It is rarely taught outside of this key learning area.

Whilst in Years 11 and 12 road safety education is not mandatory, it is taught in various elective subjects. These include PDHPE, English and Student Welfare/Pastoral Care programs.

Each education agency has a different model for delivery of road safety education funded by the NSWCRS/RTA:

- The DET presently has full time consultants based in Northern Sydney, Western Sydney, South Western Sydney, Hunter/Central Coast, Illawarra/South Coast, North Coast, Riverina, Western NSW, New England and Sydney to service all DET regions in NSW. The Program Manager is based in Sydney supported by a Senior Curriculum Adviser position.
- The CEC in Sydney represents the 11 Dioceses of NSW and provides program management and administration. Each diocese has its own road safety adviser. Many of these advisers also provide professional support in other areas including drug education, health education, pastoral care, sport and PDHPE.
- The AIS has three part time road safety consultants and a Program Manager to service its schools around NSW. They are all based in Sydney.

The education agencies all have a number of road safety education consultants and advisers (same road safety educational role but different terminology applies to different education sector) who are funded through the NSWCRS/RTA to provide support to teachers and schools in planning and implementing road safety education in the classroom.

Access to teachers and schools is generally gained through invitation or request from individual class teachers, head teachers or principals. In addition, schools may be targeted by the road safety education consultants/advisers. Some agencies also have programs for targeting schools based on specific criteria, as well as responding to inquiries.

Consultants/Advisers are required to provide a variety of services to teachers and schools. These may include:

- assistance with programming road safety into classroom activities
- assistance with linking road safety to the PDHPE syllabus
- professional development sessions for teachers/whole staffs
- assistance with developing school road safety policies and practices
- provision of road safety education resources
- provision of advice and information for parents.
The NSWCRS/RTA School Road Safety Education Program is a long term integrated educational strategy supported by each of the education agencies and has previously conducted four yearly independent evaluations. These evaluations generically gathered information via written surveys or face to face interviews with school principals, classroom teachers and road safety education program managers and consultants.

The purposes of these previous whole program evaluations were to assess:

- the extent to which road safety education was delivered in school programs
- the nature and level of road safety education provided by the education agencies
- the level of awareness and usage of the road safety education resources developed and provided by the NSWCRS/RTA

This evaluation however, aims to assess the penetration and recognition of road safety education by current students in schools and recent former students, conducted independent of and outside the immediate school environment.

Therefore the anticipated outcome of this research is an understanding of the reach of current school road safety education programs currently being delivered in NSW schools Years K-12, in increasing road safety awareness in young people. The research seeks information from students and recent former students about the delivery and extent of road safety education in schools. It should be noted that this research will only attempt to contact current Years 9-12 students in schools and recent school leavers across all three education agencies in both rural and metropolitan areas.

**Methodology**

Given that we are looking for a focus in this research on establishing exposure to road safety education which can often be taught within a wider curriculum theme of safe living and risk taking, there are needs to establish the recall of road safety education and issues taught, the subject areas where it was taught as well as the school year levels, where it has been found to be a part of the learning experiences.

To gather the required information the process also need to identify: the respondent’s present enrolment status (year 9-12 or year level in which they left school recently); the education system attended (i.e. Department of Education and Training (DET), Catholic Education Commission (CEC) or the Association of Independent Schools (AIS)).

A computer assisted telephone interviewing procedure of 1,612 young people was conducted – 1,009 from government schools, 303 from the Catholic sector and 300 from the Independent educational sector, covering road safety education experiences covered in both primary and secondary school (this covered recall of road safety messages and recognition of key topics covered in both primary and secondary school). Those surveyed (aged between fourteen and twenty) represented those randomly selected from the NSW White Pages telephone directories and were either in one of Years 9-12 at the moment or had completed secondary schooling in the past two years.

All who participated in the telephone interviews were then invited to also participate in an online component of the research that asked them if a range of randomly selected teaching materials had been used in their school work and who had been involved in presenting the materials to them – i.e. teachers, police, or others from outside the school. In addition they were asked to identify in which subject area the material was presented to them during secondary school class time. Attrition was reduced by sending reminder emails and making telephone contact to remind respondents that they had agreed to complete the online section of the research but had not done so at the time of the reminder contact. There was also an incentive to complete the online component by being eligible to be placed in a prize draw to win one of ten iPods or a laptop computer for all those who completed the online survey. 562 of the interviewees went on to complete the online component of this research.

The login provided to each interviewee who consented to do the online survey allowed the replies to be matched to their earlier telephone interview responses. This online material essentially asked three questions about each of a selection of visual prompts from road safety education curriculum materials – had the material been used in their class work; who had presented the materials to them and what school year and subject it was presented in.
The main dilemma encountered here was the selection of the material for the online prompts due to such a wealth of quality teaching materials provided to schools by the NSWCRS/RTA being available to choose from.

Nine cognitive testing interviews were conducted to allow both refinement of the questions and at the same time the collection of a small sample of replies that provided confidence in the survey codings providing adequate opportunities to reflect accurately what the interviewees want to say.

The sampling method involved a random search of surnames with phone numbers from the from the most recent electronically searchable data base of residential phone numbers and then verified against the current Electronic White Pages listings that can only be searched given a surname. This selection was then stratified by Sydney, major regional centres (Newcastle and Wollongong) and other NSW regional/rural locations.

Households were then contacted and screened to establish if any one resident was in the target group required. The process was devised to ensure a reasonable balance between mates and females, those in Years 9-10, Years 11-12 and those who had left school since 2007. Representation of the three different education sectors was also monitored to provide the required numbers:

- AIS schools: 300
- CEC schools: 300
- DET schools: at least 1,000

**Results**

The data collected provide a wealth of detail on the themes and messages, as well as specific content, recalled. The main objective of this research being the extent to which students had been reached by, and recalled key messages from their road safety educational experiences in school.

Almost all (98% Secondary school and 97% Primary school) of the students interviewed showed some evidence of exposure to one or more of the key themes of the NSW School Road Safety Education Program materials.

**Table 1: Incidence of road safety education exposure reported.**

<table>
<thead>
<tr>
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<th>% Reporting</th>
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<tbody>
<tr>
<td>Secondary Road Safety</td>
<td>100</td>
</tr>
<tr>
<td>Primary Road Safety</td>
<td>90</td>
</tr>
<tr>
<td>Driver Messages</td>
<td>80</td>
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<tr>
<td>Passenger Themes</td>
<td>70</td>
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<tr>
<td>Wheels Themes</td>
<td>60</td>
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<tr>
<td>Pedestrian Themes</td>
<td>50</td>
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The specific conclusion that can be ascertained from this broad summary of results is that road safety education is delivered to almost all students in primary and secondary schools and that they do remember key road safety education themes and messages that were a part of those educational experiences.

The clear implication is that most students do recall materials that were used to teach them about road safety education covered in both the primary and secondary levels of their schooling. Their recall of key
road safety messages are consistent with those highlighted in the NSWCRS/RTA educational resources for school use.

Messages and information with respect to the risks faced by them and how to keep themselves safer as a pedestrian and as a passenger in cars (and also buses), including the correct use of seatbelts are widely recalled. There is also considerable recall of messages about risks and safety in the use of bicycles (especially the need to wear a protective helmet) and to a lesser extent about safe practices when operating or using wheeled devices.

Most students have indicated they have been exposed to some education in respect to driving safely. Drink driving is by far the most widely acknowledged safety topic followed by the effects of speeding.

Interviewees demonstrated a widespread recognition of specific materials from each of the six separate stages of road safety educational resources produced by the NSWCR/RTA school education program. The outcome of the information gained from the online survey had its limitations because only selections from a vast amount of available materials could be shown and any misleading responses would tend to under report exposure.

Several areas of evidence in the data collected support the conclusion that the respondents were reporting genuine recall of school-based road safety education messages and topics in the computer assisted telephone survey and recognition of actual material from the NSWCR/RTA program material in the online survey. Most respondents can be seen to be giving thoughtful and valid answers revealing what they did actually recall and recognise from their school –based experiences.

The majority of road safety education material is recognised through this study as having being presented by the students classroom teachers from the students own school, whilst acknowledging that this road safety input was at times supported, especially in Kindergarten and Year 1 by involving police and other outsiders for about one third of the respondents to the online survey.

Previous independent evaluations of the school road safety education program have indicated that schools generically report teaching road safety topics in any one year of school to be approximately four to seven hours. Given this, it is a noteworthy achievement that so much road safety education is recalled, recognised and reported.

**Conclusion**

The results of this study strongly suggest that the road safety education information relating to exposure by students is more likely to be underreported than otherwise. With this in mind the reading of the research clearly indicates even more strongly that road safety education is delivered to almost all students in primary and secondary schools and most students remember at least some key themes and messages that were covered in those schools based educational experiences.