## ROAD SAFETY EDUCATION IN AUSTRALIAN SCHOOLS:

# A Study of Dissemination, Implementation and Exemplary Practice

### Volume I

Prepared by

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Abstract A study of the dissemination and implementation of road safety education materials and practices, and the identification of exemplary practices in both primary and secondary schools throughout Australia. The major materials were collected, collated and analysed. Recommendations for future development and implementation of road safety materials are suggested. The report is in two volumes.

#### Keywords

PRIMARY SECONDARY SCHOOL ROAD SAFETY CURRICULA AUSTRALIAN MATERIALS EXEMPLARY PRACTICES DISSEMINATION IMPLEMENTATION

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#### **Executive Summary**

Over a period of fourteen months the authors undertook:

- to develop individual State/Territory profiles of the organisations, structures and resource materials relevant to road safety education
   and
- (b) to conduct case studies of schools with road safety education practices considered to be exemplary.

In each State and Territory a total of 101 interviews were undertaken with major providers. Although there were some structural differences between states, typical road safety education providers included Departments of Transport, Departments of Education/ Ministries of Education, Non-government/Catholic Education systems, Road Safety Councils, State Bicycle Committees, Police Departments, Commercial firms/service organisations (for example, Automobile Clubs, Insurance companies), Medical groups (for example, Royal Australasian College of Surgeons, Child Accident Prevention Foundation), Tertiary professors, lecturers.

These interviews enabled important issues to be drawn out and they were then explored further via the use of three separate questionnaires.

Interviewees contacted early in the study were most helpful in targetting individuals to whom questionnaires should be sent. The three categories of questionnaires and numbers involved were as follows:

 a questionnaire sent to Policy Directors and Senior Administrators in Federal and state Government organisations and associated bodies (151 distributed, 74 returned, response rate of 49%).

- a questionnaire sent to Curriculum Consultants and Curriculum Developers in Departments of Transport, Education Departments and other bodies (72 distributed, 42 returned, response rate of 58%).
- a questionnaire sent to Administrative staff and Coordinators working in Departments of Transport, Education Departments and other bodies (83 distributed, 32 returned, response rate of 39%).

During the course of the 14 months, curriculum project materials of various kinds were collected/purchased from various road safety education providers and individually analysed, using a standard category system based upon Piper (1976) and using a format prescribed by A.C.I.N. (1988).

In total, 85 road safety education packages were obtained and analysed. They included materials designed for pre-primary, primary and secondary students and covered a wide range from single videotapes to elaborate packages containing 20 or more components.

The research literature on road safety education was studied systematically. Papers were obtained via various computer informal retrieval systems (including A.S.C.I.S. and A.C.I.N.), and major reports were obtained from state and federal agencies and from overseas agencies (especially the USA, Canada and the United Kingdom). In total, 105 technical reports, papers, monographs and books were analysed.

Information obtained from the literature, curriculum packages and questionnaire data was carefully analysed and presented in separate chapters of the report.

An analysis of case study schools displaying exemplary road safety education practices was another major emphasis of the study. A selection process to obtain a comprehensive sample of urban/rural, government/non-government, pre-primary/primary/secondary schools was developed, but final decisions about schools to be visited was based largely upon recommendations made by road safety education liaison officers

in each State and Territory, and to a lesser extent, restricted by the willingness or otherwise of education systems and individual schools for visits to be made.

A total of 59 schools were visited over the 14 month period, representing all States and Territories and based upon the criteria listed above. At each school the authors had discussions with teachers and students and sometimes parents, they collected various school documents and policy statements, and they observed road safety education lessons wherever possible. A summary record of each of the 59 schools was made and detailed case study accounts were compiled on 28 schools.

In summary it can be concluded that:

- (a) providers in all States and Territories are relatively active in producing road safety education materials but the extent of communication patterns and their level of effectiveness ranges from substantial to minimal.
- (b) there have been some exciting curriculum developments, including joint projects between providers and these achievements need to be disseminated widely as examples of what can be accomplished.
- (c) there are lessons to be learnt from technical studies and reports on road safety education but too often the policies implemented and the curriculum materials produced by agencies do not reflect these findings.
- (d) throughout Australia there are some exciting schools where valuable teaching in road safety education is occurring. However, the incidence of successful schools is relatively low and most of the successes are confined to primary schools.

Twenty-nine specific recommendations were developed and these are detailed in the concluding chapter. The topics covered include:

- (a) levels of activity of providers.
- (b) informal contacts between road safety providers.
- (c) publicising successful practices & programmes.

- (d) incorporating road safety in formal Education Department syllabi.
- (e) the effects of political initiatives upon road safety education programmes.
- (f) the role of road safety education consultants & administrators.
- (g) knowledge about teachers' rates of adoption and implementation of road safety education materials.
- (h) curriculum competition and teachers' receptivity to using road safety education materials.
- (i) the Principal as a major player in initiating and maintaining effective road safety education programmes in schools.
- (j) Parent support and the viability of road safety education programmes in schools.
- (k) the potential of simulated materials and videotapes.
- (l) availability of road safety education materials for preschool/kindergarten children.
- (m) bike trailers as an effective teaching aid.
- (n) student driver education as an important element in secondary schools.
- (o) integration of road safety education concepts across a number of subjects.

#### Chapter 1

#### Introduction

#### 1.1 Background

Road safety of children and young people is of major concern to the Federal Government. The government is very aware that road accidents are the single biggest killer of Australian children under seventeen years of age.

The Federal Office of Road Safety (FORS) has been very involved in collecting information on specific road safety programmes and resource materials in schools. One such study by Maggs and Brown (1986) highlighted a problem of the non-use of road safety materials by a significant number of teachers in primary schools. These researchers also noted the problems that teachers experienced in getting access to road safety materials and information. At a National Road Safety Education in Schools Conference, hosted by FORS in 1987, several speakers stressed the importance of the process of dissemination and implementation of materials to ensure an adequate uptake-rate in schools.

It was envisaged therefore that a road safety project should be initiated which examined in particular the dissemination and implementation of road safety materials. It was deemed necessary, as part of this study, to identify exemplary practices in both primary and secondary schools throughout the country.

#### 1.2 Purpose of the Project

Various state and federal groups were responsible for drawing up the specifications of the project. The final specifications, titled "Road Safety Education in Australian Schools" were completed in mid-1988 and the Curriculum Development Centre (CDC) was contracted to undertake the project. The senior author of this report, Associate Professor Colin Marsh, was the person

selected by CDC in November 1988 to undertake the study. He was assisted by Dr N.H. Hyde (W.A. College of Advanced Education).

Important elements of the project specifications are listed below:

#### Objectives

The objectives of the project are:

- To develop individual State/Territory profiles of the organisations, structures and resource materials relevant to road safety education that are available for primary and secondary schools.
- 2. To conduct case studies of schools with road safety education practices which are considered to be exemplary.

<u>Part One</u> - State/Territory profiles of the communication networks which exist between organisations concerned with road safety education and primary and secondary schools.

This part of the research project seeks to identify the factors which are most likely to influence the decision-making processes of teachers. It is their activities at the school and classroom levels which determines what road safety education is experienced by the children. Each State and Territory will be studied individually. Major organisations involved in road safety education are to be identified and meetings with key staff arranged.

Several outcomes can be expected from this part of the project:

- A clearer picture of the role of the various organisations in influencing schools/teachers to teach road safety. (The findings of the case studies to be conducted in Part Two of the project will also contribute information relevant to this.)
- The development of effective communication networks, within a State/Territory which can be used to enhance the dissemination and implementation of road safety resources.
- A range of views on how exemplary road safety practices can be defined.

 The identification of schools considered by these organisations to have exemplary road safety education practices.

Part Two - Case studies of schools with exemplary road safety programs.

The schools to be studied will be selected from those identified in Part One of the project. An average of three schools per State will be studied. The purpose of Part Two of the project is to identify the factors, at the school and classroom level, which contribute to the development and implementation of an exemplary road safety program. Personal interviews with teachers, students, department heads, the principals and other relevant persons will take place.

A written report which provides a clear picture of the dynamics of the processes which occurred at each school is required. This will be mainly descriptive in style, however some analysis of the similarities and differences between schools will be required. In particular, this analysis should highlight those practises which are considered exemplary.

#### Project Outcomes

The outcomes of the project relate to the purposes.

#### They are:

- A state by state profile of road safety communication networks, and their influence on road safety education at the school level.
- 2. The identification of exemplary road safety education practices.

(FORS, Project Specification, Attachment A)

#### 1.3 Methodology used in the Project

#### (i) <u>Developing State and Territory profiles</u>

Several techniques were used to collect data on individual state and territory profiles. Prior to a visit to each state and territory, key road safety liaison officers were contacted by telephone to obtain information about:

- (a) names and addresses of organisations which are involved directly and indirectly in road safety education in their State/Territory.
- (b) ways of organising individual and group interviews and meetings with senior officers from these organisations.
- (c) identifying and arranging for copies of any locally produced curriculum materials to be forwarded to the senior author.
- (d) identifying and arranging for copies of any technical reports on road safety education to be forwarded to the senior author.
- (e) identifying primary and secondary schools which might be good examples to visit later in the year (to be reconsidered in the light of recommendations made by interviewees).

Prior to the first visit, an interview checklist to be used with organisations was developed by the author (see Appendix 1) and covered such areas as:

historical/contextual background
major goals/initiatives in road safety education
staff involved
funding sources
curriculum materials development
dissemination strategies
implementation strategies
names and addresses of exemplary schools.

A trial set of questionnaires was developed to distribute to additional organisations not available for interview during State/Territory visits and as a follow-up to organisations already contacted. The questionnaires were targeted at three different groups namely:

- (a) Policy Directors/Senior Administrators
- (b) Education Officers/Administrators/Coordinators

#### (c) Consultants and Curriculum Developers.

Draft versions of these questionnaires were discussed and analysed at a Road Safety Education Management Committee meeting in Canberra. Amended versions were subsequently developed and distributed widely to all States and Territories (see Appendix 2). Visits were made to all States and Territories during the period November 1988 - June 1989 and discussions were held with a wide range of officials (see Appendix 3).

## (ii) <u>Undertaking case studies of schools with exemplary road safety</u> programmes

The procedures used to undertake the case studies are detailed in Chapter 5. Initial criteria used for selecting case study schools were based upon:

- (a) urban (rural locations)
- (b) government (non-government schools)
- (c) primary/secondary
- (d) examples of key personnel
- (e) examples of key programmes developed.

Final decisions about schools to be selected had to take into consideration local and system-level priorities. Further, because road safety education in many schools is taught incidentally or in intensive weeks, it was not always possible to observe "peak" activities. In these situations, important information was collected from the principal, teachers, parents and students about recent past events.

A considerable amount of data was collected from each school. An interview checklist consisting of 15 items was designed by the senior author and used for interviewing staff and parents. Students were interviewed informally in small groups. This data was supplemented by a wide array of written materials such as school handbooks and policies, memoranda and school notices,

minutes of meetings, letters to local councils, teacher programmes and lesson notes, school newsletters and notices of competitions.

#### 1.4 Organisation of the Report

Because of the enormous amount of data collected it was decided to present the report in two volumes. Volume One contains seven chapters and deals with Parts 1 and 2 of the project specifications. Volume Two contains the 28 case studies and summary tables of 59 schools and centres visited by the authors.

In Volume One, the introductory chapter (Chapter 1) is followed by a literature survey chapter which examines the findings of reports produced in Australia and overseas on bicycle, pedestrian, passenger and driver safety. Special attention is given to evaluation studies undertaken on road safety education projects/materials produced in Australia.

Chapter 3 describes and analyses individual State and Territory profiles and provides important information on dissemination and implementation practices. Chapter 4 provides a systematic analysis of road safety education materials currently available for primary and secondary school students in Australia. Significant patterns and key variables derived from the 28 case studies are examined in Chapter 5, titled "Case Studies of Exemplary Practices". Chapter 6 contains a summary and concluding issues. A number of appendices are included which provide details of personnel contacted and interviewed and samples of interview schedules and questionnaires used by the authors.

#### Chapter 2

#### Literature Review

#### 2.1 Introduction

The literature on road safety is considerable both within Australia and in other western countries such as the USA, Canada and the United Kingdom. Within Australia, the Federal Office of Road Safety has been a major initiator of studies but so too have various state government agencies such as the Road Traffic Authority (Vic). There are parallel organisations, especially in Canada and in the United Kingdom, which are involved in research studies and curriculum projects.

The references cited in this chapter represent a sampling of the materials available. They should not be considered to be a comprehensive account of past or on-going studies. Numerous reports were made available to the author from the various agencies in Australia and such overseas organisations as the Saskatchewan Education Division, Transport Canada, Royal Society for the Prevention of Accidents (ROSPA, UK), Transport and Road Research Laboratory (UK). Data-base retrieval systems in Australia such as Australian Schools Catalogue Information Service (ASCIS) and Australian Curriculum Information Network (ACIN) were also used to obtain relevant studies.

To aid the reader, the studies will be presented in the following sections:

- (a) general studies on road safety
- (b) studies on bicycle safety
- (c) studies on pedestrian safety
- (d) studies on passenger safety
- (e) studies on driver safety
- (f) studies on road safety education in schools.

#### (a) General Studies on Road Safety

An enormous range of documents, reports and books has been published in this area. A number of these focus upon human factors responsible for road accidents. For example, Macdonald (1985) provides a comprehensive review and suggests a range of research needs associated with behaviours of vehicle drivers, licence tests, child cyclists, motor cycling behaviour, pedestrian behaviour and alcohol-related issues. Hampson (1984) examines human factors but extends this to consider important social factors. Harrison (1987) concentrates upon one major factor, namely the relationship between alcohol and road accidents.

A recent volume by Trinca et al (1988) provides a global perspective on road safety. The chapters in this report provide a fascinating historical and contemporary account of motorisation, traffic safety and personal safety. Various strategies and programme options for injury reduction are described in some detail.

The monograph "Road Trauma: The National Epidemic" (Lander, Herbert and Trinca (1983)) is a more graphic depiction of the problems associated with road accidents.

Designing appropriate strategies and cost-benefit analyses in road safety have been the focus of a number of studies. For example, Drummond and Hall (1986) did a cost-benefit analysis of programmes in Victoria and estimated that a "breakeven" point for expenditure on road safety education would be reached if a reduction of 3.4% in casualties occurred. Haque (1987) proposed that a comprehensive range of disaggregated road accident data should be collected to enable early intervention strategies to be applied to problem areas and districts (including schools).

Community attitudes to road safety have implications at all levels from political priorities to the nature and range of specific programmes.

Touche Ross (1986) and Reark Research (1987) point to the low priority accorded to road safety by the majority of community members. A McNair (1988)

study provides more specific information on community attitudes to road safety correlated with levels of occupation and education of respondents.

The media also has a major impact on community attitudes to road safety. Several important studies have been undertaken on the role of television. For example, Noble and Noble (1987) reviewed such aspects as the implications of programme content, the portrayal of anti-social behaviour, and the influence of aggressive role models in various television programmes. Bell (1987) examined traffic-related incidents in programmes viewed by school-age children. He raises a number of issues such as the negative, counter-productive messages of some programmes; the relatively unexciting and didactic format of road safety promotions compared to product advertisements; and the effects of vicarious driving /cycling/motor-cycling experiences provided in some programmes.

#### (b) Studies on Bicycle Safety

Bicycle safety has been the subject of high-level reports as well as the focus for numerous research studies on such matters as head injuries and the wearing of bicycle helmets.

During the period 1986-87, a Social Development Committee, chaired by J. Dixon (1987), and appointed by the Parliament of Victoria, undertook an inquiry into child pedestrian and bicycle safety. In its two reports, a number of key recommendations were made about the teaching of road safety in schools; the need for training programmes for preservice teachers; mandatory use of bicyclist helmets; an upgrading of data collection material on child injury; the need for special enforcement campaigns on safe road behaviour; and the encouragement of community awareness.

The Parliament of New South Wales appointed a joint standing committee on road safety in 1987 and their report "Staysafe 12: Bicycle Safety" was published in 1988. This report made over 50 recommendations including the need to expand bicycle safety programmes in schools; that traffic laws applicable to

bicyclists should be reviewed; the need to achieve a high helmet use by cyclists; that bicyclists be catered for in all developments of transport corridors.

The respective State Bicycle Committees made substantial submissions to these inquiries in Victoria and N.S.W. Over the years bicycle committees in a number of states have been extremely active in various areas of road safety at state and national workshops such as the National Bicycle Workshop held at Geelong in April 1989. At this latter conference over 20 major papers were presented including those by Sutherland (1989) Simeon (1989) and Lindley (1989).

There have been several important studies on the incidence of factors related to bicycle accidents. Alexander and Wood (1985) undertook a study of major variables responsible for bicycle accidents in Victoria. They concluded that children most at risk are in the 12-17 year age group and that most accidents occur on arterial roads. Haque (1987) studied fatal bicycle accidents in Melbourne and concluded that adult cyclists (17 years and over) constituted the majority of fatalities; that 90% of collisions were from the rear and that 60% occurred during daylight hours. Travers Morgan's (1987) study of bicycle crashes in Western Australia noted that 90% of cyclists involved in accidents were not wearing safety helmets. These studies provide valuable information which has relevance to planners of road safety education programmes.

A number of studies reported in medical journals have analysed head injuries received by children riding bicycles and have proposed various solutions. For example, O'Rourke et al (1987) concluded that important strategies must focus upon helmet use, environment improvement and bicycle law enforcement. Armson and Pollard (1986) argued that attention must be given to safety helmets and reflective jackets; and that a lower age limit be imposed for bicycle riders on public roads (for example, illegal to ride bicycles on public roads under 12 years of age).

A South Australian study by Dorsch et al (1984) concluded that bicyclists not wearing approved helmets had a ten-fold greater risk of incurring serious head

injury compared with those bicyclists wearing helmets. Similar findings were produced by McCaul et al (1988) from a longitudinal study in South Australia.

Surveys of the use of bicycle helmets have occurred in all states over recent years. In Victoria, a study by Healy (1986) concluded that overall usage rates are relatively high among primary school children (58%) and low among secondary students (18%); and that usage rates are lower for non-metropolitan children. Heiman (1987) used a similar survey approach in 1987 and noted that usage rates had increased to 68% for primary school children and increased marginally to 20% for secondary school students. Rates for country children also increased to 54% for primary students and 19% for secondary students.

Elliott and Shanahan Research (1986) undertook an attitudinal survey of helmet usage in Victoria and concluded that cosmetic considerations, peer-group pressures and practical barriers (for example storage space for helmets at schools) were important factors.

In NSW, Wilson (1989) noted that one in five children and commuter cyclists wear helmets in the Sydney region. A survey by the Queensland Department of Education (1988) concluded that 40% of child cyclists (Years 1-3) wear helmets when riding bicycles to school and that this proportion falls to 20% by Year 7. Only 7% of students in Year 8 wear helmets when riding bicycles to school. A recent survey reported by Collis (1989) indicates some improvement with 46% of primary school students wearing helmets but secondary percentages overall are only 6%. By contrast the percentage of helmet usage for private school students is said to be 55%.

It is evident that mounting pressures from various government and non-government sources are leading to greater public awareness of the need for children to wear helmets when riding bicycles and helmet usage is increasing steadily, especially among primary school children. Serious consideration is being given to ways of improving the appearance of helmets and their degree of comfort. For example, Mathieson (1989) recommended ventilation features that

need to be included in Australian Standards for helmets. Concerted efforts via special promotions, legislature, and educational programmes, have the potential to raise helmet usage to much higher levels among children and adults.

#### (c) Studies on Pedestrian Safety

The Dixon (1987) inquiry, referred to previously, was concerned specifically with pedestrian safety as well as bicycle safety. This major study by the Social Development Committee, appointed by the Parliament of Victoria, sought data from a wide range of sources. The two reports contain valuable statistics as well as detailed discussions on various aspects of road safety.

For example, reference is made in the second report, Dixon (1987), to the numbers of children who walk to school (31%) or who ride bicycles to school (9%) in Victoria. An increasing problem is the number of children who are dropped off or collected by car and who have to adjust to very congested traffic situations. Children need special skills in coping with the traffic and parents need to be educated about parking regulations and vehicle movements.

Several studies have been completed on pedestrian accidents and patterns of behaviour related to these accidents. Struik (1986) concluded that one third of all pedestrian accidents studied in Victoria involved children aged 15 years or less; and that they occurred between 2.00 p.m. and 6.00 p.m. A later study by Struik and Rogerson (1988) analysed a number of variables related to pedestrian accidents. These authors concluded that school children needed to be far more aware of potential traffic hazards. In his study, Pennisi (1984) focused upon vehicle designs and their differential effects upon pedestrian accidents. He noted in his study that 70% of fatal pedestrian accidents involved children up to the age of 16 years.

A study by Bowen (1985) on pedestrian safety is especially noteworthy because the author proposed that an effective way of evaluating educational programmes on road safety is by the use of unobtrusive observations of children's behaviour in *real* traffic situations. This aspect has special relevance to curriculum planners. Road safety programmes in schools could make use of observational data collected by teachers, and even community members and parents might be willing to be involved.

In contrast to school-based training, children's traffic centres simulate the real traffic situations. These have been established in a number of places, especially in Victoria. They can provide valuable practice for young children learning road crossing skills and related pedestrian behaviours. However, Manders and Hall (1984), in their evaluation of the Essendon Traffic School, noted the 'artificiality' of this traffic environment but considered that young children gained important pedestrian skills, especially if teachers used appropriate follow-up activities back at their respective schools. Bowler and Torpey (1988) evaluated the community road safety programme operating in the Latrobe Valley. In particular, they examined the extent to which the local centre was able to publicise the use of the curriculum package *Roadswork* to schools. It appears that community support was substantial and publicity endeavours were successful.

A study by Robbins (1989) examined the predispositions and priorities of local government officers toward road safety. He concluded that metropolitan officers tend to rate road safety much higher than their country counterparts; that the most common complaints to officers are about road junctions; and that many of the complaints from the public are about potential road hazards rather than as a consequence of accidents. In some states, local councils have taken on an active role in the organisation and running of children's traffic centres and in the provision of bicycle trailers (see Summary Tables pp.125-126).

#### (d) Studies on Passenger Safety

A number of research studies of driver behaviour make general references to passenger safety but it should be noted that there are few empirical studies which examine specific elements of passenger safety.

The majority of these studies have examined the wearing of seat belts by vehicle occupants. To date, this has not been extended to studies of the use of child restraints and the behaviour of children in motor vehicles, except for the literature review by Herbert and Lozzi (1976). Pederson and Mahon (1983) observed seat belt wearing behaviour of vehicle occupants in six provincial towns in Victoria, South Australia and Western Australia.

Both of these studies were chiefly methodological in purpose and were used as the basis for a major study undertaken by O'Hara et al (1987). This study examined seat belt wearing rates and the characteristics of people not wearing seat belts in rural and urban Australia. The majority of vehicle occupants were found to wear seat belts, the highest state being Western Australia (92%) while the lowest was South Australia. Only 63% of occupants in rear seats wore seat belts. Seat belt wearing was lowest in the 1-7 age group (males 66%, females 67%).

Passengers in each category of motor vehicle were found to have much lower seat belt wearing rates than drivers of these vehicles. Drivers who wore seat belts tended to have higher levels of educational achievement and household income than drivers not wearing seat belts and passengers not wearing seat belts. Some of these findings provide useful data about passenger safety which should be of interest to curriculum developers.

#### (e) Studies on Driver Safety

Driver education programmes have been operating for several decades in a number of countries, such as the USA, and in some Australian states since the early 1970s. The research literature consists of major empirical studies,

evaluation studies of individual training programmes and statistical studies relating accident rates to training programmes.

One of the most widely cited studies was conducted in De Kalb County, Georgia (USA) by the National Highway Traffic Safety Administration (1987) between 1978-1981. The project involved 16,000 students who were allocated to one of three groups. One group undertook the Safe Performance Curriculum (80 hours tuition including simulators and off and on road instruction); another group did the standard course (30 hours tuition) and the third group of students acted as a control group and received no formal driver education through a school system.

The conclusions from this study were that the standard course of 30 hours was effective; that the 80 hours course was not effective; and that accident rates between the groups were not statistically different. However, a follow-up data collection of the three groups produced evidence that certain categories of the standard course students had significantly fewer crashes in years of driving after the first year of driving.

Programmes have also been introduced for special clientele such as those with drink-driving offences. For example, the Saskatchewan Driving Without Impairment Program (1984) has been developed for persons on probation orders from the court due to driving offences. An elaborate set of teaching modules has been developed but to date the programme has not been evaluated.

Evaluation studies of specific programmes tend to be based on observations, interviews and questionnaires. Usually, they are formative in purpose and contain recommendations designed to bring about further improvements to the programmes.

The study by Strang et al (1982) examined a driver training course provided by the Goulburn Valley Driver Training Complex (now the Driver Education Centre of Australia). The study compared on-road and off-road driving training courses. In the context of short-term impact the researchers concluded that

participants in the training course scored more highly on tests of driver knowledge and attitudes compared with students receiving driving lessons on public roads from a commercial driving school. The long-term impact was less clear-cut with no significant differences in terms of accidents and convictions between the on-road and off-road groups.

The Brisbane North Regional Office (1984) evaluated twenty schools which were piloting the *Student Driver Education* course in Queensland schools. Students found the course to be very enjoyable; teachers considered that the course was a necessary part of the total education of the age group and principals considered that resources were adequate and it could be timetabled quite easily.

Holmes-Smith et al (1987) undertook an evaluation of the Keith Edmonston Regional Traffic Safety School based at Ballarat, Victoria. The evaluators concluded that the full year pre-driver education course operating at this school was very comprehensive and was used by a majority of high schools in the local area.

Hawthorne (1989) examined pre-driver education courses in government post-primary schools in Victoria. He concluded that financial cutbacks were having undesirable effects on the availability of trained staff to run pre-driver education courses in a number of schools.

The study undertaken by the South Australian Public Service Board (1985) of the Oaklands Park Road Safety Instruction Centre was far from positive. The conclusions reached in this study were that the student driver education courses were not effective as they had not been shown to reduce potential accident involvement. The authors of the study recommended the cessation of Student Driver Education courses and the phasing out of Defensive Driving Courses. They were more positive however, about the value of training programmes for motor cyclists. Studies in other states such as Victoria (Daltrey and Thompson (1987), Wood and Bowen (1987)) and the Northern Territory (Cadet-James (1989))

provide empirical data to support the continuance of training programmes for motor cyclists.

Some of these findings highlight the dilemma of what and how to measure outcomes from driver education courses. A number of other studies have demonstrated no significant relationships between driver accidents and driver education programmes. For example, Drummond et al (1985) noted no significant effects with a pilot driver improvement programme for drivers with two offences compared with a control group. Other studies by Drummond and Torpey (1984) and Drummond (1986) also examined accident statistics and related these to driver age and education programmes.

Yet, overseas experts such as Jolly (1988) have argued that driver education programmes cannot be evaluated by basic road accident statistics. He criticised writers who use standard pre-/post- and control group methods to evaluate driver education programmes. He states that:

There is a multiplicity of factors which influence the behaviour of the road user. Many of these factors are extremely difficult and expensive to control under experimental conditions, others, to date, are quite impossible to keep constant. Factors such as changes of mood, personal problems and exposure to risk, each of which can temporarily erode the effects of the most effective programme, may change - not by the year or the month or even by the day but even by the minute or the second. The problem of assessing the outcome of a specific education programme is compounded by the fact that the teacher's effort, particularly those to attitude formation, may not bear fruit for many months or even many years.

Road accident reduction is, of course, the ultimate criteria upon which our total road safety policy must be judged. It is not however, necessarily the most appropriate criteria for the short term assessment of individual methods of achieving the overall reduction. If, for example, such a criteria must be met by the traffic educator, must we not ask the home economics teacher to justify her course in terms of a significant reduction in the divorce rate in her area? Must we not demand a significant reduction in the crime rate as a pre-requisite of continuing to teach moral education in schools? The use of raw accident data as a means of evaluating the effect of traffic education is about as realistic as using the balance of payments as a measure of the effectiveness of the teaching of business studies! (p.66)

#### (f) Studies on Road Safety Education in Schools

#### (i) General Reports/Studies

Many overseas countries have invested substantial funds into road safety education in attempts to reduce road accidents. The underlying assumption is that traffic behaviour by participants is dependent on their skills, knowledge and attitudes, and that it is possible to improve the behaviour of road users through systematic educational efforts.

A major OECD study (1986) on "The Effectiveness Of Road Safety Education Programmes" provided comprehensive details on major factors and case study examples. In particular it provided criteria for effectiveness of road safety education programmes in terms of:

validity

relevance

content and structure of instruction

learner variables - age, sex, cognitive functioning, personality

and intelligence.

instructional variable - type of mediator,

instruction situations,

types of methods and media.

social variables - socio-economic background, cultural mores,

peer pressures.

These criteria are useful when examining existing road safety education programmes (see Chapter 4).

Other overseas publications about road safety education point to major deficiencies in existing programmes. For example, a review by the U.K. Transport and Road Research Laboratory (1986) into road safety education in primary and middle schools concluded that:

nearly two-thirds of schools had no structured road safety teaching programme. Almost all (98%) had no guidelines for staff and only a very few had a teacher designated as being responsible for road safety education. Road safety was most frequently covered by external speakers such as Road Safety Officers and the police. (p.1)

The authors of this report make recommendations to schools and education authorities but also to preservice teacher training institutions, producers of teaching aids and materials and television and broadcasting authorities. A recent

report by the Transport and Road Research Laboratory published in the *Times Educational Supplement* (April 21, 1989) emphasized the lack of training in road safety education in preservice teacher education institutions.

Most secondary teachers have received no training in road safety education - despite 12 year old children being most at risk from road accidents.

Staff in 95% of schools have received no in-service training for road safety education over the past three years, and only one in eight initial teacher-training programmes covers the subject, say the Transport and Road Research Laboratory.

However, 70% of teachers recognize the importance of in-service training and 97% want initial training for secondary teachers in road safety. (p.A2)

Within Australia a major national study of primary school road safety education materials and practices was undertaken by Maggs and Brown in 1986. The authors analysed a range of existing road safety materials using a process model they had developed and concluded that a number of packages/programmes were ineffective in terms of instructional design. Their survey of almost 600 teachers revealed that:

- the teaching of primary road safety education is not a high priority;
- primary teachers teach road safety incidentally, mainly through class discussion:
- less than 40% of teachers use available kits or programmes.

(Maggs and Brown 1986, p.xi)

At the state level several reports have been produced which examine existing and desired levels of road safety education programmes.

J. Brown (1980) surveyed the use of road safety resource materials in Queensland primary schools. She concluded that many teachers were not familiar with the programme and that the role of field officers needed to be extended. However, those teachers who were aware of the programme were well satisfied with its design and applicability in schools.

In South Australia, M. Brown, a co-author of the Maggs and Brown study (1986), was contracted by the Department of Transport to review primary school road safety education in that state. Brown's (1986) report indicated that primary

school teachers taught road safety mainly through incidental discussions and that it was taught predominantly by teachers in Grades R-5. She was especially critical of the lack of effective road safety education materials and observed that insufficient attention was given to the effective trialling of materials.

Unease about road safety education in South Australia among senior officers in a number of major agencies may have been the catalyst for a government inquiry in 1987. An inter-departmental working party in South Australia, under the chairmanship of Don Blackman, examined the extent and provision of existing road safety education in schools at junior primary, primary and secondary levels. The Blackman report (1987) made a series of recommendations to the South Australian Government about major changes which were needed. Some of these recommendations included:

- the formation of a Road Safety Development Unit to co-ordinate and integrate the production of road safety education curriculum, programmes and promotions relating to school age children.
- the formation of an interdepartmental Road Safety Education
   Management Committee to co-ordinate activities of various
   government and non-government agencies.
- all school going children should experience on-going road safety education.
- every school should produce a policy statement on road safety education (pp 6-8).

In Victoria, a Working Party, under the chairmanship of I. Allen, and established by the Minister of Education and Transport in 1985, reviewed traffic safety education in schools. The Allen Report (1985) provided an overview of existing programmes initiated by the Education Department, the Road Traffic Authority and other agencies. Its recommendations re-asserted the role of the Education Department as the agency primarily responsible for the co-ordination

and implementation of traffic safety education programmes in schools and that the Road Traffic Authority should play a complementary role in terms of materials development, dissemination and consultancy services. Recommendations were also made about the provision of traffic safety education in all schools across all year levels to be integrated into existing curriculum areas.

Several years later the Road Traffic Authority produced a comprehensive survey of curriculum programmes produced by that agency. The report (Taylor et al (1987)) and a companion volume (Bowler and Warren (1988)) provided descriptions and evaluative data on the use of specific curriculum packages. The study was based upon surveys of more than 140 primary schools and over 150 secondary schools. A significant finding in the report was the extent to which teachers were found to rely upon consultancy support for initiation and implementation of road safety education programmes.

The Dixon report (1987) in Victoria, referred to above, recommended that "health and safety" should be emphasized as an additional major learning area by the Ministry of Education; that there should be an expansion of inservice training in traffic safety education; that traffic safety education units should be included in preservice teacher training courses; that a credentialled course in health and safety should be established; and that matching grants should be provided to all primary and secondary schools for the purchase of traffic safety equipment and related facilities.

# (ii) Evaluations of Individual Road Safety Education Programmes/ packages

Road safety education programmes for schools have been in operation in state education systems for several decades. In some state systems specific road safety syllabi have been developed (for example, Queensland 1973, and South Australia 1979), while in others they were subsumed within other subjects such as Health Education, Social Studies and Science.

It was not until the late 1970s that specific road safety education packages were developed by educational agencies. Victoria led the way in 1978 with the production of a bicycle safety kit *Bike-Ed*. Soon after another curriculum package entitled *Roadswork* was produced. Since then a number of pre-primary, primary and secondary school packages have been produced by the Road Traffic Authority in that state.

On the Federal scene, the curriculum package *Out and About* was developed in 1984 by the Federal Office of Road Safety. Subsequently further revisions and extensions of this package have occurred.

More recently, a number of curriculum packages have been produced by the Road Traffic Authority in NSW such as Kids and Traffic, Street Sense and Are You in Control. In other states similar packages have also been produced such as Cyclesafe in South Australia; Teenagers, Alcohol and Road Safety (adapted from Victoria) in Tasmania; Nipper in Western Australia; and potentially useful videotapes on bicycle safety in Queensland and South Australia and on pedestrian safety in the ACT and the Northern Territory. These and many other packages/materials are analysed in Chapter 4.

Evaluations of individual packages are relatively limited in number. Not surprisingly, more evaluations have been published on the earlier packages such as *Bike Ed*, *Roadswork* and *Out and About*.

With regard to *Bike Ed* numerous descriptive accounts and newspaper accounts were published in Victoria during the early 1980s, but the first evaluation study appears to have been undertaken in Newcastle by Trotter and Kearns in 1983. These authors trialled *Bike Ed* with 572 Year 5 students in selected primary schools in the Hunter Region of NSW in 1981 as part of the Newcastle area Bike Plan Study.

As the authors stated:

Evaluation of the trial was by means of a pre-test and post-test study of road safety-related knowledge and behaviour. The 572 children included in the knowledge component of the evaluation had been assigned by school class to one of three groups. Group A was given classroom bicycle safety instruction and off-road on-cycle training, group B was given classroom instruction and both on-road and off-road on-cycle training, while group C acted as a control group. A knowledge test was administered to all of the subjects in each of the groups both before and after the period of the *Bike Ed* trial. Some of the children from each of the groups, 193 children in all, were also given a bicycle riding performance test in a simulated road environment. (Trotter and Kearns 1983, p.1)

The authors concluded that group B improved significantly more than both group A and group C and that group A also showed significant improvement over group C in both of the tests. They considered that *Bike Ed* was of positive benefit to bicycle riders in the 9 - 12 years age group.

Gardner (1984) undertook an evaluation with colleagues from the Monash University Evaluation Studies Group, titled "Project Rose", which focussed upon adoption, classroom processes and implementation strategies of *Bike Ed, Science and the Road*, and *Roadswork*. They interviewed curriculum developers, mailed questionnaires to users, undertook telephone interviews and visited schools to observe classes and to supervise the distribution of tests and attitude scales to students.

Their results pertaining to *Bike Ed* revealed that 44% of schools who obtained the kit were still using it; that teacher-user support was very high – 90% indicated that they continued to use it; and that usage rates were highest in primary and special schools.

Gardner (1984) concluded that *Bike Ed* was successful because of the instructional characteristics of the programme, and the requirement for teacher in-service training. He also stated that major problems with it were the lack of equipment (helmets, road signs); constraints upon use of on-road experience; and insufficient time for teachers to plan and make arrangements.

Maggs and Brown (1986) analysed *Bike Ed* and although positive about many of its attributes, criticised the formulation of objectives; and noted that the sequences of learning activities were not logical. Since then, revisions to *Bike Ed* 

have been undertaken and a Mark II version has been available to schools since 1988.

Boyd (1987) surveyed the growth of *Bike Ed* in Victoria from 1978-1986. He concluded that the training of *Bike Ed* instructors was crucial and that teachers relied heavily upon road safety consultants in planning their programmes. Boyd noted that by 1986, about 36% of primary schools in Victoria had personnel trained to undertake the *Bike Ed* course – that is, it was being taught in over 900 primary schools, increasing from an estimated 212 in 1984.

The *Roadswork* package on pedestrian safety was developed in 1981 and distributed unsolicited to all primary schools in Victoria in 1982.

Dowse (1984) evaluated this package and found from a survey of teachers that very few (22%) had used, or were currently using (5%) the package. As part of "Project Rose" Gardner (1984) also evaluated the package and found that levels of implementation among teachers were very low. For example, the evaluators noted that only 23% of schools could demonstrate planned inclusion of *Roadswork* in their programmes; serious users were estimated to be 10% of schools; and in many user schools use was limited to one enthusiastic teacher. Gardner (1984) concluded that there were implementation problems with *Roadswork* because of the way it was introduced (unsolicited mass mailing); the lack of teacher in-service to assist teachers to use the package; and problems in devising appropriate activities for young children and integrating the topics across the curriculum.

Bowen (1985) examined pedestrian safety education packages produced in a number of countries and included *Roadswork* in her study. The study was predominantly a literature review and no specific findings were produced about *Roadswork* but the author did suggest some interesting methods of evaluating curriculum packages such as the use of unobtrusive observations of spontaneous behaviour of children in pedestrian-related situations.

Maggs and Brown (1986) in their study were very critical of *Roadswork* in terms of the disorganised information and the lack of consideration given to objectives and key concepts.

In 1986 the RTA (Victoria) made a decision to revise *Roadswork*, especially in the light of less than favourable evaluation reports. The new package, *Streets Ahead* was first released in 1988 and has had the advantage of consultants being available to assist with its implementation into the schools.

This package would appear to be far more elaborate than its predecessor (see the analysis in Chapter 4). An interesting innovation has been the involvement of selected secondary school students to teach an aspect of *Streets Ahead* to younger children in nearby primary schools (cross-age tutoring) as part of their Personal Development elective (Horton-James 1989).

The Careful Cobber project was developed by a teacher attached to the Driver Education Centre of Australia (DECA) at Shepparton, Victoria. Separate grade level books for primary school children and a teacher's guide are provided (for details see Chapter 4). Liddell (1986) undertook a study of this package by surveying 70 schools which annually send their students to DECA and another 70 which have the programme but do not visit DECA. She concluded that Careful Cobber is well accepted by teachers and that schools which visit DECA are more inclined to have a continued commitment to traffic safety education.

Maggs and Brown (1986) also analysed *Careful Cobber* and, although they agreed that the package complemented schools' visits to DECA and was a useful reinforcement, they were critical of the lack of instructional objectives (rather than programme objectives) and the separation of content into units on pedestrian, passenger and bicycle safety.

Of the more recent curriculum packages produced for the secondary school level in Victoria, the only one to date that has been evaluated formally is *Science* and the Road. This evaluation was undertaken as part of "Project Rose" (Gardner 1984). The evaluation consisted of three phases over the period 1984-86, namely:

an examination of the levels of implementation; an analysis of the objectives of the package; and the preparation and use of tests and attitude scales using a quasiexperimental design. In the initial study, Gardner (1984) noted that although there was good market penetration with over two-thirds of schools purchasing some or all of the materials, only one third of purchasers were actually using the materials. Major reasons cited for non-use included lack of interest among science teachers and a feeling that road safety was not their responsibility; lack of in-service training; and difficulty in fitting materials into science courses. Subsequent publications (Gardner 1986, Gardner 1988(b)) compared users and non-users (Year 10 students) of Science and the Road. The findings were that: the 'driver' unit had a significant effect upon knowledge with the 'vehicle' unit having a lesser but still significant effect; these effects were consistent across a range of schools with different socio-economic/migrant backgrounds; girls in the sample displayed a markedly more cautious and responsible attitude to road safety behaviour than boys; and there was no statistically significant difference in students' road safety attitudes between the user and non-user groups.

A report compiled by Wicks (1988) reviewed the current use of *Science and the Road* in Victorian schools. She concluded that both the 'driver' and the 'vehicle' books provided valuable materials for teachers to use but that usage had fallen away in some schools because the material was now becoming dated. Further, the author observed that the restructuring within schools to accommodate the new Victorian Certificate in Education (VCE) would require a wider range of science based units in Years 7-10 whereas *Science and the Road* was aimed at Years 9-11 students.

On the national scene, the Federal Office of Road Safety developed the first edition of *Out and About* during 1984-85. During 1986-87 a second version was produced which targeted children's books at 6-7 year olds (level one) and 8-9 year olds (level two). For a detailed analysis of the two levels see Chapter 4.

Castor and Rush (1988) undertook a three phase evaluation using teachers, parents and children who had trialled these materials. The trials were conducted in 10 pre-schools, 32 pre-school classes and a small sample (unspecified) of primary schools. The evaluators concluded that: attitudes towards *Out and About* were very positive; that the material helped children sustain an awareness of dangerous behaviour and to be more willing to adopt safe behaviours; and teachers claimed that they used the material and would continue to do so.

Webber (1988) undertook a pilot study on *Out and About* using a telephone survey of schools to ascertain levels of implementation of the materials. She concluded that: teachers were using the materials in a variety of ways; that the materials were adaptable for use in a number of subjects across the curriculum; and that *Out and About* enabled teachers to include practical learning activities both inside and outside the school ground.

Major curriculum packages have been produced recently by the Roads and Traffic Authority of N.S.W. Descriptive accounts of each package have been produced (for example, St. John 1988), but only one evaluation study has been published to date.

In this study, Aylward (1988) undertook an evaluation of *Kids and Traffic* which was developed for kindergartens in N.S.W. and distributed in that state in 1987-88. Aylward surveyed 12 kindergartens in South Australia who were using the package, based on a sample of three from each of the four education regions. The evaluator concluded that *Kids and Traffic* was very acceptable to kindergarten teachers and parents of young children apart from some minor components (stickers, calendar), which were considered to be of limited benefit. His recommendation was the *Kids and Traffic* should be implemented statewide in kindergartens in South Australia.

From time to time research studies are published which concentrate upon learning processes, instructional design and related topics. A number of these are relevant to road safety curriculum developers. For example, Gardner (1988 (b))

argued that students approach a new topic with a set of firmly held prior conceptions, many of which can be erroneous. He suggested that road safety is an excellent "real world" social problem where students can learn about and refine their understanding of important science concepts and, in so doing, overcome previous misconceptions. Elliott (1985) examined a number of developmental capacities of young children and how this affects their road behaviour as pedestrians. He argued in particular for a concentration upon concrete behavioural training in road safety education packages. Renaud and Stolovitch (1988) argued that simulation games that include role playing and behaviour modelling can trigger change in attitudes and behaviour in young children.

There has been renewed interest in several states recently on measures of student outcomes in road safety. Although some published evaluations have included measures of student knowledge and attitudes (for example Gardner 1986) the new initiatives are endeavouring to provide base line tests that can be used longitudinally with students and teachers. For example, the Roads and Traffic Authority in NSW is trialling base line tests with students. In South Australia base line tests for students incorporating measures of general road safety attitudes, knowledge, opinions, awareness, behaviour, are being piloted for children 8-10 years, 10-12 years, 12-14 years by Aylward (1989) for the Department of Transport.

In addition to the above studies of individual packages, road safety authorities in some states have produced overviews of their activities. The Road Traffic Authority (RTA) in Victoria has been especially active in this regard and has produced an overview of programmes 1978-87 (Bowler 1987) and a schools' survey report (Taylor et al 1987). The Bowler study provides important historical and contemporary information about the scope and developments in traffic safety education programmes. The Taylor study provides summaries of usage and strategies applied by schools and surveys undertaken internally by RTA staff.

# 2.2 Concluding Comment

The literature on road safety is very extensive and although it is far from conclusive, there are important implications for curriculum developers charged with the responsibility of producing road safety education programmes. A number of the studies on road safety point to target groups and target concepts that should be given a high priority. The evaluative studies undertaken to date on individual road safety programmes reveal a number of successes but also some deficiencies in scope, design and emphasis, which need to be addressed in subsequent revisions and in new projects.

#### Chapter 3

#### **Dissemination and Implementation Patterns**

#### 3.1 Introduction

As described in the first chapter, a major thrust of the study was to examine the communication networks existing between organisations concerned with road safety education. This information was sought initially from interviews with major providers in each State and Territory, but further details were obtained by a series of questionnaire surveys. The results of these surveys and an analysis of the data is the major focus of this chapter.

#### 3.2 The Questionnaire Surveys

Questionnaires were sent to a total of 306 individuals in respective States and Territories who were identified as having some involvement with road safety education (see Appendix 4). These comprised:

- . 151 Policy Directors and Senior Administrators in Federal and State Government organsiations and associated bodies;
- . 72 Curriculum consultants and Curriculum developers in Departments of Transport, Education Departments and other bodies;
- . 83 Education officers, Administrative staff and Consultants working directly with schools.

In each case, questionnaires were sent directly to the individuals concerned and all responses were deemed to be anonymous. Table 3.1 below shows both the separate and overall response rates for respective groups.

Table 3.1 Responses to Questionnaire Survey

GROUP	REQUESTS (N)	RESPONSES (N)	% RESPONSE
Policy Directors/ Senior Administrators	151	74	49.0
Curriculum Consultants/ Developers	72	42	58.3
Education Officers/ Programme Administrators Consultants	83	32	38.5
Total	306	148	48.3

Although the overall response rate was lower than anticipated (despite follow-up reminder letters), the evaluators were impressed by the thoughtful comments made by those who did reply. For the convenience of readers, the responses of the three groups are considered separately. In view of the large amount of information contained in the questionnaires, emphases have been placed first upon aggregates of responses across the States and Territories. References are made to state-level perspectives where these are deemed to be relevant or atypical. In the case of certain questionnaire items, the information provided by respondents was insufficient to permit meaningful collation. References to these items have been omitted from the report.

# 3.3 Policy Directors and Senior Administrators

The questionnaires sent to Policy Directors and Senior Administrators in the various States and Territories (see Appendix 2), comprised 23 items arranged in two categories: biographical information; and activities, responsibilities and issues. Responses are considered under these headings. Table 3.2 shows the respective return levels per state/territory. However, it should be noted that low responses in some states/territories could have been due to inaccurate information about appropriate contact persons.

Table 3.2
Return Levels for Policy Directors and Senior Administrators

GROUP	REQUESTS (N)	RESPONSES (N)	% RESPONSE
ACT	11	3	27.3
NSW	33	15	45.5
NT	9	8	88.9
QLD	10	5	50.0
SA	28	14	50.0
TAS	14	6	42.8
VIC	28	16	57.1
WA	18	7	38.9
Total	151	74	49.0

# (a) Biographical Information

Table 3.3 below illustrates the parent organisations of the 74 individuals who responded to this survey. These data indicate the diverse range of organisations with interests in road safety education and ones that have policies and programmes relating to the area.

Table 3.3
Respondent's Employing Organisations

STATE/ TERRITORY	No. of RESPONDENTS	ORGANISATIONS
АСТ	3	ACT Schools Authority; Canberra College of Advanced Education; Transport Industry; ACT Administration.
NSW	15	Police Department; Road Traffice Authority; Education Department; NSW TEC; Trades Hall; North Shore Hospital (Accident Prevention Unit); Catholic Educa- tion Office; Federation of Parents and Citizens; ABC; Newcastle Bike Plan Committee; Bicycle Advisory Council
NT	8	Education Department; Road Safety Council; Department of Transport and Works; Teachers' Federation; Aboriginal Education Consultative Group; Motor-cycyle Rider Training Programme

Table 3.3 (cont.)
Respondents' Employing Organisations

STATE/ TERRITORY	No. of RESPONDENTS	ORGANISATIONS
QLD	5	Police Department; Education Department; Catholic Education Office; RACQ; Drug & Alcohol Programme Unit
SA	14	Police Department; Department of Transport; Education Department; SGIC; Road Safety Advisory Council, Drug/ Alcohol Services Council; SA College of Surgeons; NHMRC (Road Accident Research Unit)
TAS	6	Division of Road Safety; Royal Australasian College of Surgeons (Road Trauma Committee); RACT: Alcohol-Drug Dependency Board; Office of Consumer Affairs
VIC	16	Police Department; Education Department; Monash University; RTA (Hawthorn); State Curriculum & Assessment Board; Essendon Traffic School; La Trobe University; Keith Edmonston Regional Traffic School; Transport Accident Commission
WA	7	Police Department; Ministry of Education; WACAE; State Bicycle Committee; Road Accident Prevention Research Unit; Child Accident Prevention Foundation

Generally, the responsibilities of individuals with positions in these organisations in regard to road safety education in schools included:

- . policy formulation and programme promotion and co-ordination;
- . supervision of field officers/instructors
- . representation of interest groups;
- . road accident research; and
- . curriculum development.

# (i) Length of Time in Position (Item 2)

Respondents indicated the lengths of time each had spent in positions with responsibilities for road safety education. Table 3.4 shows the patterns in respect of each State and Territory.

Table 3.4
Length of Time in Position

	TIME IN POSITION (Years)					
STATE/TERRITORY	<1	1-3	4-6	7-9	>10	No Response
ACT	1	1	-	-	-	1
NSW	-	5	4	3	3	-
NT	-	2	1	-	2	3
QLD	-	1	-	2	1	1
SA	-	1	-	2	1	1
TAS	-	-	1	-	2	3
VIC	-	3	1	1	4	7
WA	1	2	<b>-</b>	-	_ 2	2
TOTAL	2	16	11	7	20	18

These data, while not conclusive in view of the number of individuals who failed to respond (N=17, 23%), suggest that a majority of those who did respond (N=38,68%) had more than three years association with road safety education while 20 (36%) claimed more than ten years experience. The atypical case appeared to be ACT where two of the three respondents indicated that they had less than three years experience in the area of road safety education.

# (ii) Factors Associated with Responsibility for Road Safety Education (Item 4)

The variety of factors which resulted in road safety education becoming a responsibility of the position included:

- organisational reponsibilities for legislation, licensing and enforcement of road traffic usage and road safety training;
- duties within Education Department Curriculum Services Directorates;
- . professional-medical interests (NSW, TAS, WA);
- . Consumer interests (NSW);
- . pre-service education of teachers (ACT, SA, WA);

- . research interests (VIC, WA);
- . Community Service (including motoring organisations) (NSW, QLD, TAS, VIC);
- . Industrial interests (ACT, NSW);
- . Media, publishing (NSW);
- . Parent interest (SA, NSW);
- . Insurance interests (SA).

These factors serve to illustrate the range of interests manifest in the field of road safety education across Australia.

# (iii) Special Interests in Respect of Road Safety Education (Item 5)

While responses to this item were predictable in terms of the positions of respondents, two general themes were evident. These were:

- the reduction of road accidents and fatalities; and
- the education of children (and others) in safe road usage attitudes and behaviour.

A number of individuals expressed interests in specific areas of road safety education.

#### These included:

- . Bicycle Safety (N=5)
- . Youth driver education (N=3)
- . Parent awareness programmes (N=3)
- . Sponsorship of road safety programmes (N=1)
- . Teacher education (N=2)
- . Research/evaluation (N=3)
- . Curriculum development (N=4)

The range of interests of individuals in senior positions would appear to be wide from a national perspective. However, apart from the two general interests,

there would appear to be deficits in respect of specific interests in the various States and Territories. However, this may have been due to the characteristics of the sample of respondents who chose to return questionnaires. Notwithstanding this, and predicting that Bicycle and Youth Driver Education programmes would be features of road safety education across the nation, then aspects such as parent awareness programmes, pre- and in-service education of teachers, research and evaluation and curriculum development would appear to be extremely localized.

# (iv) Proportion of Time Spend on Matters Related to Road Safety Education (Item 6)

Given the variety of positions held by respondents, their assessments of the time devoted to road safety education produced interesting patterns. Table 3.5 illustrates these patterns by State and Territory.

Table 3.5
Proportion of Time Spent on Road Safety Education

	TIME (% OF TOTAL)													
State/ Territory	<1	2-5	6-10	11-15	16-20	21-25	26-30	31-50	51-60	61-70	71-80	81-90	91-100	No Resp.
ACT	1	1	-	1	-	-	-	-	-	-	-	-	-	-
NSW	1	7	-	2	-	1	-	2	- ,	-	-	2	-	-
NT	2	5	-	-	-	-	1	-	-	-	-	-	-	-
QLD	1	2	-	_	1	-	-	-	_	-	_	-	-	1
SA	1	6	-	1	-	1	2	-	-	1	-	_	2	_
TAS	3	-	1	_	-	-	-	-	_	_	_	-	-	2
VIC	4	2	-	-	1	-	1	-	-	-	_	-	2	6
WA	3	1		1	1	-	-		-	-	-		-	1
TOTAL	16	24	1	5	3	2	4	2	_	1	_	2	4	10

These data show that, at the Policy Director-Senior Administrator levels a total of 40 (54%) of individuals spend less than five percent of their time on matters related to road safety. Fourteen respondents (19%) claimed to devote between 11 and 30 percent of their time to the area, while only four individuals, all Police Department employees, could be considered as "full-time".

# (b) Activities, Responsibilities and Issues

# (i) Major Goals of Organisations (Item 8)

Predictably, the major goals of their organisations were deemed by various respondents to include the following:

- To reduce road accidents and fatalities through effective road safety education programmes, particularly at the school-levels.
- To improve the knowledge, skills, attitudes and behaviours of pedestrians and road users.
- To improve bicycle safety and driver education, through school-level education.
- . To increase public awareness of road safety issues.
- To develop curriculum policies, goals and materials to facilitate road safety education programmes.
- To facilitate teacher development in road safety education.
- . To represent road safety interests at various levels of Government.

In total, these represent a worthwhile and comprehensive set of goal statements in aggregate. However, it was apparent from individual responses that some sectional interest groups within the total area of road safety education subscribed to goals that were partisan. The impressions gained by the evaluators in this respect were ones of apparent degrees of fragmentation and duplication.

# (ii) Strategies Employed in Road Safety Education (Item 9)

There was a high level of similarity in the descriptions of strategies employed by the various organisations. In order of popularity, these included:

- . Provision of training facilities, programmes, and instructors.
- . Use of practical training approaches with teachers and students.
- . Lectures and seminars (and other forms of promotion) with community and school groups.
- . Development of instructional materials.
- . Provision of consultancy/advisory support.
- . Sponsorship for programmes.
- . Representation on major committees/working parties.

A number of individuals cited strategies that might be considered atypical.

#### These were deemed to involve:

- . Monitoring road hazard areas and targetting interventions in schools (Tas.).
- . Secondment of schools' personnel to support programmes (Vic.).
- . Evaluations of programme effectiveness (WA; Qld).
- . Political lobbying (WA).

The most frequently cited strategies were perhaps predictable in that they represent "standard approaches" particularly in the sphere of education. Simply put, they characterize a "top down" system which provides everything from policies, programmes, and resources to instruction. There was an absence in responses to suggest other than centralized operations in each State and Territory. In this regard, the deficit would appear to be avenues for local involvement.

#### (iii) Re-direction of Goals (Item 10)

Analyses of responses to this item suggest that there were differences in perspectives between individuals in the respective States and Territories about the redirection of goals. These perspectives are illustrated separately below as sets of needs:

- ACT Decrease the gap in provisions for road safety education between primary and secondary schools; and greater emphasis upon support for teachers in their teaching of road safety.
- NSW Emphases upon curriculum integration; improvement to the school-level process changing the emphasis from provision to implementation; better co-ordination between agencies involved in road safety education.
- NT Ensure greater involvement of teachers; and extend road safety education across the K-12 age levels.
- QLD Target parents and families; and emphasize attitude changes in programme content and delivery.
- . SA Integration of road safety education across the curriculum; greater co-ordination between agencies involved in road safety education; provision of time during teacher education courses (as one respondent stated "we have to battle to get four hours a year").
- TAS Allocation of more time for and integration of road safety education across the curriculum.
- . VIC The Ministry of Education to place more emphasis on road safety education; and emphases on cognitive development rather than training.
- . WA None cited.

Essentially, respondents' suggestions for the re-direction of goals distil into two major issues:

- The roles of education systems in directly influencing what takes place in respect of road safety education in schools; ie. firm policies, allocation of time and other resources; and curriculum integration; and,
- a need to focus precisely upon the necessary educational outcomes of road safety education programmes in schools.

These suggestions foreshadowed respondents' comments to later items in the questionnaire relating to problems and constraints in road safety education.

# (iv) Resources Available for Road Safety Education (Item 11)

The Policy Directors and Senior Administrators reported a range of resources available to them for the purposes of road safety education. Table 3.6 illustrates the patterns of a selected sample for each State and Territory.

Table 3.6
Resources for Road Safety Education

State/ Territory	ORGANISATION/ PROGRAMME	NUMBER OF STAFF	FACILITIES/OTHER RESOURCES USED
ACT	ACT Administration (Road Safety)	2 FT + 2 PT	2 Traffic Centres Use of NSW instructional materials
NSW	Road Traffic Authority Newcastle Bike Plan Cttee Rail Safe Programme Education Dept (Curric. Dir).	12 FT + 1 PT 7 FT 4 PT  12 FT Regional Consultants	RTA materials RTA facilities; Sponsorship Information production facilities FORS/RTA instructional materials
NT	Police Dept (Community Police) Education Dept (Student Driver programme) Road Safety Council	18 FT 4FT + 20 PT 5 FT	RSC material  NT Education Curriculum 3 Training Complexes
QLD	Police Dept (Community Branch) Education Dept (Studies) Department of Transport	10 FT 1FT 3 FT	A/V materials 10 Bike Ed. Trailers 1 Road Safety Caravan

Table 3.6 (cont.)

Resources for Road Safety Education

State/	ORGANISATION/	NUMBER OF	FACILITIES/OTHER
Territory	PROGRAMME	STAFF	RESOURCES USED
SA	Police Dept (R.S. Section)	7 FT	4 Vehicles, Bicycle Safety equipment
	Dept Transport (R.S.Ed. Unit)	7 FT + volunteers	7 Road Safety Centres + Training equipment
	SGIC (Driver Ed. Programme)	5 FT	5 Vehicles
TAS	Division of Road Safety RACT (Driver Training)	10 FT 9 PT	2 Road Safety Centres 9 Vehicles + Driver training aids
VIC	Education Dept (Curric. Policy) RTA (Hawthorn) Edmonston Regional Traffic School	3 FT 20 FT + 8 Admin 3 FT	Off-road Centres School instructional materials
	Essendon Traffic School	10 PT	Training complex; driving simulator, 4 cars, 2 motor cycles, 120 bicycles, 60 tricycles Off-road training complex, 4 vehicles
WA	Police Dept (Cty Affairs Br.) 4 PT (R.S. Ed. Off)	6 FT (Bike Ed. Off) Bike trailer 19 FT (Lecturing/ School-based staff)	Bike Edn Training Centre,
	WA College Adv. Education	1 PT	25 Bicycles + R.S. training equipment

\* FT = Full Time

PT = Part-Time

While the information provided by respondents obviously did not illustrate the complete situations, the data serve to indicate that considerable human, financial and material resources are devoted to the various areas of road safety education. The numbers of full-time staff involved with these activities suggest efforts to reach as many schools and students as is practical.

#### (v) Linkages Between Road Safety Education Agencies (Item 13)

There was substantial evidence to suggest that the road safety education agencies within each State and Territory maintain both formal and informal associations. Largely, these are characterized by:

- . Joint memberships of committees and working parties;
- . liaison between key personnel;
- . information exchange;
- . consultancy/advisory/training support; and
- . periodic joint ventures.

Respondents' comments suggested, however that at this level the linkages between organisations and agencies were mainly formal.

#### (vi) Involvement in Joint Projects

Apart from major areas of co-operation that might be expected from the key agencies involved in road safety education, there was little evidence to suggest extensive involvement in joint projects. Those that were cited by respondents included, in:

- . NSW, joint development and evaluation of instructional materials between the Roads and Traffic Authority and the Education Department.
- the NT, between the Road Safety Council and the Education Department, use of Aboriginal Teachers' Aides as interpreters in road safety instruction for Aboriginal children.
- . QLD, none cited.
- . SA, between the Road Safety Division, Police and Education Departments, a

  Cycle Offence Reporting Scheme which emphasized education and the Bicycle

  Helmet Protection Programme; and between

the Road Safety Division and the Education Department, a Youth Driver Education Programme and the development of community road safety groups.

- . TAS, between the Division of Road Safety and the Education Department, joint development Curriculum materials; and between the Division of Road Safety and the RACT, joint development of promotional materials.
- . VIC, between the Roads and Traffic Authority and the Ministry of Education in the development of the Traffic Safety Education component of the Personal Development Framework.
- . WA, between the Child Accident Prevention Foundation and
  - the Police Department Neighbourhood Watch Programme, in respect of lectures to local groups;
  - the Red Cross, in respect of the Infant Capsule Hire Programme;
  - the St. John's Ambulance Association, in the sharing of display materials; and
  - Bike-West, through an Intervention committee.

While these projects represent worthwhile activities, the data suggest that joint ventures do not occur to any great extent.

# (vii) Reasons for Non-Involvement in Joint Projects (Item 14)

The reason given by respondents for non-involvement in joint projects emphasized the constraints of time and resources. Variously, the perspectives of individuals were, for:

- . NSW, absence of appropriate structures and difficulty in meeting responsibilities given current resource allocations.
- the NT, lack of requests.

- . QLD, lack of time and other resources, and the low priority given to road safety education in schools.
- . SA, other road safety agencies perceive the Police Department as dominating the area.
- . VIC, none cited.
- . WA, lack of time, money and other resources.

While these reasons for non-involvement in joint projects may be valid, in that they represent the perspectives of senior personnel, they also infer some degree of isolation between respective organisations and agencies.

# (viii) Major Priorities (Items 17-18)

The short and long term priorities assigned to road safety education by senior personnel in the various States and Territories serve to illustrate current directions. In summary, Table 3.7 highlights these priorities and the reasons cited for them.

Table 3.7

Major Priorities in Road Safety Education

State/ Territory	SHORT TERM	LONG TERM	REASONS
АСТ	Targetting of the 10-16 year age group.	-	Most 'at risk' group.
NSW	To assist schools to identify needs & develop integrated programmes.	To target 'at risk' groups	The need for more effective programmes.
	Involvement of parents.	Development of positive attitudes.	The need for parents to accept responsibility.
	Improvement of (instructional materials (To raise teacher (awareness. (	Increase involvement of teachers.	

# Table 3.7 (cont.) Major Priorities in Road Safety Education

State/ Territory	SHORT TERM	LONG TERM	REASONS
NT	Curriculum integration K-12.	More efficient, on-going instruction.	Currently, road safety education is a piecemeal activity in schools.
	To raise teacher	More effective	Reduce teacher apathy.
	awareness.	programmes/instruction.	Make road safety a whole-
	Increasing priority of Road Safety education in schools.	Emphases on attitude/behaviour changes.	of-school activity.
QLD	To make road safety education available to all children.	To treat road safety education as a school-community responsibility.	Sound, on-going road safety education is the key to reduction in the road toll.
SA	To increase co-operation/ co-ordination between agencies.	To broaden approach to urban/rural situations.	To extend road safety education across the while community.
	To increase impact of road safety education in schools.	To integrate road safety education across the K-12 curriculum.	To avoid current frag- mentation/piecemeal approaches.
	To improve resources and evaluation of programme outcomes.	Long term monitoring of efficiency and effectiveness.	To justify and target use of finite resources.
TAS	To integrate road safety education across the K-12 curriculum.	To achieve a structured co- ordinated approach to road safety education.  To increase the impact of road safety education in schools.	( The need for ( efficient and ( effective road ( safety education. (
VIC	To extend road safety education in primary and secondary schools.	To achieve curriculum integration.	The need to maximise impact of road safety education.
	To increase levels of teacher development.	To make road safety education available to all children.	The need to reduce teacher apathy.
WA	To integrate road safety education across the K-12 curriculum.	To maximise impact of road safety education programmes in schools.	Need to use finite resources efficiently and effectively.
	To induct more primary and secondary school teachers.	To make road safety education available to all children in schools.	Need to maximise impact of road safety education.

These priorities, and the reasons given for them suggest the logical and practical directions currently being assigned to road safety education in schools. The similarities between States and Territories reflect the high levels of consistency that exists both in goals and intent.

# (xi) Major Problems Items 19-22)

There were very high levels of similarity among respondents' views about the major problems confronting road safety education in schools. In order of frequency of citation, these included:

- . lack of time devoted in schools; curriculum competition;
- lack of principal/teacher motivation, high levels of apathy, absence of formal policies;
- . lack of finance, personnel and other resources;
- low priority given to road safety by the community, lack of recognition/awareness;
- . negative attitudes and peer pressures among children;
- . competing demands upon organisations and agencies, low levels of co-ordination.

Respondents were somewhat pessimistic in their assessments of the degree to which they had control of these problems. Typical comments included:

- . "none" "very little" (NSW, NT, QLD, TAS, VIC, WA).
- . "they are largely beyond our control" "limited" (NSW, VIC, WA).
- . "we can only keep trying" (NSW, QLD, VIC).
- . "the control must come from political levels" (NSW, SA, WA).
- . "the problems can only be resolved by Education Departments and schools" (NT, SA, WA).
- . "the answer is in more resources" (QLD, SA).

A small number of respondents, however, expressed more optimistic perspectives:

- "the problems can be overcome by better co-ordination and planning" (NSW).
- . "encourage school-level programmes" (NSW).
- . "ensure high quality instruction" (NT).
- . "continue to work towards goals" (SA).

Overall, though, respondents tended to a majority view that they had little control over the problems encountered. Given that these respondents were categorized as Policy Directors and Senior Administrators it can only be inferred that they were indicating that the resolution of these problems could be undertaken at higher levels within Government Departments or by Governments themselves.

# 3.4 Consultants and Curriculum Developers

The perspectives of Consultants and Curriculum developers are represented by the responses of 44 individuals to questionnaire items. Table 3.8 shows the respective return rates which, in aggregate was 60.3 percent.

Table 3.8

Return Levels for Consultants and Curriculum Developers

STATE/TERRITORY	REQUESTS (N)	RESPONSES (N)	% RETURN
ACT	7	4	57.3
NSW	13	8	61.5
NT	1	1	100.0
QLD	3	1	33.3
SA	2	1	50.0
TAS	13	12	92.3
VIC	19	15	78.9
WA	15	0	0.0
TOTAL	73	44	60.3

The questionnaire sent to consultants and curriculum developers comprised 32 items grouped into two categories: biographical details; and activities, responsibilities and issues. Table 3.9 indicates the parent organisations of respondents.

# (a) Biographical Information

#### (i) Positions (Item 1)

Table 3.9 illustrates the parent organisations of the 44 individuals who responded to the survey. Of these only 10 were members of Education Departments (NSW = 7; QLD = 1; TAS = 2).

Table 3.9
Respondents' Employing Organisations

STATE/ TERRITORY	No. of RESPONDENTS	ORGANISATIONS
ACT	4	ACT Administration; School Bus Services; Catholic Education Office
NSW	8	Education Department (Regional Consultants); Road Safety Bureau
NT	1	Police Department (School-based police officer)
QLD	1	Education Department (Regional Projects Officer)
SA	1	Road Safety Division (Project Officer)
TAS	12	Education Department; Division of Road Safety
VIC	15	Road Traffic Authority
WA	-	

In this regard, therefore, readers should be cautious about interpreting the perspectives portrayed in this part of the report as ones relating to Education Departments.

#### (ii) Motivation (Item 2)

Respondents cited a variety of factors that had caused them to be in their current positions. These were:

- . General interest in teaching children/challenge (N = 25).
- Interest in reduction of road toll (N = 8).
- . Career development (N = 4).
- Professional interest in curriculum development (N = 2).
- Desire to influence "the system" (N = 2).
- . Opportunities for research (N = 1).
- . Job satisfaction (N = 1).
- . Assigned to duties (N = 1).

These data suggest that the vast majority of individuals involved with road safety education as consultants and curriculum developers are motivated by altruistic factors, including a conern for the welfare of children.

#### (ii) Length of Time in Position (Item 3)

Table 3.10 indicates the times that respondents have spent in their current positions.

Table 3.10

Length of Time in Position

	TIME IN POSITION (Years)										
STATE/TERRITORY	<1	1-3	4-6	7-9	>10	No. Response					
ACT	1	2	-	1	-	-					
NSW	3	3	1	1	_	-					
NT	-	-	1	-	-	-					
QLD	-	1	-	-	-	-					
SA	-	-	-	-	1	-					
TAS	1	1	3	-	6	1					
VIC	5	8	2	-	-	-					
TOTAL	10	15	7	2	7	1					

These data show that 26 (59%) of respondents have occupied their positions for three years or less, while nine (20%) have served for ten years or more.

# (iv) Levels and Areas of Operation (Item 4)

In response to the item regarding level and area of operation, respondents revealed that their levels and areas of operation involved both primary and secondary schools.

- . ACT K-12 (integrated) N = 1; Primary schools (integrated) N = 3
- . NSW K-7 N = 7; No school contact (Road Safety Curriculum development) N = 1
- . NT Territory wide, K-12 (Road Safety, drug, alcohol education) N = 1
- . QLD Materials supplied only N = 1
- . SA K-7 (Road Safety education) N = 1
- . TAS K-12 (integrated) N = 10; (H.Ed/P.Ed) N = 2
- . VIC Secondary (integrated) N = 5; k-7 (integrated) N = 10

Although a majority of respondents claimed to be involved with curriculum development and consultancy in an integrated way, their comments did not indicate the level to which this involved road safety education.

# (v) The Nature of Duties

Table 3.11 highlights the fact that the nature of the majority of repondents' duties associated with road safety education involved direct contact with schools in activities related to courses, lectures and workshops. In these regards, the activities encompassed both teacher development and direct student instruction.

Table 3.11

Duties of Consultants and Curriculum Developers

STATE/TERRITORY										
DUTY	ACT	NSW	NT	QLD	SA	TAS	VIC	Total		
Project Management	1	-	-	-	-	-	-	1		
School-level contacts, courses, lectures, workshops	3	7	1	-	-	12	13	36		
Research	-	1	-	-	-	-	-	1		
Curriculum Development (trails, evaluation)	-	-	_	-	1	-	2	3		
Other	-	-	_	1	-	_	_	1		

Significantly, only one person was involved with project management and three with actual curriculum development.

#### (vi) The Time Allocated to Duties (Item 6)

The nature of respondents' duties may be brought into perspective by their estimates of time spent on various activities. Table 3.12 shows these estimates in respect of planning/development, visiting schools, providing workshops and other duties (eg. administration, committees).

Table 3.12
Time Spent on Activities

			ACTIV	'ITY (% TI	ME)			
State/	PLANI	NING/	VISI	ΓING	WORKS	SHODS	OT	HER
Territory	DEVELO	PMENT	SCHO	OOLS	WORK	oriors	017	TEK
	% TIME	N	% TIME	N	% TIME	N	% TIME	N
ACT	10	2	Minimal	1	-	-	5	2
(N=4)	15	1	20	1	-	-	10	1
	50	1	30	1	-	-	20	1
	90	_	60	1	-	-	-	-
NSW	None	2	None	1	None	3	None	1
(N=8)	10	4	20	1	10	2	10	4
	25	2	50	5	20	3	20-25	3
		-	70	1	-	-	-	-
NT								
(N=1)	30	1	50	1	5	1	15	1
L								
QLD		_						
(N=1)	None	1	10	1	None	1	5	1
SA	90	1	10	1	None	1	None	1
(N = 1)								
	<10	9	<10	1	None	9	None	3
	10-20	3	20	2	<10	1	5	1
TAS	-	-	40	1	20	1	15	4
(N = 12)	-	-	50	1	40	1	20	3
	-	-	80	4	-	-	55	1
		-	90+	3	-	-	-	-
	None	3	None	2	None	4	None	5
VIC	<10	2	<10	3	20	2	<10	3
(N = 15)	20	5	20	1	30	5	20	2
(11 – 13)	30	3	30	6	40	1	30	4
	40	1	50	2	50	3	40	1
	100	1	60	1	-		-	

Essentially, these data show that, across States and Territories:

Only four respondents claimed to spend 50 percent or more of their time on planning and development, with two of these spending 90 and 100 percent respectively on the tasks. A majority of this group, some 75 percent (N = 33), indicated that they spent less than one quarter of their time on planning and development.

- A total of 20 individuals said that they spent half or more of their time visiting schools. Of the remainder, some 16 claimed to spend 20 percent or less of their time on this activity.
- . While 24 respondents indicated that they provided and/or organised workshops, only three were involved so for half of their time. Of the remainder, 10 said that these activities occupied one-fifth or less of their time.
- . In total, 16 individuals claimed to spend 20 percent or more of their time on other activities such as administration and committee/liaison meetings. Only 10 respondents indicated that they were free of these duties.

#### (vii) Special Orientation/Induction Training (Item 8)

Respondents cited a variety of orientations and induction training and these are shown in Table 3.13.

Table 3.13
Orientation - Induction Training

STATE/TERRITORY (No.)									
ORIENTATION/ INDUCTION TRAINING	ACT	NSW	NT	QLD	SA	TAS	VIC	Total	
None	2	2	-	1	1	-		6	
1 week (formal)	1	-	-	-	-	-	13	14	
Academic/Curriculum	1	-	-	-	-	-	-	1	
Residential Workshops									
(Consultancy training)	-	6	-	-	-	-	_	6	
Police Training	-	-	1	-	-	6	-	7	
Motor Vehicle									
(Driver Instruction)	-	-	-	-	-	4	-	4	
Health Education	-	-	-	-	-	2	2	4	

The data revealed that only a small proportion of respondents (18%, N = 8) had received no preparation for their jobs. A majority of respondents from Victoria (N = 13) described their orientation/induction as a "formal one week course" while six individuals from New South Wales described their induction as comprising a series of "residential workshops". Others cited police training (Tasmania, N = 6) and Health Education (Tasmania, N = 2 and Victoria, N = 2) as their special orientations to the job. Significantly, only one respondent claimed to have an academic-curriculum background.

# (b) Activities, Responsibilities and Issues

#### (i) Productions, Trials and Evaluations (Items 9 and 10)

Responses to the questionnaire items on materials produced by individuals' organisations were inconclusive. In view of the extensive and detailed review of curriculum materials undertaken during this evaluation the evaluators deemed it inappropriate to cite the questionnaire data. However, responses to the question about trials and evaluations of materials were most revealing, In total, the data indicated marked deficits in these areas. By State and Territory, the situation indicated the following:

. ACT:  $\underline{\text{Trials}}$  - None (N = 4)

Evaluations - None (N = 4)

NSW: Trials - In progress - unspecified (N = 2)

- None (N=6)

Evaluations - In progress - unspecified (N = 2)

- None  $(N \approx 6)$ 

NT: Trials - Project Dare - 4 Schools - 1989 ( (N = 1)

<u>Evaluations</u> - None cited (

. QLD:  $\frac{\text{Trials}}{\text{Constant}}$  - None cited (N = 1)

<u>Evaluations</u> - None cited.

SA: Trials - 1. Kids and Traffic - 1987

2. Cycle Safe (30 schools) (N = 1)

Evaluation - None cited

Evaluations - Bike Ed

- Science and the Road

These data suggest a situation in respect of road safety education wherein testing of curriculum materials is at a low level and evaluation of their use and impact virtually non-existent.

- Roadswork

# (ii) Personal Involvement in Curriculum Development (Item 11)

Table 3.14 lists individuals' involvement in the development of road safety curriculum materials.

Table 3.14

Recent Involvement in Curriculum Development

STATE/TERRITORY (No.)										
NATURE OF CURRICULUM MATERIALS	ACT	NSW	NT	QLD	SA	TAS	VIC	Total		
None	2	4	1	1	-	10	8	26		
Driver Education	1	-	-	-	-	2	-	3		
Bike Education	1	1	-	_	-	-	1	3		
Cycling for Sport	-	1	_	-	-	-	-	1		
Bike Licence System	-	1	-	-	-	-	-			
Road Safety (k-7)	-	-	-	-	1	-	2	3		
Teacher Development	-	-	-	_	-	-	1	1		
Policy Statements	-	1	-	-	-	-	-	1		
Promotional	-	-	-	-	-	-	2	2		
Special Education	-	-	_	_			1	1		

These data highlight the fact that almost two thirds of respondents had not been involved in any recent development of road safety curriculum materials. Those who claimed recent involvement cited a variety of curriculum materials developed:

- . ACT Bike Ed (Pre-school and High School packages).
- . NSW NSW Bike Ed Manual; Cycling for Sport.
- . SA Cycle Safe; Road Safety (K-7); Bike Helmet Resource Kit.
- . TAS Teenagers, Alcohol and Road Safety; Defensive Driving.
- . VIC Streets Ahead; Starting Out Safely; Legal Studies Pack.

#### (iii) Curriculum Materials Promoted in Schools (Item 12)

Responses to this item precluded any detailed listing of the curriculum materials promoted in schools. However, the data did show some preferences for "own State's" materials in five instances; "other States" materials in four and FORS materials in three States/Territories.

Table 3.15

Curriculum Materials Promoted in Schools

STATE/TERRITORY (No.)									
NATURE OF CURRICULUM MATERIALS	ACT	NSW	NT	QLD	SA	TAS	VIC	Total	
None	-	1	1	-	-	-	_	2	
Own State's materials (unspecif.)	1	7	_	2	2	-	4	16	
Other states' materials (unspecif)	2	1	_	-	-	6	2	11	
FORS materials	1	4	-	-	-	5	-	10	
Bike Helmet Resource Kit (SA)	-	-	1	-	-	-	-	1	
Ride for Your Life (SA)	-	1	-	-	-	_	_	1	
Out and About	-	-	_	-	-	_	-	1	
Road Work	-	-	1	_	_	-	-	1	

# (iv) Percentage Use of Materials by Teachers (Item 13)

Responses to this item suggested that there was a definite lack of knowledge among respondents about the levels of use by teachers of various road safety curriculum materials. Patterns of response by State and Territory were:

```
Unknown (N = 2); No response (N = 2).
ACT
NSW
               Unknown (N = 5); Street Sense - 20\% (N = 1);
               Out and About - 40\% (N = 1);
               Young Driver Education Kit - 10\% (N = 1);
               Bus Safety Programmes - 80-100\% (N = 1).
NT
               Unknown (N = 1).
QLD
               Unknown (N = 1).
SA
               Out and About - "widely used"; Roadswork - 50% (N = 1).
               Out and About - 56\%, 61\%, 39\% (N = 3);
TAS
               Bike Ed - 8\% (N = 2); Driver Ed - 47\% (N = 10).
               Bike Ed (Primary) 30\%, 40\%, 60\% (N=3).
VIC
               Roadswork - 50\% (N= 1); Streets Ahead - 30\% (N = 1).
```

Almost half of the consultants and curriculum developers indicated that they did not know the degree to which various road safety materials were used by teachers. Among the remainder, individuals from single States or Territories gave widely different estimates of the levels of use of particular packages. Within the limits of these data, the evaluators must conclude that:

- there is no widespread knowledge about levels of use of various road safety curriculum materials among consultants and curriculum developers;
- the estimated levels of use of road safety curriculum materials by teachers in primary schools is at best 50% and probably much lower; and
- usage of these materials in secondary schools, largely, is unknown.

In terms of programme efficiency and effectiveness, these deficits in knowledge about levels of use of material may be regarded as serious.

### (v) Curriculum Priorities (Item 14)

In total, three-quarters (N = 33) of the respondent group indicated that they had no specific priorities in respect of the development and production of curriculum materials. For the remainder, the situations were as follows:

- . ACT All areas of road safety (N = 1).
- . NSW Health/Physical Education programmes K-12 (N=1).
- . SA All areas of road safety K-12; and Bike Ed. (N = 1).
- . TAS All areas of road safety K-12; Bike Ed, Driver Ed. (N = 1).

  School Bus Safety (N = 1).
- VIC Appropriateness, relevance, attractive presentations, varied student activities (N = 2); pre-school, appropriate language
   (N = 2); school policies, integrated units, cycle safety (N = 2).

Apart from a small number of individuals in Victoria, responses to this item were not specific. The evaluators conclude that, at least for the participants concerned, priorities in the development and production of road safety curriculum materials are vague - or perhaps at low levels.

### (vi) Contacts with Specialist Agencies (Items 15, 16 and 18)

These items were intended to establish:

- (a) those agencies typically contacted by this group of respondents in regard to advice/encouragement; training and finance (Item 15);
- (b) those agencies which contact the consultants and curriculum developers (Item 16); and
- (c) respondents' perspectives of their preferences for contacts (Item 18).

The pattern of response on these dimensions are shown below by State and Territory.

### Sources of Advice - Encouragement

- . ACT Other states/Territories (N = 2); Internal groups (N = 2);
- NSW Police Dept/RTA (N = 4); Education Dept (N = 4).
   In addition: Community groups (N = 1); Other Consultants (N=1); informal sources (N = 1).
- . NT None cited (N = 1).
- . QLD Internal group and local authorities (N = 1).
- . SA Education Dept, State Bicycle Committee (N = 1).
- TAS Education Dept (N = 2); Main Roads Dept (N = 3);
   None cited (N = 7).
- VIC Internal groups (N = 7); Schools (N = 3);
   Ministry of Education (N = 2);
   State Bicycle Committee (N = 1); Community bodies (N = 1).

Given the limitations of data for three States, these patterns suggest a degree of isolation among curriculum consultants in respect of sources of advice and encouragement.

### Sources of Training

- . ACT None cited (N = 2); internal (N = 1);
  - General public service courses (N = 1).
- . NSW Education Dept (N = 5); RTA (N = 1);
  - Driver Education Centre (N = 1); None cited (N = 1).
- . NT None cited (N = 1).
- . QLD None cited (N = 1).

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. SA - None cited (N = 1).
```

- . TAS None cited (N = 10); Self Training (N = 1);

  Department of Road Safety (N = 1).
- VIC Police/RTA (N = 11); Ministry of Education (N = 1);
   External groups (N = 2); Bicycle Education Group (N = 1).

Perhaps with the exception of Victoria, training for road safety curriculum consultants and developers would appear to exist at relatively low levels in some instance and be non-existent in others.

#### Sources of Finance

- . ACT None (N = 3); internal (N = 1).
- . NSW Education Department (N = 5);

  RTA/State Bicycle Committee/Sponsorship (N = 3).
- . NT Police Department/Community Support (N = 1).
- . QLD None cited (N = 1).
- . SA None cited (N = 1).
- . TAS None cited (N = 12).
- VIC RTA (N = 6); Transport Accident Commission (N = 1);
   State Bicycle Committee (N = 1); None cited (N = 7).

The data provided by respondents on this dimension, to a large extent, were inconclusive. Apart from an expectation that some sources of finance might be from the "public purse", the number of individuals who failed to respond or said "none" could mean that either no finance was available or that they did not know.

### Contacts Made by Organisations and Groups

Again, the nature of response patterns to this item highlighted both similarities and differences between the respective groups:

- . ACT Schools, Community groups (N = 3);

  Education Department, Community groups, FORS (N = 1).
- NSW Schools (N = 5); Other Consultants (N = 2);

  Police Department (N = 1).
- . NT None cited (N = 1).
- . QLD Schools/Local authorities (N = 1).
- . SA Police Department, Education Department, State Bicycle

  Committee (N = 1).
- TAS None cited (N = 6); Schools (N = 2);

  Community groups (N = 2); Other Government agencies
  (N = 1); private sector agencies (N = 1).
- VIC Schools (N = 6); Community groups (N = 6);
   Police Department (N = 1); Tertiary Institutions (N = 2).

While many respondents claimed that they were contacted by several external agencies and groups, the data suggest broadly that these were predictable in terms of areas of interest. However, that data also suggested that a number of curriculum consultants and developers had extremely limited external contacts while others may have none.

### **Perspectives of Ideal Contacts**

Table 3.16 lists respondents' views about "ideal contacts" for advice/encouragement, training and finance.

Table 3.16
Perspectives of Ideal Contacts

	CC	NTACT FOR	
STATE/ TERRITORY	ADVICE	TRAINING	FINANCE
ACT	Police Dept (N = 1) Colleagues (N = 1) Schools (N = 1)	Police Dept (N = 1) Schools (N = 2) None (N = 3)	None cited (N = 5) Sponsorship (N = 1)
NSW	Inter-state bodies (N = 4) FORS (N = 1) RTA (N = 1) Colleagues (N = 1) Intra-state bodies (N = 1)	None cited (N = 7) Education Dept (N = 1)	None cited (N = 7) Education Dept (N = 1)
NT	None cited (N = 1)	None cited (N = 1)	None cited (N = 1)
QLD	Curriculum agencies (N = 1)	Driver education (N = 1)	None cited (N = 1)
SA	RTA; Victorian & NSW Bike Ed. Committees (N = 1)	None cited (N = 1)	$\overline{FORS}$ (N = 1)
TAS	None cited (N = 8) Education Dept (N = 2) RTA (N = 1), Inter-state bodies (N = 1)	None cited (N = 9) Police Dept (N = 1) Overseas bodies (N = 1) Commonwealth Dept of Teaching/Training (N = 1)	None cited (N = 1)
VIC	None cited (N = 12) Vic. Curric.Ass. Board(N = 1) Major interest groups (N = 1)	None cited (N = 1)	None cited (N = 1)

Generally, the paucity of data provided by respondents to this question precluded reasonable inferences and comment.

# (vii) Keeping Up-to-Date (Item 17)

This item was intended to establish the means by which consultants and curriculum developers keep abreast of their fields. Table 3.17 illustrates the means by which this is undertaken.

Table 3.17
Keeping Abreast of Developments

	STATE/T	ERRITOR	Y (Frequ	ency cite	d)			
MEANS	ACT	NSW	NT	QLD	SA	TAS	VIC	Total
Internal meetings/contacts	1	2	-	_	-	2	10	15
Journals/periodicals	2	2	-	_	-	-	3	7
Media	1	1	-	-	-	2	4	8
Formal Conferences/meetings	-	3	-	1	1	-	2	7
Intra-state meetings	~	1	1	_	1	2	-	5
Inter-state materials	-	-	-	1	1	-	2	4
Federal Office of Road Safety	-	-	-	-	-	-	2	2
Overseas visits/information	_	-	-	-		1	1	2
Other consultants	_	-	-	_	-	1	-	1
None cited	2	-	1		-	2	-	5

These data show that the most frequently used sources in this regard appear to be: internal meetings and contacts; journals and periodicals; conferences and the media.

### (viii) Strategies Used with Teachers (Items 19 and 20)

These two questions were designed to establish:

- (a) the strategies/methods that are used in getting teachers to teach road safety courses; and
- (b) those methods that consultants and curriculum developers perceive to be most effective.

### Strategies Used

There was a great deal of consistency across States and Territories in the strategies adopted to persuade teachers to adopt road safety education. Table 3.18 indicates the frequency with which respective approaches were cited.

Table 3.18
Strategies Used with Teachers

	STATE/TERRITORY (Frequency of Citation)											
STRATEGY	ACT	NSW	NT	QLD	SA	TAS	VIC	Total				
Direct contact	3	4	-	-	1	6	12	26				
Provision of materials	1	3	-	1	-	7	7	19				
In-service courses	-	3	_	-	-	2	6	11				
Fllow-up support	-	-	-	-	-	1	7	8				
Demonstration lessons	-	5	_	-	-	-	-	5				
Service on request	-	-	1	1	-	-	-	2				
Promotional activities	-	-		-	4	1	-	1				

As these patterns illustrate, the most frequently cited strategies used with teachers are direct contacts and the provision of curriculum and other resource materials.

The Most Effective Strategies with Teachers

As with the previous item, there was a great deal of consistency in respondents' perspectives about the most effective strategies for use with teachers. Table 3.19 lists these in order of frequency of citation.

These data are explicit in highlighting direct contact with teachers, the provision of easy to use materials, professional development courses and ongoing classroom/ implementation support as those which respondents perceive to be most effective.

Table 3.19
Most Effective Strategies

STAT	E/TERR	ITORY (	Frequenc	y of Cita	tion)			
STRATEGY	ACT	NSW	NT	QLD	SA	TAS	VIC	Total
Provision of easy-to-use materials	1	2	1	1	1	4	6	15
Direct contact	3	<b>-</b>	1	-	1	4	6	14
Professional development courses	-	3	-	-	-	1	7	11
On-going classroom support	_	-	_	_	-	1	6	7 .
Staff meetings	-	5	-	-	<del>-</del>	-	-	5
Make subject interesting	-	-	-	-	-	3	-	3
Demonstration lessons	_	2	-	-	-	-	-	2
Use of Statistical information								
on road accidents	-	_	-	1	-	-	-	1
Curriculum integration	-	1	-	-		-	_	1
Peer recommendation	-		-	-	-	1		1

# (ix) Role constraints (Item 21)

Respondents' views about the factors that constrain their work as consultants and curriculum developers also showed high levels of agreement across States and Territories. Table 3.20 illustrates this tendency.

Table 3.20
Role Constraints

STAT	E/TERR	TORY (1	Frequenc	y of Citat	ion)		<del></del>	-
CONSTRAINT	ACT	NSW	NT	QLD	SA	TAS	VIC	Total
Lack of finance/resources/materials	1	2	1	-	1	2	2	15
Lack of time for direct contact	1	6	-	-	-	3	3	10
Curriculum competition	2	-	-	_	_	-	-	7
Organisational factors	-	- ,	-	_	_	2	2	7
Gaining access to schools	-	2	-	-	-	-	-	6
Teacher apathy	-	2	-	-	_	2	2	5
Funding uncertainties	-	2	-	-	-	_	-	2
Lack of transport	-	1	-	- 	-	<u> </u>	-	1
Lack of priority of Road Safety Ed.	_	-	-		,	_	_	1

The most frequently cited constraints were lack of finance, resources and time for direct contact with teachers and to a lesser extent the competition for time within the curriculum that limits attempts by consultants and curriculum developers to introduce road safety education.

### (x) Role Effectiveness (Item 22)

Respondents' judgements about their own role effectiveness showed some ambivalence across the group. Table 3.21 shows the distribution of ratings across a four point scale.

Table 3.21
Role Effectiveness

STATE/TERRITORY (N=44)											
EFFECTIVENESS RATING ACT NSW NT QLD SA TAS VIC TOTAL(N)											
Unknown	-	3	-	_	1	4	12	20			
Effective	3	5	-	_	-	6	1	15			
Very effective	1	-	1	-	-	2	2	6			
Ineffective	-	_	-	1	-	-	-	1			

The data are stark in their indication that while just over half of the respondents considered themselves to be either very effective or just effective in their roles, almost all of the remainder (46%) claimed no knowledge about their effectiveness.

### (xi) Strategies Used in Gaining the Support of School Principals (Items 23 and 24)

These two items intended to generate respondents' views about:

- (a) the most effective strategies; and
- (b) the least effective strategiesin gaining the support of principals for road safety education.

Table 3.22

The Most Effective Strategies used with School Principals

ST	ATE/I	ERRITO	RY (Fr	equency	of Citati	on)		_
STRATEGY	ACT	NSW	NT	QLD	SA	TAS	VIC	Total (F)
Direct contact	3	2	-	-	-	9	9	23
Provision of free easy-to-use materials	1	2	1	-	-	1	2	7
Promotion of student needs	-	1	-	1	1	-	3	6
benefits	-	1	-	-	-	-	3	4
Provision of teacher development/support	-	2	_	-	-	-	-	2
Knowledge of curriculum								

As these data show in Table 3.22, the most effective strategy is said to be direct contact with school principals.

Table 3.23

The Least Effective Strategies used with School Principals

STATE	STATE/TERRITORY (Frequency of Citation)									
STRATEGY	АСТ	NSW	NT	QLD	SA	TAS	VIC	Total (F)		
Indirect contacts	1	2	-	-	1	1	4	10		
"Hard sell" approaches	-	1	-	1	-	1	5	8		
Lack of back-up support	2	-	-	-	-	-	1	3		
Provision of hard-to-use materials	1	-	-	-	-	1	-	2		
Group conferences/meetings	-	1	-	-	-	-	-	1		
Failure to consult	-	-	1	-	-	-	-	1		
Unreliability	_	-	-	-	-	-	1	1		
Insensitivity to local conditions	-	-	-	_	-	-	1	1		
Using negative statistics	<u> </u>	_	-	-	-	_	1	1		

The two most frequently cited "least effective strategies" with school principals were indirect contacts and "hard sell" approaches.

# (xii) Major Problems with Teachers (Items 25 and 26)

In these questions, respondents were asked to express their views about:

- (a) the major problems in getting teachers to teach road safety courses; and
- (b) ways in which these problems might be overcome.

Table 3.24 below shows the frequencies with which particular problems were cited by respondents.

Table 3.24
Major Problems with Teachers

STATE/T	ERRIT	ORY (F	requen	cy of Cit	ation)			
LEVEL OF SCHOOLING/PROBLEM	ACT	NSW	NT	QLD	SA	TAS	VIC	Total (F)
Pre-School:								
Time constraints for teachers	1	-	-	_	1	2	-	4
Low priority/apathy	-	3	-	-	-	-	1	4
Lack of appropriate materials	1	-	-	-	-	1	1	3
Curriculum competition	-	1	-	-	1	_	-	2
Lack of awareness	-	-	-	-	-	-	1	1
Primary school:								
Curriculum competition	4	5	-	-	1	4	12	26
Lack of confidence	-	-	-	_	_	-	6	6
Lack of available/easy-to-use materials	1	1	-	1	-	-	2	5
Low priority/apathy	1	1	-	1	-	1	1	5
Time constraints for teachers	-	3	-	-	1	-	-	4
Dependence on external experts	-	-	-	-	_	1	ı	1
Secondary school:								
Curriculum competition	2	6	_	_	1	7	3	19
Low priority/apathy	1	3	_	-	_	1	4	9
Teacher specialisation	4	2	-	1	_	-	-	7
Teacher workload	-	5	_	-	1	_	-	6
Dependence on external experts	_	-	-	-	-	1	-	1
Access to principals	-	-	_	_	- ;	1	<del>-</del>	1
Availability of approp. resources	-	-	-	-	-	1	-	1

Although only a small number of individuals chose to comment about problems at the pre-school level, majority views were evident about primary and secondary schools. For each case, these identified curriculum competition as the major problem in persuading teachers at both levels to include road safety education in their courses.

While respondents suggested self-evident solutions to their particular lists of problems, such as "more resources", "more teacher development" and "increased parent involvement", many were not so forthcoming about the major issue of curriculum competition. Those who did propose solutions did so in terms of compulsion to include road safety education in the curriculum and mandatory requirements for teachers to address the topic. A small number of others suggested "awareness raising" and "undertaking the activity outside of school" as possibilities.

### (xiii) Teachers' Priorities (Items 27 and 28)

In these items, respondents were asked to list what they perceived to be the high and low priorities of teachers in respect of road safety education. Tables 3.25 and 3.26 illustrate these perceptions.

Table 3.25
High Priorities for Teachers

ST	ATE/TE	RRITOR	Y (Free	quency c	of Citati	ion)		
HIGH PRIORITY AREA	ACT	NSW	NT	QLD	SA	TAS	VIC	Total (F)
Pedestrian/bike safety	2	4	1	1	-	11	8	27
Easy-to-use materials	1	3	-	-	1	-	5	10
Driver education	-	-	-	-	-	4	1	5
Attractive instructional materials	-	3	-	-	-	-	-	3
Relevant topics for students	1	-	-	-	-	-	-	1
Bus safety	-	-	-	1	-	-	-	1

Table 3.26 Low Priorities for Teachers

STATE/TH	ERRITO	ORY (F	requenc	y of Cita	ation)			
LOW PRIORITY AREA	ACT	NSW	NT	QLD	SA	TAS	VIC	Total (F)
Passenger safety	-	3	1	1	1	1	2	9
Driver education	-	-	-	1	1	-	4	6
Activities requiring preparation and								
planning	_	-	-	-	_	-	6	6
Bicycle safety	-	2	1	-	1	1	-	5
Practical road safety ed. activities	_	1	-	- ]	1	1	1	4
Pedestrian safety	-	-	1	-	1	_	2	4
Bus safety	-	1	-	-	1	1	-	3
Activities beyond expertise	1	-	-	-	-	-	-	1
Activities lacking in interest for students	1	_	_	-	-	_	-	1
Bicycle maintenance	-	_	-	-	_		1	1

Respondents considered that teachers' high priorities in road safety education were pedestrian and bike safety and activities that were accompanied by easy-to-use materials and teaching techniques. From the opposite viewpoint, respondents' ratings of the low priorities for teachers included passenger safety, driver education and activities that required time for planning and preparation.

# (xiv) Use of the Media in Promotion of Road Safety Education (Item 29)

More than two-thirds of respondents (N = 30, 68%) claimed that they used the media to promote road safety education. The nature and extent of this usage is shown in Table 3.27.

Table 3.27
Use of the Media

ST	STATE/TERRITORY (Frequency of Citation)										
MEDIUM	ACT	NSW	NT	QLD	SA	TAS	VIC	Total (F)			
Major newspapers	4	5	-	-	1	4	11	25			
Radio/TV	4	4	1	1	1	4	6	21			
Local newspapers	_	5	-	-	-	-	2	7			
Newsletters, posters, pamphlets	3	-	-	-	-	-	2	5			
Journals, magazines	-	-	-	-	-	-	3	3			
Public displays	-	-	-	-	-	1	-	1			

The data suggest that major (daily) newspapers and radio/television are the major promotional vehicles used by this group of respondents.

### (xv) Parent Considerations (Item 30)

Respondents' views about the major points for consideration in working withinvolving parents in road safety education. Their suggestions included:

- Emphasize parents as role models (N = 3);

  focus upon road safety as it relates to their children (N = 1).
- . NSW Emphasize parent as role models (N = 5);
  emphasize awareness raising (N = 4);
  overcome their feelings of incompetence (N = 1).
- . NT Emphasize the cost in terms of child accidents (N = 1).
- . QLD focus upon relevance of local needs/situation (N = 1).
- . SA Emphasize parents as role models, road hazards and limitations for different age groups (N = 1).
- TAS Emphasize parental responsibilities (N = 6);
   emphasize parents as role models (N = 4).

VIC - Emphasize parental responsibilities (N = 15);
 emphasize parents as role models (N = 15);
 emphasize childrens' limitations (N = 5).

# 3.5 Education Officers, Administrators and Coordinators

The perspectives of education officers, programme administrators and coordinators are portrayed by the responses of 31 out of 83 individuals who returned their questionnaires. This represents a return level of 37.3 percent and Table 3.28 illustrates the patterns for States and Territories. The balance included 11 individuals who returned uncompleted questionnaires and 40 who failed to respond.

Table 3.28
Return Levels for Education Officers, Administrators and Coordinators

STATE/TERRITORY	REQUESTS (N)	RESPONSES (N)	% RETURN
АСТ	8	4	50
NSW	13	5	38
NT	2	1	50
QLD	10	5	50
SA	5	0	0
TAS	9	1	11
VIC	18	8	44
WA	18	5	28
Total	83	31	37

### (a) Biographical Information

Table 3.29 shows the employing organisations of respondents.

Table 3.29
Employing Organisations of Respondents

STATE/TERRITORY	ORGANISATIONS
ACT	Schools Authority (N=1); Catholic Education Office (N=1); National Catholic Education Commission (N=1); Police (N=1).
NSW	Ministry of Education (N=2); Catholic Education Office (N=1); Road Traffic Authority (N=1); Advisory Committee on Road Safety Education (N=1).
NT	Education Department (N=1).
QLD	Education Department (N=2); Police Department (N=1); Child Accident Prevention Unit (N=1); Paraquad (N=1).
TAS	Division of Road Safety (N=1).
VIC	Education Department (N=1); Police Department (N=4); Traffic Schools (N=2); Private Bus Industry Association (N=1).
WA	Education Department (N=2); Bike-West (N=1); Police Department (N=2).

### (i) Motivation (Item 2)

Respondents cited a variety of factors which had influenced their involvement in road safety education. The following illustrate the frequency with which respective factors were mentioned.

- . Interest in road safety (N=13)
- Promotion (N=7)
- . Direct appointment/transfer/secondment (N=5)
- . Interest in curriculum development (N=2)
- . Interest in teaching (N=2)
- . Career advancement (N=1)

- . Employment opportunity (N=1)
- . Change of duties (N=1).

These data suggest that, for the majority, their involvement in road safety education resulted from: interest in the area; promotion, or direct appointments, transfers and secondments.

### (ii) Scope of the Positions (Item 3)

Table 3.30 reveals the scope of the positions held by respondents.

Table 3.30
Scope of Positions

STATE (TEDDITODY													
	STATE/TERRITORY												
SCOPE OF POSITION	ACT	NSW	NT	QLD	TAS	VIC	WA	Total (N)					
Instruction of Children	1	-	-	1	-	5	-	7					
Liaison, dissemination of information	1	-	-	1	,	3	-	5					
Road Safety Programme co- ordination	-	4	-	~	-	-	1	5					
Administration/Committee support	-	1	-	~	1	-	1	3					
Subject consultancy	-	-	-	1	-	-	1	2					
Policy formulation	1	-	_	,	-	-	-	1					
School-level facilitation	1	-	-	~	-	-	-	1					
Promotion of Road Safety Programmes	-	-	-	1	-	-	-	1					
Curriculum development	-	-	-	~	-	-	1	1					
Nominal (due to organisational factors)	-	-	1	-	-	-	-	1					
Nominal (due to withdrawal of funding)	-	-	-	~	-	-	-	-					

Although obviously limited by the number of respondents, the data do show that somewhat less than one-quarter of them are involved in direct instruction of children. Almost half of the positions (45%) were said to be "administrative".

### (iii) Time Spent on Road Safety (Item 5)

Another perspective of the scope of individuals' positions may be gained from information provided about the time spent on road safety education (see Table 3.31).

Table 3.31

Time Spent on Road Safety Education

			•	•	1	T)	IME%			_				
State/ Territory	<1	2-5	6-10	11-15	16-20	21-25	26-30	31-50	51-60	61-70	71-80	81-90	91-100	No Resp.
АСТ	2	-	-	~	-	-	1	_	-	-	-	1	- '	-
NSW	-	1	-	-	-	-	-	-	-	-	-	1	3	-
NT	-	-	-	-	-	-	-	-	_	-	-	-	-	1
QLD	-	-	_	-	-	-	-	-	-	-	1	-	2	2
TAS	-	_	-	-	-	-	-	1	-	-	-	-	-	-
VIC	-	2	1	-	1	-	-	1	-	-	-	_	2	1
WA	-	4					_	1	_	-	-	_	-	-
Total	2	7	1	_	1	-	1	3	-	-	1	2	7	4

These data show that only one-third (N=10) of respondents claimed to spend substantial amounts of time on road safety education as part of their duties.

### (iv) Length of Time in the Position (Item 4)

Responses to this item indicate that about two-thirds (N=20) of individuals have occupied their positions for less than three years. Of these, one-third have less than one years experience. If the data are representative of individuals in positions at this level, then the number with substantial experience may be deemed to be low.

Table 3.32
Length of Time in Position

		TIME	E IN POSITIO	N (Years)	· <del></del>	
State/ Territory	<1	1-3	4-6	7-9	>10	No Response
ACT	1	2	-	-	1	_
NSW	2	3	-	-	-	-
NT	-	_	_	_	-	1
QLD	-	2	1	_	-	2
TAS	-	-	1	-	-	_
VIC	1	5	1	-	1	-
WA	1	2	1	1		-
Total	5	14	4	1	1	3

# (v) Relationships within the Organisation (Item 6)

The relationships of respondents to other parts of their organisations is illustrated in Table 3.33.

Table 3.33
Relationships within Organisations

S	STATE/TERRITORY(N)											
RELATIONSHIPS	ACT	NSW	NT	QLD	TAS	VIC	WA	Total (N)				
With internal curriculum groups	1	3	_	1	-	1	2	8				
Directly with schools	-	-	_	1	1	5	1	8				
With other organisational branches/units	3	1	-	1	-	-	-	5				
None	-	1	1	  -	-	-	2	4				
No response	-	-	_	2	_	2	-	4				

These data indicate that about one-quarter of the respondents, in respect of road safety education, deal directly with schools while about half of them have connections either with other curriculum areas (within Education Departments) or branches/units within their employing organisations.

## (vi) Special Interests (Item 7)

The special interests of respondents are displayed in Table 3.34.

Table 3.34

Special Interest in Road Safety Education

STATE	STATE/TERRITORY (Frequency of Citation)											
AREA OF INTEREST	ACT	NSW	NT	QLD	TAS	VIC	WA	Total (F)				
General road safety	1	1	1	-	1	3	2	8				
General child welfare	1	-	-	1	-	-	1	3				
Bicycle safety	-	-	-	-	-	2	1	3				
Promotion of road safety education	2	-	-	-	-	-	-	2				
Resource development	-	-	-	1	-	1	-	2				
Physical/Health Education	_	2	Had	~	-	-	_	2				
Curriculum integration	-	2	-	-	-	-	-	2				
Driver education	-	-	1	_	-	_	-	1				
Bus safety	-	-	-	-	-	1	-	1				
Training of road safety instructors	-	-	-		-	1	-	1				
Increasing school/teacher												
participation		<u>-</u>	-	<u>-</u>	-	-	1	1				

### (vii) Number of Staff (Item 8)

An idea of the number of individuals involved in road safety education may be obtained from responses to the questionnaire item relating to colleagues. Of those who responded to this item, a total of 13 (42%) indicated that they worked alone on road safety education. Respondents who gave information regarding associates revealed that 13 individuals (42%) had either colleagues and/or subordinates working with them on road safety education:

- . **ACT** 3 colleagues (N=1); 4 colleagues (N=1).
- NSW 1 colleague and 10 subordinates (N=1);
   13 subordinates (N=1);
   1 part-time subordinate (N=1).
- . **QLD** 6 subordinates (N=1).
- . VIC 2 colleagues (N=2); 1 colleague plus 2 subordinates (N=1).
- . WA 1 colleague (N=2); 2 colleagues (N=2).

The nature and extent of contributions to road safety education in these regards was not explicit.

### (b) Activities, Responsibilities and Issues

### (i) Productions, Trials and Evaluations (Items 9 and 10)

The nature and extent of materials produced recently by respondents' organisations can be seen from the following list:

- . **ACT** promotional materials (N=1); none (N=3).
- . NSW Road Safety Package for Parents, Kids and Traffice, Street

  Sense, Belt-up, Are You in Control?, Driver Education for

  Parents (N=2); None (N=3).
- . **NT** *Driver Education Package* (N=1).
- . QLD None cited (N=5).
- . TAS Teenagers and Alcohol (N=1).
- . VIC Instructional materials (N=3); promotional materials (N=1); none (N=2).
- . WA Bike it Safe, Safe Cycling in the '90's, Cyclists and the Law

  (N=1); Buckle-up and Win (N=1); none (N=1).

These data suggest that recent productions of curriculum and other materials, generally, are not at high levels, with the exception of NSW and Victoria.

Reports of trials and evaluations of materials were reported at extremely low levels in all but two instances.

Only twelve (39%) individuals reported trials of materials. These included:

ACT - 1988 - Resource Kit (2 schools), Outcomes: "very positive";

Year 7 Living Skills Course (2 schools), Outcomes: "very positive".

1988-1989 - Pre-Licence Driver Course (6 schools)

Outcomes: "unknown".

. NSW - 1988 - Kids and Traffic, Street Sense, Belt-up, Are you in Control?,

Road Safety Package for Parents (N=2); none (N=3).

. QLD - 1989 - Child Safety Video, Cycling - Years, 8, 9 and 10.

1988-1989 - Health Education Syllabus. Outcomes of trials unspecified.

While trials of materials were claimed in two States and one Territory, no respondent reported formal evaluations of road safety materials.

### (ii) Materials Used/Promoted in Schools (Item 11)

Citations of the materials used and/or promoted by some respondents provide an indication of the popularity of particular road safety education curriculum packages in each State and Territory.

- . ACT Out and About (N=1); Kids and Traffic (N=1); Street

  Sense (N=1); Streets Ahead (N=1); Bike Ed II (N=1);

  Young Driver Survival Kit (N=1); Belt-up (N=1); Are

  You in Control? (N=1).
- . NSW Out and About (N=2); Kids and Traffic (N=3); Street

  Sense (N=1).
- QLD Department of Transport Road Safety Guides (N=2);

  Student Driver Education Package (N=1); FORS Road

  Safety Materials (N=2).
- TAS Out and About (N=1); Preventing the Human Collision (N=1).
- . **VIC** Bike Ed (N=2); Streets Ahead (N=2); Roadswork (N=1).
- . WA Out and About (N=1); Bike Ed WA (N=1); Ministry of

  Education Lesson Planning Materials (N=1).

### (iii) <u>Usage of Materials by Teachers (Item 12)</u>

Respondents' estimates of the levels of use of road safety education materials by teachers indicated that, largely, these were unknown by the vast majority of individuals.

- . **ACT** Unknown (N=4).
- . **NSW** Unknown (N=4); *Street Sense* 40% (N=1).
- . NT Unknown (N=1).
- . QLD Unknown (N=3); Student Driver Education estimated 80% of schools (N=1).
- . TAS Student Driver Education estimated 65% of schools (N=1);

  Bike Ed 25% (N=1): Out and About 70% (N=1).
- . VIC Unknown (N=8).
- . WA Unknown (N=4); K-7 Health Education Syllabus-100% (N=1).

### (iv) Keeping Up-to-Date (Item 15)

Table 3.35 lists the methods used by respondents to keep abreast of developments in road safety education.

Table 3.35
Keeping Abreast of Developments

STA	STATE/TERRITORY(Frequency of Citation)											
MEANS	ACT	NSW	NT	QLD	TAS	VIC	WA	Total (N)				
None	2	1	-	3	-	-	2	8				
National Journals/publications	-	1	1	-	1	2	2	7				
Inter-departmental publications	-	-	-	-	-	5	-	5				
State/Territory Rd Safety Council	2	1	-	-	-	-	-	3				
Inter-state organisations	-	1	-	1	-	-	-	2				
Personal contacts	-	_	-	-	1	-	1	2				
Education Department	-	1	-	_	-	-	-	1				
Conferences/meetings	-	-	-	-	-	1	-	1				
Federal Office of Road Safety	-	-	-	1	-	-	-	1				
International Journals/publicns	-	_	-	-	1	-	-	1				
Overseas travel	_	_	-	-	-	1	-	1				

The most frequently cited means of keeping up-to-date on developments in the area were through national journals and other publications - cited by about one-quarter of respondents and inter-departmental publications, cited by five individuals in one state.

One-third of the respondents either failed to list sources or indicated that they had none.

# (v) Strategies Used with Teachers (Items 17 and 18)

Responses to these items indicated the use of a range of strategies with teachers. Given the limitations of the data, "direct contact" and "the provision of teaching materials" were the ones most frequently cited (see Table 3.36).

Table 3.36
Strategies used with Teachers

STA	STATE/TERRITORY(Frequency of Citation)									
STRATEGY	ACT	NSW	NT	QLD	TAS	VIC	WA	Total (N)		
Direct contact		-	-	1	-	4	-	5		
Provision of materials	1	2	-	1	-	1	-	5		
Curriculum integration	-	2	1	-	1	-	-	4		
In-service courses/workshops	-	-	-	1	1	-	1	3		
Follow-up support	1		-	-	-	1	1	3		
Demonstration lessions	2	-	-	-	1	-	- ,	3		
Compulsion (via H.Ed. Syllabus)	-	-	-	1	_	-	1	2		
Newsletters	-	-	-	1	-	-	-	1		
Conferences	-	1	-	_	-	-	-	1		
Community pressure	-	1	-	-	· -	-	<b>-</b> .	1		
Incentives	-	_	-	-	-	-	1	1		

Respondent's perspectives about the most effective strategies for use with teachers are shown in Table 3.36. These data show that "the provision of easy-to-use materials", "teacher inservice courses" and "direct contacts" are considered to be the most effective strategies.

Table 3.37

Most Effective Strategies

STATE	STATE/TERRITORY(Frequency of Citation)										
STRATEGY	ACT	NSW	NT	QLD	TAS	VIC	WA	Total (F)			
Provision of easy-to-use resources	1	1	1	1	-	2	2	8			
In-service courses	_	1	1	1	1	2	-	6			
Direct contact	-	-	-	1	-	4	_	5			
Curriculum integration	1	2	-	-	1	-	-	4			
Practical involvement/demonstration	1	-	-	_	1	-	-	2			
Consultancy support	1	-	-	-	-	-	-	1			
Media publicity/newsletters	-	1	-	1	-	-	-	2			
Compulsion (via. H.Ed Syllabus)	_	-	-	-	-	-	1	1			

# (vi) Strategies Used with Principals (Items 21 and 22)

In responses to these items, individuals provided their perspectives about the most effective strategies for use with school principals in promoting road safety education in schools. Tables 3.38 and 3.39, respectively highlight these strategies.

Table 3.38

Most Effective Strategies with School Principals

STAT	E/TERR	ITORY	(Frequ	ency of	Citation	1)		
STRATEGY	ACT	NSW	NT	QLD	TAS	VIC	WA	Total (F)
Direct control	2	1	-	3	1	5	1	13
Display/provision of materials	1	-	1	-	1	1	-	4
Focus on local needs	-	1	-	-	-	-	2	3
Curriculum integration	_	3	-	-	-	+	-	3
Community pressure	_	1	_	_	-	1	-	2
Provision of direct support for	-	1	-	_	-	-	1	2
teachers								
Provision of in-service for teachers	_	-	1	-	-	1	-	2
Use of shock tactics	1	-	-	-	-	_	-	1

There was a high level of agreement among respondents that direct contact with school principals was the most effective means of ensuring the introduction/continuance of road safety education in schools.

Table 3.39

Least Effective Strategies used with School Principals

STA	STATE/TERRITORY(Frequency of Citation)											
STRATEGY	ACT	NSW	NT	QLD	TAS	VIC	WA	Total (F)				
Indirect contacts (mail)	2	1	-	-	1	2	1	7				
Lectures/one-off contacts	-	1	-	-	-	1	1	3				
Top-down directions	-	_	-	1	-	-	1	2				
Use of shock tactics	1	1	-		-	-	-	2				
Approaches by non-teaching staff	-	-	_	_	-	-	1	1				
Assumption of interest	_	_	-	_	-	-	1	1				

As might have been predicted from responses to the previous item, respondents saw indirect contacts with school principals as the least effective way of promoting road safety education.

### (vii) Role Constraints (Item 19)

For the item, respondents were asked to list the factors which acted as constraints on their roles. Table 3.40 shows the frequency with which particular factors were cited for each State and Territory.

Table 3.40
Role Constraints

STAT	E/TERI	RITORY	(Frequ	ency of	Citation	1)	•	
CONSTRAINT	ACT	NSW	NT	QLD	TAS	VIC	WA	Total (F)
Lack of finance	4	-	1	1	1	4	-	11
Lack of teacher support personnel/								
services	3	1	1	1	1	2	-	9
Lack of time for direct contact		2	_	1		-	1	4
Teacher apathy	-	-	1	1	-	2	-	4
Lack of material resources	-	-	1	1	1	1	-	4
Curriculum competition	-	1	1	-	- ,	1	-	3
Autonomy of schools	-	-	-	-	-	-	2	2
Organisational factors/bureaucracy	-	2	_	-	-	-	-	2
Coordination of diverse interest								
groups	1	1	_	-	-	-	_	2
Working in isolation	-	-	_	-	-	-	1	1
Geographic factors	~	-	-	1	_	-	-	1

By far the most frequently cited constraints were lack of finance and lack of support services and personnel.

### (vii) Main Problems (Item 23)

Table 3.41 highlights the specific problems which individuals said that they confronted in their work with schools.

Table 3.41
Specific Problems in Work with Schools

STAT	E/TERI	RITORY	(Freque	ency of C	itation)			
PROBLEM	ACT	NSW	NT	QLD	TAS	VIC	WA	Total (F)
Pre-Primary:			-					
Lack of appropriate resources	-	2	1	2	<u>-</u>	-	1	6
Lack of teacher expertise	2	-	-	-	-	-	1	3
Lack of teacher support/awareness	1	_	-	-		1	-	2
Lack of time for teacher training	-	-	-	-	1	1	-	2
Curriculum competition	-		<u>.</u>	-	- '	2	-	2
Primary:								
Curriculum competition	1	4	1	4	1	5	_	16
Teacher apathy	-	1	-	1	-	3	_	5
Lack of teacher expertise	-	-	1	-	-	1	2	4
Lack of appropriate resources	-	1	-	_	-	-	1	2
Lack of advisory support	1	-	1	-	-	-	-	2
Lack of in-service opportunities	-	1	-	-	-	_	-	1
Teacher workload	-	1	-	-	-	-	-	1
Secondary:								
Curriculum competition	2	4	1	4	1	3	-	15
Teacher apathy	1	2	_	-	_	2	1	6
Lack of teacher expertise	-	_	1	-	-	-	2	3
Lack of appropriate resources	1	1	_	_	-	-	1	3
Lack of central pressure	_	-	-	-	-	3	-	3
Low status of road safety education	_	-	-	-	-	2	-	2
Teacher specilization	-	1	-	-	-	-	-	1
Lack of in-service opportunities	_	1	-	-	-	-	-	1
Lack of curriculum/advisory support	-	-	1	-	-	-	-	1
Peer pressure	-	-	-	1	-	-	-	1

These perspectives suggest that at the:

. <u>Pre-primary level</u> - lack of appropriate resources is a major problem.

. <u>Primary level</u> - competition for time and space for road safety education within the curriculum is a major problem.

. <u>Secondary level</u> - curriculum competition again, is a major problem.

### (ix) Role Effectiveness (Item 20)

The aggregate responses to this item revealed that:

- almost two-thirds of respondents claimed that their role effectiveness was "unknown";
- one individual considered that he/she had "no effect";
- six individuals (20%) believed themselves to have "limited effect";
- while only four (13%) rated their efforts as "effective".

If generalizable to all people involved in road safety education at this level, the data suggest a serious state of affairs.

### (x) Resolution of Problems (Item 24)

Respondents' suggestions about resolution of the problems confronting road safety education in schools were predictable in terms of the problems they had cited previously. Table 3.42 lists these proposed solutions and shows their preference by State/Territory and in aggregate.

Table 3.42
Problem Resolution

STATE/I	ERRI	ΓORY (	Freque	ncy of C	Citation)	)		
SOLUTION/LEVEL	ACT	NSW	NT	QLD	TAS	VIC	WA	Total (F)
Pre-Primary:								
Increased (more approp.) materials	-	1	-	2	-	1	_	4
Compulsion via curriculum	2	-	<u></u>	-	-	-	-	2
Improve pre-service education	-	-	-	-	-	1	1	2
Increase teacher support	-	-	-	-	1	1	-	1
Formal provision of curriculum								
space/time	_	-	-	_	1	-	-	1
Reduce staff attrition	-	~	-	_	1	-	_	1

Table 3.42 (cont.)
Problem Resolution

STATE/	TERRI	TORY (F	requen	cy of Cita	ation)		· · · · ·	
PROBLEM/LEVEL	ACT	NSW	NT	QLD	TAS	VIC	WA	Total (F)
Primary:								
Improve pre-service education	-	-	_	1	-	4	1	6
Improve promotional activities	1	-	-	_	_	4	-	5
Curriculum integration	1	1	-	1	-	-	-	3
Increase teacher support	-	1	-	1	-	1	1	4
Increase 'teacher friendly' resources	-	2	-	1	-	-	-	3
Compulsion via curriculum	1	-	-	-	1	-	-	2
Parent education	-	1	_	-	_	-	-	1
Improved in-service education	-	-	_	-	_	-	1	1
Secondary:			-					
Curriculum integration	1	2	-	1	-	3	-	7
Increase 'teacher friendly' resources	-	2	-	1	-	2	1	6
Improve pre-service education	-	-	-	-	-	3	1	4
Special positions in schools	-	-	-	_	-	3	_	3
Parent education	-	1	-	-	-	_	-	1
Increased teacher support	-	1	-	-	- '	-	-	1
Compulsion via curriculum	-		-	_	1	_	-	1
Improve in-service education	-	-	-	_	-	_	1	1

While these suggestions reveal the preferences of individuals in the respective States and Territories, the aggregates provide more global perspectives. For the three levels of schooling, these included, for:

- . <u>Pre-primary</u> increased and more appropriate curriculum materials.
- . Primary improved pre-service education of teachers; improved promotional activities/awareness raising, curriculum integration and increased teacher support.
- . Secondary curriculum integration and increased "teacher friendly" materials.

# (xi) High and Low Priorities for Teachers (Items 25 and 26)

Tables 3.43 and 3.44 respectively list the high and low priorities which teachers are said to assign to aspects of road safety education.

Table 3.43

Teachers' High Priorities

S	TATE/	TERRIT	ORY (I	Frequenc	cy of Ci	tation)		
AREA/TOPIC	АСТ	NSW	NT	QLD	TAS	VIC	WA	Total (F)
Appropriateness/ease-of-use of								
materials/programmes	-	3	-	-	2	-	2	7
Bicycle safety	2	1	-	-	-	-	1	4
Pedestrian safety	1	1	-	-	-	3	-	5
Effects of accidents	-	-	-	-	_	1	3	4
Driver education	-	1	-	1	-	-	-	2
General road safety	-	-	-	2	-	-	-	2
Enjoyment of learning	1	-	-	-	-	-	-	1
Passenger safety	-	1	-	-	-	-	-	1
Traffic/road rules/regulations	-	-	1	-	-	-	ü	1
Assessment of students	-	-	-	~	1		-	1
"Busy work" activities	- 1	-	-	_	-	1	-	1

These data suggest that teachers involved with road safety education give high priorities to the appropriateness and ease-of-use of curriculum materials, bicycle and pedestrian safety.

Table 3.44
Teachers' Low Priorities

S	TATE/	ΓERRIT	ORY (	Frequen	cy of Ci	tation)	_	
AREA/TOPIC	ACT	NSW	NT	QLD	TAS	VIC	WA	Total (F)
Practical activities	-	1	-	1	_	1	1	4
Passenger safety	-	3	-	-	-	-	1	4
Bicycle safety	-	-	_	} -	-	1	1	2
Activities requiring planning/								
organisation	-	1 1	-	-	-	1	=	2
Road Safety statistics	-	- {	-	1	1	, -	-	2
Attitude development	-	-	2	-	- ;	-	<u>-</u>	2
Pedestrian safety	-	-	_	-	-	-	1	1
Promotional materials	-	-	-	_	1	-	-	1
Rules/regulations	-	-	-	1	-	-	-	1
Bicycle maintenance	1	-	-	-	_	-	_	1
Secondary school courses	1	-	_	-		-	_	1

Generally, these data were inconclusive for, although they showed a range of perspectives, there was no clear strength of opinion in any area.

# (xii) Use of the Media (Item 27)

A total of 19 (61%) out of the 31 respondents claimed that they used the media as a means of promoting road safety education. Table 3.45 shows the trends by State and Territory. The major vehicles were said to be radio/television and local newspapers.

Table 3.45
Use of the Media

STATE/TERRITORY (Frequency of Citation)								
MEDIUM USED	ACT N=2	NSW N=4	NT N=1	QLD N=2	TAS N=1	VIC N=7	WA N=2	Total (F)
Local newspapers	1	3	1	2	_	6	1	14
Radio/TV	1	2	1	2	-	4	2	12
Major newspapers	-	-	1	2	-	-	1	4
Reports of court proceedings	-	-	1	-	-	-	-	1
Government publicity		-	-	_	1	-	_	1

# (xiii) Parent Considerations (Item 28)

Table 3.46 illustrates the factors and considerations which respondents deemed to be important in involving parents with the road safety education of their children.

Table 3.46

Parent Considerations

STATE	TERR	ITORY	(Frequ	ency of	Citation	)		
PARENT CONSIDERATION	ACT	NSW	NT	QLD	TAS	VIC	WA	Total (F)
Importance of role modelling	-	3	-	-	-	5	2	10
Childrens' limitations	-	3	-	1	-	4	_	8
Parental responsibility	1	_	1	2	_	_	1	5
Safety awareness	1	_	1	2	1	-	_	5
How to exert pressure on schools	-	-	_	_	_	2	_	2
Teacher-parent co-operation	-	1	-	-	-	-	-	1

There was a strength of opinion among respondents which indicated that emphasizing the importance of role modelling and childrens' limitations were the most important aspects of road safety education with parents.

# 3.6 Concluding Comment

The data obtained from the respondents to three questionnaires, namely police directions, curriculum consultants and developers, and administrative officers and coordinators, was the major focus of this chapter. A wealth of data about priorities, activities, strategies and problems of individual providers and their links with each other in joint projects were presented and analysed.

# Chapter 4 Analysis of Road Safety Materials

# 4.1 Introduction

Various road safety education packages and materials were collected and purchased from all States and Territories. The analyses of 85 packages in this chapter are presented on a state by state basis. A complete listing of the packages is included in Table 4.1

Table 4.1
Listing of Packages/Kits

TTTLE	FUNDING SOURCE	Page
Out and About	FORS	96
Road Safety Education Resource Kit	ACT Administration, ACT	99
Road Safety Resource Package for	FORS	
Community Groups		100
Show it with Action	Action Bus Co., ACT	102
Streetbeat	Mobil & FORS	103
Young Driver Survival Kit	FORS	104
Are You in Control?	Traffic Authority, NSW	106
Belt Up	Traffic Authority, NSW	107
Bike Week '86, Bicycle Week '87	Department of Education, NSW	
Gear up for Bicycle Week '88		108
Drink-Driving Education	Traffic Authority, NSW	111
Health Education Syllabus, Years 7-10	Department of Education, NSW	112
How to Provide Bicycle Helmets for	Traffic Authority, NSW	
Children in Your School		113
Kids in Traffic	Traffic Authority, NSW	114
Road Safety – A School Community	Traffic Authority & Department of	
Issue	Education, NSW	117
Road Safety Education (Draft Document)	Department of Education, NSW	119
Spike's Bike Book	Traffic Authority, NSW	122

Table 4.1 (cont.)
Listing of Packages/Kits

TITLE	FUNDING SOURCE	Page
Street Sense	Traffic Authority, NSW	123
Road Safety with Hector	Road Safety Council, NT	128
Student Driver Education	Department of Education, NT	128
Health & Physical Education – Guidelines	Department of Education, Qld	}
for Secondary Schools, Years 8-10	,	130
Health Education – Curriculum Guide	Department of Education, Qld	
Years 1-7		130
How to Introduce Bicycle Helmet	Road Safety Council, Qld	
Wearing to your School		131
PASS	Department of Education, Qld	132
Road Safety Education	Department of Education, Qld	135
Road Safety Education	Road Safety Council, Qld	136
Road Safety Education News	Department of Education, Qld	137
Safe Cycling	Department of Education, Qld	138
Safe Cycling Course	Road Safety Council, Qld	139
Starting School	Department of Transport, Qld	141
Student Driver Education	Department of Transport, Qld	141
The Safe Cycling Course	Department of Education, Qld	144
Traffic Safety Projects – A Teacher's	Department of Transport, Qld	
Guide for Years 8, 9 & 10		145
Cyclesafe	Department of Transport, SA	146
Getting There and Back Again –	Department of Transport, SA	
Draft only, 1986		148
Pic-a-Pak	Education Department, SA	150
Ride for Your Life – Bicycle Safety	Education Department, SA	
Education		150
Road Safety and Driver Education	Education Department, SA	152
Road Safety for Pre-school Children	Education Department, SA	154
Road Workers	Road Safety Curriculum Committee, SA	155
The Complete Driver's Companion –	SGIC, SA	
Student driver education		156
Health Education in Tasmanian Schools	Education Department, Tas	
& Colleges – A Curriculum Framework		157

Table 4.1 (cont.)
Listing of Packages/Kits

TITLE	FUNDING SOURCE	Page
Bike Ed.	Road Traffic Authority, Vic	159
Children in Traffic	Road Traffic Authority, Vic	161
Language on the Road	Longman Cheshire, Vic	161
Roads and Traffic	Education Department & RTA, Vic	164
Roadswork – Road Safety for Primary	Education Department & RTA, Vic	
Schools		165
Science and the Road	Road Traffic Authority, Vic	168
Starting Out Safely – Traffic Safety	Road Traffic Authority, Vic	
Education for Pre-School Children		170
Streets Ahead – Traffic Safety	Road Traffic Authority, Vic	
Education for Primary Schools		172
Student Driver Program	DECA, Vic	175
Surveys	Road Traffic Authority, Vic	177
Survival Trails	Road Traffic Authority, Vic	178
Teenagers, Alcohol and Road Safety	Road Traffic Authority, Vic	180
The Age – Road Safety	"The Age", Vic	181
The Bike Ed. Course	Road Safety & Traffic Authority, Vic	182
The Careful Cobber Programme (2nd edn)	DECA, Vic	184
Traffic Safety Education	Ministry of Education, Vic	185
Traffic Safety Education – Pre-driver	Department of Education, Vic	]
Education		186
Health Education, K-10 Syllabus	Education Department, WA	187
Kangaroo Creek Gang		190
Live to Ride	Health Department, WA	191
Audio Visual Aids		192
		<u> </u>

## 4.2 Analyses of Individual Packages/Kits

Author: Federal Office of Road Safety

Title: Out and About

Published by: Australian Government Publishing Service, Canberra, 1987

There are two packages which make up the road safety programme of *Out and About*, one for the pre-school level and one for the primary school level. This programme uses a 'team' of Australian animal characters to help children learn about road safety.

The pre-school package contains:

- a teacher's guide.
- parents' guides written in eleven languages.
- student books.
- 3 activity posters and six cut-out sheets.
- stickers.

There is an introductory section at the beginning of the teacher's guide and this provides the teacher with the rationale for teaching road safety, background information, an introduction to the animal characters, information on how to use this kit and ways to involve parents in the programme.

The programme is divided into four topics:

- seatbelts
- roads
- footpaths
- playing.

For each topic the aim, objectives, teaching concepts and suggested activities are given. Indication is given where an activity corresponds with a page in the student book.

Both the teacher's guide and the student book are colourful and attractively presented.

The introductory paragraph of the parents' guide points out the need for teaching road safety to children and for parents to realise that children do not understand traffic and the road environment. It suggests that parents need to play an important part in this education.

The remainder of the material in the pamphlet deals with specific areas of road safety and how parents can help in developing correct road safety behaviour in their children. The areas of concern are:

- in the car
- walking to and from school
- crossing a road
- using public transport
- playing
- bicycles.

A booklet called "A Simple Guide to Child Restraints" produced by the Federal Office of Road Safety is also included in the pre-school package.

The primary school programme is divided into level one suitable for children aged 6 to 7 years (second year of primary school) and level two suitable for children aged 8 to 9 years (fourth year of primary school).

This kit contains:

- a teacher's guide incorporating both levels
- parents' guides
- children's books
- a support activity and stickers.

The introductory pages of the teacher's guide provides teachers with the rationale and background information for teaching road safety. The animal characters are introduced and ways to use the programme are suggested such as integrating it with other subjects, taught as a separate subject or as part of a theme.

Some teaching techniques suitable for teaching road safety are given along with ways to assess students and how to involve parents in the programme.

After this general information, the guide is divided by colour into the two levels, orange for level one and green for level two. At both levels the concepts to be taught take into account the child's developmental limitations and it is recommended that the content be taught in a set sequence.

For level one the topics are:

- walking to and from school
- crossing the road
- playing safely
- in the car
- in the country.

The topics for level two are:

- walking safely
- crossing the road
- playing safely
- using public transport
- riding your bike
- responsible behaviour.

The aim, objectives, concepts, and a list of activities from which the teacher may choose are given for each topic. The student's books correspond to the activities provided in the teachers guide.

There is a video "Road Safety for Children" which goes with this programme but it is recommended for use with children in their second year at school and complements the printed material of level one. It is a story using the animal characters to explain the road safety concepts of walking, crossing the road, playing and travelling in the car safely. The video can be stopped after each of these segments for discussion and revision of road safety points.

The Out and About kits are available free, on request, to all schools throughout Australia.

Author:

Transport Operations Branch of the A.C.T. Administration.

Title:

Road Safety Education Resource Kit

Published By:

Transport Operations Branch of the A.C.T. Administration.

This Road Safety Education Resource Kit has been designed to provide lessons which can be integrated into Legal Studies, Living Skills and Social Science programmes for Years 7-10 in the high school. There are five lessons and for each one the objectives, lesson procedures and resources are given. Overhead projector transparencies, worksheets and relevant sections from motor traffic ordinances are provided.

The lesson topics are:

- Road Accidents
  - causes
  - economic costs
- Road Rules for the A.C.T.
  - Motor Traffic Ordinance (suitable for Years 9 and 10)
  - Traffic Ordinance
- Accident Data
  - Statistics
  - Accident Report
- Protect Your Life
  - Type of Road User
  - Drink, Drive, Survive
- Bicycle Maintenance
- Motor Vehicle Maintenance.

Author:

Federal Office of Road Safety

Title:

Road Safety Resource Package for Community Groups

Published by:

Federal Office of Road Safety,

Federal Department of Transport and Communications,

Canberra, 1988.

This is a very large resource package designed to help community groups identify road safety problems in their local community and to provide strategies which these groups can use to prevent road accidents.

Sections One and Two contain general information, while the remaining sections provide specific information which is relevant to specific groups.

In Section Three, "Children", the introduction provides details on the number of children killed and seriously injured in road accidents in 1986. It goes on to point out that children have difficulty coping with many traffic situations. Research has shown that significant improvements have been achieved if simple safety measures are adopted.

The *Out and About* material for schools, produced by the Federal Office of Road Safety is described and a copy of teacher's guide, student books, parents' guide and a video flyer are included.

Section Four focuses on young drivers and is aimed at the 17 to 25 year old group. There is a booklet called "Young Drivers – Over-Confident One Day – Dead the Next" which deals with crash statistics into crashes involving young drivers and puts forward an alternative approach to the present-day training and licensing of drivers. A flyer advertising the *Young Driver Survival Kit*, aimed at pre-licence and novice drivers (15 to 19 year olds) is included.

Section Six has relevance to teaching road safety in schools as it deals with occupant restraints and contains the following pamphlets:

 "A Simple Guide to Child Restraints" – useful for parents of pre-school and lower primary children, available in eleven languages.  "Prevent the Human Collision" – a valuable resource for secondary students provides information about the effectiveness of seatbelts in road crashes.

Section Seven, "Alcohol", contains material suitable for secondary students and provides many facts about alcohol and road accidents, how alcohol affects the road user, drink-driving laws, blood alcohol levels, the time element and ways to avoid drinking and driving.

Section Eight, the "Bicyclists", provides details of cyclists involved in road accidents and ways that these might be reduced. It introduces a booklet "How to Introduce Bicycle Helmet Wearing to Your School", a Queensland Road Safety Council Production (described in the Queensland resource material) and another titled "Choosing a Bike Helmet", published by the Federal Office of Road Safety in July 1987. This is a paper written by H. Pang and D. Millar and provides information on bicycle accidents and the effect that helmets have on minimizing head injuries. Information is also given on how to select a suitable helmet and on the Australian Standards.

In Section Eleven, entitled "Miscellaneous", there are a number of pamphlets which could be used in road safety lessons. They are:

- Before Other Help Arrives
- Vehicle Safety The Australian Design Rule System
- Cost of Road Crashes

These pamphlets have been produced by the Federal Office of Road Safety.

The remaining sections, although not directly related to road safety in schools, could be of some interest to teachers and students. They are:

Section Five - Older Pedestrians

Section Nine - Motorcyclist

Section Ten - Town Planning

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It is anticipated that by providing this information in a community resource package that both parents and teachers will become aware of what material is available for school use and that teachers will use it to assist them in teaching road safety to both primary and secondary students.

Author:

Action Bus Company, Canberra

Title:

Show it with Action

This package produced by the Action Bus Company of Canberra is given out at schools, displays and shows. It contains:

- a two page leaflet "Things You Should Know About Safe Bus Travel"
- worksheets
- certificates
- stickers
- cut out of a bus.

The leaflet, 'Things You Should Know About Safe Bus Travel', contains a number of safety rules which need to be observed by school students when travelling by bus. These are listed under the headings:

- Waiting for the Bus
- Riding in the Bus
- Leaving the Bus
- Kerb Drill
- Bikes

The bus company has produced a videotape which could be used in schools. The first segment, filmed in Germany, shows the different types of buses which can be used to move a large number of commuters quickly about a city. This is

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followed by a short segment showing 'Constable Kenny Koala' and an Action bus

driver discussing the rules about safe bus travel.

The last segment shows a display of material set up by the bus company.

This includes photographs of vandalism to buses together with the printed

material available to schools.

Title:

Streetbeat

Presented by:

Mobil Oil Company and Federal Office of Road Safety, 1986.

Streetbeat is a big picture book which contains tips on road safety, driving skills

and positive driving attitudes along with messages about safe driving from

members of well known rock bands. This book is targetted at the 16 to 25 year old

group.

**Author:** Federal Office of Road Safety

Title: Young Driver Survival Kit

Published by: Federal Office of Road Safety,

Department of Transport and Communications, Canberra.

The Young Driver Survival Kit is targeted at pre-licence and newly licensed drivers (15-19 year olds). It aims to increase the awareness of young drivers of the major factors which cause road accidents in the younger age group.

The kit contains:

- 2 videos "Road Worrier" and "The Big Gig"
- 2 Teachers' Notes
- 2 pamphlets "Why You Should/Should Not Drink and Drive".

The Teachers' Notes are divided into three sections

- background information
- using the videos
- classroom activities.

The background information details some facts about the involvement of young drivers in road crashes. It enumerates the skills that young drivers need to acquire before they become safe drivers. These are:

- manipulative or "car-craft" skills.
- perceptual skills or driver anticipation.
- decision-making skills or driver judgment.

Information is also provided for the teacher on what are considered to be the major factors which cause road accidents in young people. The factors include night driving, peer group pressure and alcohol.

The section on the use of the videotapes gives the aim, target group, summary of the videotape and teaching points.

The classroom activities suggest several teaching strategies. These include:

- discussions before and after viewing
- research projects
- values clarification
- debates
- role play
- group discussions
- art.

Some suggestions are made as to how the programme can be used such as in Driver Education programmes or integrated in other subjects such as social science, health or English.

## Videotapes

"Road Worrier" describes the skills needed to become a safe driver – driving skills, driver anticipation and driver judgment. The story tells of a newly-licensed youth who enlists the help of a robot to help him develop these skills.

"The Big Gig" deals with the issues of alcohol, late night driving and peer group pressure. The story centres around the members of a rock band who get themselves into dangerous driving situations because of these issues. Positive behaviour for avoiding these dangerous situations is also shown.

The pamphlet "Why You Should/Shouldn't Drink and Drive" has three blank pages following the title "Why You Should Drink and Drive". Turn the pamphlet the other way and "Why You Shouldn't Drink and Drive" details many facts all drivers should know about alcohol, how it affects road users, blood alcohol levels, the time element, how to avoid drink-driving, standard drinks and drink-driving laws.

Author: Education Section, Traffic Authority of New South Wales

Title: Are You in Control?

A programme dealing with drink-driving

Published by: Traffic Authority of NSW, 1988

ISBN 0730550249 (Set)

0 7305 5060 5 English Activities

0 7305 5068 0 Science Activities

0 7305 5076 1 Mathematic Activities

0 7305 5084 2 Health Activities

This programme has been designed for Years 9-10 and it is suggested that it be used in conjunction with the *Belt Up* programme. It aims to provide students with information about drink-driving and to develop an understanding about the relationship between alcohol consumption and impaired driving ability. By using this programme it is hoped that students will develop responsible attitudes towards drink-driving and skills to enable them to deal with such situations.

There are four teacher's manuals, one each for English, Science, Mathematics and Health. Each manual contains background information for the teacher on drink-driving and the activities are related to syllabus concepts. For each activity the objectives, teacher information and references are provided. The English and Science activities are graded to suit student abilities and interests. Worksheet masters are provided for all units.

Also included in the teacher files are single copies of brochures which may be ordered free of charge from the Traffic Authority of NSW. Posters and student timetables may also be ordered. Author: Education Section, Traffic Authority of New South Wales

Title: Belt Up

The road safety subject is "Seat Belts"

Published by: The Traffic Authority of NSW, 1988

ISBN 07305 5016 8 (Set)

0 7305 5004 4 Maths Activities

0 7305 5004 4 Science Activities

0 7305 5020 6 Technical Drawing Activities

0 7305 5028 1 Health Activities

Belt Up is a road safety education programme designed for secondary school students in Years 7-10. It aims to demonstrate how seat belts work and to show the consequences of being involved in an accident with and without a seat belt. The programme also aims to correct myths associated with the wearing of seat belts and to develop responsible attitudes and behaviour towards the use of seat belts and helmets.

The programme consists of four activity files in the subject areas of maths, science, technical drawing and health. Each activity is a teacher's manual which includes an introduction stating the rationale and aims of the programme and a list of resource material available. This is followed by background information on seat belts, other restraints and helmets.

All the activities are related to specific syllabus concepts. Objectives are given for each activity along with specific resource materials and worksheet masters. In the Technical Drawing manual, extension activities are provided for the more able students and there is a seat belt assembly kit provided. In the Maths and Science manuals, some activities are provided for the younger or less able students while other activities are provided specifically for the older or more able students.

Included in each file and appropriate to the content are single copies of a number of brochures, such as "Prevention of Human Collision", "A Simple Guide to Child Restraints", "The Cost of Road Crashes" and "Australian Design Rules for Motor Vehicles". Teachers can obtain free multiple copies of the brochures from the Traffic Authority of N.S.W., along with posters and colourful student timetables.

Developed by: Studies Directorate, Department of Education, NSW

State Bicycle Committee

Catholic College of Education, Sydney

Titles: Bike Week '86

Bicycle Week '87

Gear Up for Bicycle Week '88

Published by: Department of Education, NSW

ISBN 0730545431 (1987)

0 7305 5717 0 (1988)

These are a series of three books which have been produced to coincide with Bicycle Week in N.S.W. each year. Bicycle Week, the third week in October, is coordinated by the State Bicycle Committee. These books contain lesson ideas which can be used in the Safety context of the proposed Health Studies Syllabus K-6 and the Health Education Syllabus 7-10.

Each year the content of these books has become more comprehensive.

The 1986 edition was a 22 page volume providing some background information for teachers and some suggested bicycle lesson ideas for Years K-3, 4-7, 5-8, 6-8 and 7-8. Some worksheet masters are also included.

In 1987 the book became a 30 page volume and it was divided into five sections and two appendices. Sections 1-3 contain lesson ideas for Years K-3, 4-6, and 7-9. Each section begins with curriculum content material setting out the principles, main ideas and sub-concepts. This is followed by teacher information, some lesson ideas and reproducible worksheets.

These lessons include some practical activities on pedestrian crossing and walks for Years K-3, practical riding skills in the playground for Years 4-6 and 7-9.

Section 4 is an on-road riding program and information and regulations that the teacher must follow if intending to use this section.

Lesson ideas relating to the Commonwealth Bank Cycle Classic are given in Section 5. Appendix I deals with bicycle riders and the law, and Appendix II provides information about helmets for bicycle riders.

The 1988 edition is a far more sophisticated, 69 page volume, and the curriculum concepts are safety and leisure. The introduction to the book provides details on the regional road safety education consultants for government schools and corresponding diocesan coordinators in catholic schools. The aims and rationale for teaching bicycle safety education together with accident statistics are also included.

The lesson ideas are set out on a double page using the following headings:

- main ideas
- learning activities
- teaching points
- curriculum integration
- resources
- evaluation.

A separate programme is provided for Years K, 1, 2-3, 4-6, 7-8, 9-10.

The lesson ideas for the secondary school vary in format from that of the primary school. The programme is set out under the headings of:

- themes
- content focus
- concept
- principles
- main ideas
- focus questions
- activities.

Worksheets have been provided for use with the students in Years 7-10.

In Section 2, information and worksheets are provided for running a bike day suitable for Years K-6. Similarly activities suitable for Years 5-10 are given for a topic called "Discover Your Local Cycleways".

The last section of the book, Section 3, contains a number of useful ideas such as a bicycle maintenance checklist, award certificates, test sheets, notes for parents.

Author: Traffic Accident Research Unit, Traffic Authority of NSW

Title: Drink-Driving Education

Published By: Traffic Authority of NSW

This kit was designed as a flexible resource to provide support for aspects of drink-driving education 'across the curriculum' and for varying levels of student ability. The aim of the programme is for students from Years 8-10 to develop positive attitudes about drinking and driving and to develop skills to prevent drink-driving.

It was intended that the kit be used as a set of resource material in subject areas such as legal studies, science, health education, consumer education, personal development and English. Suggested teaching strategies along with the rationale and objectives for teaching Drink-Driving Education are given.

The programme is divided into a number of sections:

- The Drink-Driving Problem
- Blood Alcohol Concentration
- Alcohol
- Detecting Alcohol
- Drink-Driving Laws
- Drink-Driving and Society
- Avoiding Drink-Driving
- Advertising.

For each of these topics teachers' notes, overhead projector transparencies, worksheet masters, background information and a set of slides are provided.

Author:

Secondary Schools Board

Title:

Health Education Syllabus, Years 7-10

Published by:

Department of Education, NSW

The Health Education Syllabus, Years 7-10 was produced by the Secondary Schools Board for optional implementation in N.S.W. secondary schools in 1983 and 1984. The introductory pages of the syllabus sets out the rationale, aims and objectives and provides ideas on how to develop a sequential programme throughout the four years of secondary school.

Ten major concepts are presented and road safety issues are treated in the concept of 'Safety'. There are four important elements of Safety and they include:

- human and environmental factors which can affect the incidence of mishaps.
- the responsibility for safe living devolves upon government,
   community, employing agencies and the individual.
- possession of knowledge and skills necessary for coping with emergencies can enhance the well-being of all people.
- mishaps can be either avoidable or unavoidable, and means exist for controlling the incidence of the avoidable mishap.

Author: The Advisory Committee on Road Safety Education, NSW

Department of Education

Title: How to Provide Bicycle Helmets for Children in Your School

Provides ideas of how to set up a school helmet borrowing

scheme

Published by: Traffic Authority of NSW 1988

ISBN 0724079122

This booklet is based on a scheme successfully carried out by two schools in Brisbane. As an introduction it lists facts about bicycle accidents and how helmets can reduce the risk of brain damage. It goes on to provide ideas on how a school P. & C. Association could find a sponsor to buy helmets for their school, how to order helmets and the conditions of supply to students.

Sample letters to would-be sponsors, parents and media along with examples of recommended helmets are provided in the back of the booklet.

Author: Education Section, Traffic Authority of N.S.W. and endorsed by The Child Accident Prevention Foundation of Australia Title: Kids in Traffic 1. Safe places to play 2. Being a safe pedestrian 3. Being a safe passenger Published by: Traffic Authority of NSW, 1988 (Set) ISBN 0730550001 0 7305 5014 1 I am a Safe Passenger - Teachers Guide I am a Safe Pedestrian - Teachers Guide 0 7305 5022 2 0 7305 5030 3 I Play Safely - Teacher Guide 0 7305 5031 1 Song and Rhythm Storybooks Read-a-long Cassette 0 7305 5023 0 0 7305 5039 7 Song and Rhythm Cassette 0 7305 5038 9 Stickers Set of Eight Storybooks 0 7305 5046 X Marisa's Party 0 7305 5054 OX Con the Whiz Kid 0 7305 5062 1 Steffano's Nonna 0 73005 5070 2 The Champion 0 7305 5078 8 Teresa Trouble 0 7305 5086 9 A Teddy for Louise, Please Tien Tells Minh 0 7305 5094 X 0 7305 5102 4 My Goldie Set of Three Big Storybooks

0 7305 5015 X	Steffano's Nonna
0 7305 5007 9	The Champion
0 7305 5110 5	Mv Goldie

## 0 7305 5006 0 Calendar 1988

Kids in Traffic is a preschool Road Safety Kit designed for 3-5 year olds. The programme is a collection of:

- Teacher Guides
- Storybooks and a read-a-long cassette
- Song and rhythm book and cassette
- Reward stickers
- Calendar for 1988

There are three teacher guides, one on passenger safety, one on pedestrian safety and one on safe playing places, all written by experienced preschool educators. The introduction to the guides gives a brief overview of the programme and the rationale for teaching these three aspects of road safety to preschool children. Ideas on how to use the teacher guides and the best approach to teaching the topics are suggested. The involvement of parents and caregivers in the programme is encouraged.

There is a list of other resources that teachers may like to use in conjunction with the *Kids in Traffic* kit.

The teachers and learning activities in the three teacher guides are divided into three or four sections each dealing with a specific topic. For example, in "I am a Safe Passenger" the sections are as follows:

- 1. How and why we use seat belts and restraints
- 2. Getting into and out of vehicles
- 3. Safe passenger behaviour whilst travelling in vehicles
- 4. Safety when travelling by bus.

The aims and objectives are provided for the teaching and learning activities and there is information for parents and other caregivers in each section. This is followed by a range of ideas to develop children's language, motor perceptual, explanatory and creative skills.

Each activity lists the type of activity e.g. picture talk, sorting, cutting and pasting etc., the material required, related language and ideas for discussion, vocabulary and follow up activities. Indication is given as to where the resource materials, provided in the kit, should be used.

At the back of the teacher guide are sample excursion notes and a letter to parents which may be photocopied or used as models. This is followed by an evaluation sheet for the teacher to use when evaluating the programme based upon each child's mastery of objectives.

There is no indication as to which of the three topics, passenger safety, pedestrian safety and safe places to play, should be taught first or whether they should be taught concurrently. However, it is recommended that road safety be taught a little at a time and often.

There are eight small storybooks and each story is reproduced on the read-along cassette tape. Each is an entertaining story based on a road safety theme and contain a multicultural element in that the characters are from different ethnic backgrounds. Three of these stories have been printed as big books. The printing in the small books uses a "wiggly" form which could be disconcerting to young children. This set of stories could also be valuable in the first years of primary school.

A collection of songs and chants are contained in the Song and Rhythm Book and cassette. They each contain a road safety message to reinforce what has been taught. Some tunes appear to be more catchy than others.

There are a great variety of reward stickers each with a different slogan. For example, "number one pedestrian", "save your brain", "keep off the road", etc. and these can be given to the children after the appropriate lesson.

The 1988 Calendar contains poster size pictures on a road safety theme. Teaching points and road safety information are printed on the back of each picture. The pictures are very colourful but some are a little overcrowded, e.g.

May, and some contain more than one concept, e.g. October, which may make it difficult for young children to comprehend.

In 1988 the kit was provided free of charge to every pre-school kindergarten and child care centre in NSW. Additional kits can be purchased from the Traffic Authority at a cost of \$75.

Author: The Advisory Committee on Road Safety Education

(A.C.O.R.S.E.)

Title: Road Safety - A School Community Issue

To make teachers and parents aware of the need for road

safety education

Published by: Traffic Authority and Department of Education, NSW

ISBN 0730536998

Road Safety – A School Community Issue is a package jointly produced by the Traffic Authority of N.S.W. and the N.S.W. Department of Education, supported by the National Roads and Motorists' Association. It has been developed to assist schools with road safety problems within their community.

The information provided in this package is for use at a parent/teacher meeting. It is divided into eight sections:

- Introduction foreword and rationale.
- 2. Action for the School Community presents ideas on how to conduct a parent meeting on Road Safety, a sample letter inviting parents to a Road Safety Meeting, focus questions and discussion points for the meeting. A videotape "Getting Across" produced by the Information Unit of the Traffic Authority of N.S.W. is recommended for use at the meeting.

 Parent brochures – these can be photocopied and handed to parents at the meeting. They include –

"Help your child to cope in traffic".

"What to do at school crossings".

"Parking near schools puts children at risk".

"Child safety in cars".

- 4. Statistical information in the form of graphs which can be made into overhead projector transparencies for use at the parent/teacher meeting. This information includes:
  - major categories of accidental death of children.
  - percentage of pedal cycle casualties.
- 5. Background information dealing with children's limitations in traffic and factors which influence the school traffic environments. This section makes parents aware of children's limitations, their responsibility in regard to Road Safety, education of their children and being good role models themselves.
- 6. Road Safety Policy Statements issued by:
  - NSW Department of Education
  - NSW Federation of School Community Organizations
  - NSW Federation of Parents and Citizens Associations
- 7. Road Safety Resources. This is a comprehensive list of many road safety resource materials such as teacher's handbooks, games, videotapes, slide sets, books, etc., which have been produced by either government or commercial agencies throughout Australia, except for those published in the ACT.

As well as giving the title and composition of the resource material, the cost, appropriate age level and a critical analysis is provided.

This section also contains a Directory of Resource Agencies within NSW and a list of focus questions for teachers' use in the classroom.

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This is a very valuable section for teachers who are in need of resource

material and for advice and specialists to visit schools.

8. Additional Material. This section contains a number of brochures

produced by the NSW Traffic Authority and the State Bicycle

Committee. They include such topics as making neighbourhood

streets safer, getting bicycle facilities in the local area and bicycle safety.

This package makes teachers and parents aware of the need for teaching road

safety in school. It is especially useful for parents in making them realise their

responsibility for educating their own children and for observing safe practices

themselves. It also informs teachers and parents about ways to make the local

environment safe for children using roads as either pedestrians or cyclists.

Author:

Department of Education, NSW

Title:

Road Safety Education (Draft Document)

Publisher:

Department of Education, N.S.W., 1988.

The Bicycle Safety Education program provides for a sequential development of

bicycle skills and is designed to be integrated across the curriculum. It consists of

a Teacher's Resource Manual and worksheet masters. The manual is divided

into five sections:

Bicycle Awareness

Bicycles and Equipment

Riding Skills in the School Grounds

Cycling Outside the School Grounds

Teacher's Guide

The Sections 1-4 are divided into a number of subsections and an

introduction, objectives, teacher's notes and activities are given. At the end of

each section a list of teacher and student references and worksheet masters are provided.

The approach taken in Sections 1 and 2 is one of discussion and activities with some practical work in Section 2. Section 1, 'Bicycle Awareness', is suitable for use with students in Year 3 and above and is designed to make children conscious of the importance of bicycle safety. The activities can be modified to suit the different age levels.

In the second section, 'Bicycles and Equipment', students are introduced to the design of the bicycle, differences in bicycles, and some practical skills. An activity in repairing punctures is included for the older, more capable students. The importance of wearing approved helmets and suitable clothing for cycling is discussed.

Section 3, 'Riding Skills in the School Ground', can be used with students from Year 4 upwards. It is a set of practical lessons which aim to provide the students with many different types of skills to ride competently with others and safely in traffic. The skills to be taught include:

- Riding in a straight line
- Scanning
- Figure of eight ride
- U-Turn
- Slalom
- Braking
- Surface hazards.

Other activities are given to familiarize students with road conditions and to develop skills for coping in traffic. These skills can be simulated in the school grounds.

'Cycling Outside the School Grounds' is suitable for Year 5 students and above. For all activities in this section a teacher would need to gain prior

approval from the Regional Director and in some cases it is advisable to obtain the assistance of the Regional Road Safety Consultant.

The first topic in this section is 'Off-road Riding' which is suitable for both primary and secondary students but only possible if suitable facilities exist near the school, e.g. bike paths, bush tracks, vacant land, parks, etc. The objectives of this activity are to increase the rider's skills on a variety of surfaces, to cope with off-road hazards and to show greater consideration for other cyclists and pedestrians.

Other activities in Section 4 are 'On-road Riding' which requires the teacher to be a competent cyclist and to have knowledge of current laws relating to cycling. The activities include:

- Entering the Road
- Negotiating past a Parked Car
- Negotiating Intersections
- Group Riding
- On-Road Test.

The last part of Section 4 is 'Cycling as a Sport' which is non competitive, recreational cycling using suitable roads and cycleways. The objectives are not only to improve physical fitness but to develop positive attitudes towards safe cycling.

The last section of the Teacher's Resource Manual provides helpful information that can be used by a school staff when setting up a Bicycle Safety Education Program. The second part of this section shows how the programme can be integrated across the curriculum in both primary and secondary schools in subjects such as visual arts, language/English, health and physical education, music, maths, social studies/social science and science. A sample programme for the teaching of "Bicycle Awareness" over a five week period is also provided.

Author:

State Bicycle Committee, Traffic Authority, NSW

Title:

Spike's Bike Book

- For Parents of Little Kids (Under 9)

- For Medium Kids (9-12)

- For Big Kids (13-104)

Subject:

**Bicycle Safety** 

Published by:

Traffic Authority of NSW

ISBN 0730547742

(Set)

0 7305 4741

(for Little Kids)

0 7305

0 7305 4743 4

(for Big Kids)

There are three books in this series each aimed at a different age group. The books have been written by the State Bicycle Committee with humorous comments and drawings by Spike Milligan.

For example, the first book in the series is mainly for parents to make them aware of the dangers which face a child when given a bicycle. Hints on buying a bike, teaching children to ride and safety equipment are given.

The third book, Spike's Bike Book for Big Kids, contains information on the rights and responsibilities of a cyclist, safety features of a bicycle, road signs and road hazards and maintenance.

Author: Education Section, Traffic Authority of New South Wales

Title: Street Sense, Road Safety Education Program,

Level One and Level Two

The road safety areas for both levels are the passenger, the

pedestrian and the cyclist

Published by: Traffic Authority of NSW, 1988

Street	Sense Level 1		
ISBN	0 7305 5008 7	(Set)	
	0 7305 5009 5	Unit 1 –	Passenger, Seatbelt Safety
	0 7305 5017 6	Unit 2 -	Passenger, Safety for Car and Bus Passengers
	0 7305 5025 7	Unit 3 –	Pedestrian, Safe and Dangerous
	0 7305 5033 8	Unit 4 –	Pedestrian, Footpaths and Pedestrians
	0 7305 5041 9	Unit 5 -	Pedestrian, The Traffic Environment
	0 7305 5049 4	Unit 6 -	Pedestrian, Crossing Roads
	0 7305 5057 5	Unit 7 –	Pedestrian, See and Be Seen
	0 7305 5065 6	Unit 8 -	Pedestrian, Signs, Signals and Rules
	0 7305 5073 7	Unit 9 –	Cyclists, Beginning Bicycles
	0 7305 5081 8	Unit 10 -	Cyclists, Safe Places to Ride
	0 7305 5089 3	Unit 11 -	Cyclists, Bicycle Helmets
	0 7305 5097 4	Unit 12 -	Cyclist, Bicycle Size, Bicycle Care and Being
			a Conspicuous Cyclist
	0 7305 5105 9	Unit 13 -	Cyclist, Off Road Signs and Skills for Young
			Drivers
	0 7305 5106 7	First Level	Songbook
	0 <b>7</b> 305 5027 3	First Level	Songbook Cassette

Set of Six Story books and Read-A-Long Cassette 0 7305 5001 X A lift to School Some Very Strange People 0 7305 5072 9 0 7305 5080 X Monsters in the Park 0 7305 5088 5 The Postie Who Delivered a Leopard 0 7305 5096 6 A Very Polite Robber 0 7305 5104 0 Bounce Away 0 7305 5099 0 Read-A-Long Cassette Six Listening Cassettes 0 7305 5043 5 Cassette 1.1 - First Level Units 1 & 2 0 7305 5051 6 Cassette 1.2 - First Level Units 3 & 4 0 7305 5059 1 Cassette 1.3 - First Level Units 5 & 6 0 7305 5067 2 Cassette 1.4 - First Level Units 7 & 8 0 7305 5075 3 Cassette 1.5 – First Level Units 9 & 10 0 7305 5083 4 Cassette 1.6 - First Level Units 11, 12 & 13 Videotape 0 7305 5011 7 Crash, Bang, Bang Street Sense Level 2 0 7305 5032 X (Set) Teaching Guides 0 7305 5002 8 Passenger, Buckle Up for Safety Unit 1 0 7305 5010 9 Unit 2 Passenger, Belt Up 0 7305 5018 4 Unit 3 - Pedestrian, Ralf 0 7305 5026 5 Unit 4 - Pedestrian, Pedestrian Survival 0 7305 5034 6 Unit 5 Pedestrian, Pedestrians and the Traffic Environment 0 7305 5042 7 Unit 6 Cyclist, Bicycle Parts, Function, Size and Purchase

0 7305 5050 8	Unit 7 - Cyclist, Trouble on Two	Wheels
0 7305 5058 3	Unit 8 – Cyclist, Hazards for Cyclis	its
0 7305 5066 4	Unit 9 – Cyclist, Safe Off-road Cycl	ing
	Places and Facilities and I	et's Get Visible
07305 5074 5	Unit 10 – Cyclist, Signs, Signals, Ru	les and the Law
	for Cyclists	
0 7305 5082 6	Unit 11 – Cyclist, Cycling Skills	
0 7305 5090 7	Unit 12 – Cyclist, Cycling Accidents	
0 7305 5098 2	Unit 13 – Cyclist, The Bicycle: Now	and in Other
	Times and Cultures	
Set of Three Storybooks		
0 7305 5008 7	(Set)	
0 7305 5048 6	Belt Up	
0 7305 5056 7	Trouble on Two Wheels	
0 7305 5064 8	Ralf	
Level Two Songbook		
0 7305 5032 X	(Set)	
0 7305 5003 6	Second Level Songbook	
0 7305 5035 4	Second Level Songbook Cassette	
Listening Tapes		
0 7305 5032 X	(Set)	
0 7305 5091 5	Cassette 2.1 – Second Level Units 1 &	τ 2
0 7305 1616 4	Cassette 2.2 – Second Level Units 3 &	τ 4
0 7305 1617 2	Cassette 2.3 - Second Level Units 5 &	τ 6
0 7305 1624 5	Cassette 2.4 - Second Level Units 7 &	τ 8
0 7305 1625 3	Cassette 2.5 - Second Level Units 9 &	τ 10
0 7305 1632 6	Cassette 2.6 - Second Level Units 11,	12 & 13
Videotape		
0 7305 5019 2	It's Smart to Be Safe	

The Street Sense programme can be integrated across the primary school curriculum and consists of two levels. The format for Level One, Year K-2, is generally the same for all units with teaching suggestions and activities suitable for many subject areas of the curriculum.

However, in Level 2, for Years 3-6, the format varies from unit to unit as the material is either subject or issue based. For example, the subject based units are Maths (Unit 12), Language (Units 2, 3 and 7), Science (Unit 9), Social Studies (Unit 13) and Physical Education (Unit 11). The remaining units are issues-based units, for example, seat belts (Unit 1), pedestrian survival (Unit 4), hazards for cyclists (Unit 8).

The topics for Level 1 are:

- Passenger 2 units
- Pedestrian 6 units
- Off-Road Cyclist 5 units

The topics for Level 2 are:

- Passenger 2 units
- Pedestrian 3 units
- Cyclist 8 units

A Calendar is provided for each class.

Each level consists of:

- 13 teaching units.
- Storybooks for both levels and a Read-A-Long cassette for Level 1 only.
- Songbook and cassette.
- 6 cassettes to assist with the child's auditory development.
- Videotape and guidelines on when to use it and teaching suggestions.
- Pack of stimulus pictures (one set covers both levels).
- Reward stickers (consumable).

## Each unit contains:

- An introduction with background information including traffic accident statistics and the child's developmental limitations, aims and objectives, and resource material including titles from reading and language programmes.
- between 2 to 4 sections of work containing teaching and learning activities, worksheets and take-home notes.
- evaluation strategies.

The 1989 Street Sense contains very large colourful pictures depicting one aspect of road safety per month. On the back of the picture are suggested activities for each year level. The activities are listed under language, art and craft and social studies. Reference is made to relevant Street Sense units in each month's topic. By following these suggested ideas it would be possible for a teacher of any year level to develop a road safety programme for the year.

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Title:

Road Safety with Hector

Published By:

Road Safety Council, Northern Territory

This is a colourful booklet which is distributed to primary school children. It contains many road safety rules which children need to learn and practise. They include:

- how and where to cross the road
- traffic lights and signs
- footpaths
- being seen
- play in safe places
- travelling by car and by bus
- safe cycling.

The characters in the pictures in the booklet are depicted as being from a number of different ethnic groups.

Author:

Northern Territory Board of Studies

Title:

Student Driver Education

Published By:

Northern Territory Department of Education, 1988

Student Driver Education is an accredited course for senior secondary students which involves both theory lessons and 20 hours of in-car practical tuition.

The document details the rationale for the course, entry requirements, aims and objectives and the course content. The content consists of:

- 1. Basic Mechanics
- 2. Vehicle Care and Maintenance
- 3. Road Law

- 4. Learning to Drive
- 5. Defensive Driving
- 6. The History and Philosophy of Transportation
- 7. The Driver
- 8. Purchasing a Car
- 9. Vehicle Insurance
- 10. The Role of Motor Vehicle Registry
- 11. Australian Design Rules
- 12. Basic First Aid
- 13. Practical Schedule.

For each of these topics a list of teaching points is given.

The practical sessions take place in out of school hours and each student has 10 two-hour lessons. These are held concurrently with the theory lessons.

Lesson 1 - Revise mechanics, vehicle inspection, changing a tyre, cabin drills, moving off and stopping.

<u>Lesson 2</u> - Clutch control, push-pull steering, gear changing, slalom.

<u>Lesson 3</u> - Practise gear changing, reversing, parking.

<u>Lesson 4</u> - The system - suburban areas.

<u>Lesson 5</u> - Using the system in heavy traffic and hill starts.

<u>Lesson 6</u> - Defensive driving and three point turns.

<u>Lesson 7</u> - City driving and angle parking.

<u>Lessons 8 & 9</u> - Practising all the above skills.

Lesson 10 - Assessment drive.

This section is followed by suggested teaching strategies, a list of resources and ways to assess students. Teachers who implement this course are required to hold a current Northern Territory 'A' Class Driving Instructor's Licence.

Author:

Department of Education, Queensland

Title:

Health and Physical Education - Guidelines for Secondary

Schools, Years 8 - 10

Published by:

Production and Publishing Services, 1984

ISBN 07242 1343 0

Road safety in secondary schools is included in Main Idea 5 which states "Effective responses to environmental hazards and injuries facilitate protection, prevention and treatment".

The topics covered include:

- listing the essential safety features of cars, motorbikes and bicycles.
- collecting newspaper articles which refer to accidents and which discuss the effects on individuals, families and communities.
- investigating the causes of accidents.
- testing the effect of wet weather on road conditions. Use of protective gear to prevent accidents.
- dealing with emergencies.
- drinking and driving.

Author:

Department of Education, Queensland

Title:

Health Education - Curriculum Guide Years 1 - 7

Promotes safe behaviour on the roads

Published by:

Department of Education, Queensland, 1982

The Health Education Curriculum Guide for Years 1 - 7 is divided into 9 main ideas and road safety is part of Main Idea 5 which is "Effective responses to environmental hazards and injuries facilitate protection, prevention and treatment".

In the lower primary the focus is on pedestrian safety especially travelling to and from school, using pedestrian crossings and traffic lights.

The objective for the middle primary is that children will be able to 'prepare a code of conduct for riding bicycles'. In the upper primary the emphasis is on the knowledge and practice of safety rules to help prevent accidents.

Author: Queensland Road Safety Council

Title: How to Introduce Bicycle Helmet Wearing to your School

Published by: Queensland Road Safety Council

In 1986 two Brisbane schools set up a Bicycle Helmet Wearing programme instituted by their P. & C. Associations. It involved giving a helmet to all students who rode a bicycle to school and the helmets were donated by a sponsor.

This booklet describes how that scheme was organised. The main points covered in the booklet include:

- Justification facts about bicycle accidents
- Finding a sponsor
- Obligations to sponsors
- How many helmets to buy
- Helmet types, sizes, fittings
- Parental approval
- Programme launch media, parent involvement
- Compulsory wearing and peer group pressure
- Aftermath (the success of the scheme and the intention to give all bike riders the Safe Cycling Course)

Following this information are copies of all letters, statistical information, media reports and school registration forms which can be copied by any other school or P. & C. Association.

Author: Alcohol and Drug Program Unit, Department of Education,

Queensland

Title: PASS

Plan a Safe Strategy - A Drink-Driving Prevention Program

for Teenagers

Published By: Department of Education, Queensland, 1988

This drink-driving prevention programme for teenagers has been produced as a result of the efforts of the Alcohol and Drug Program Unit of the Department of Education and the Department of Social and Preventive Medicine at the University of Queensland. The programme aims to change teenagers attitudes and behaviours towards drink-driving.

The complete package contains:

- A training package
- Kit for classroom use.

It is desirable that all teachers complete a six hour training programme prior to commencing the course with their students. The training package contains:

- a videotape segment one is for teachers, parents and community groups and segment two for teachers only.
- a teacher training manual which contains information on how to use the school package, teacher's guide, prepared lessons and resource materials.
- a set of overhead projector transparency masters.

The kit for use in schools contains:

- teacher's guide
- overhead transparencies and copy masters
- worksheet copy masters
- case study copy masters
- assessment suggestions and copy masters

- community resources list
- videotape.

The introduction to the teacher's guide gives the rationale for the *PASS* programme, the aims and objectives, a summary of the kit contents, an overview of the core lessons, questions teachers often ask and ideas students may have.

This is followed by very detailed lesson plans each stating the main organising idea, objectives, notes to teachers, preparation for the lesson, procedure, resource materials, homework surveys, contacts and parent information.

## There are 12 core lessons:

- 'Youth and Risks on the Road' deals with the facts that traffic accidents, including alcohol-related ones, are the largest single cause of death in the 15-24 year old group in Australia.
- 2. 'Alcohol and Driving Skills' examines how even small amounts of alcohol can affect a person's driving skills.
- 3. 'Fact or Fiction' the myths related to drinking and driving.
- 4. 'Outcomes' focuses on the negative outcomes of drinking and driving, even for those not involved.
- 5. 'Belief and Excuses' this lesson deals with the excuses for drink-driving or being a passenger with a drink driver and ways to counter this behaviour.
- 6. 'Separating Drinking from Driving': There are choices young people can make to separate drinking and driving.
- 7. 'How Does It Feel?' explores the likely consequences for parents with a teenager charged with a drink-driving offence.
- 8. 'Choices and Actions 1': Students practise ways of being assertive and refusing alcohol if they are the driver.
- 9. 'Choices and Actions 2': Examines the alternatives to being a passenger of a drink-driver.

- 'Choices and Actions 3': Presents ways in which young people can use assertive responses to avoid being a passenger of a drinkdriver.
- 11. 'Planning for Ourselves 1': Deals with planning beforehand to avoid being a passenger of a drink-driver.
- 12. 'Planning for Ourselves 2': Provides students with a choice of alternatives to avoid drink-driving.

It is recommended that for this programme to be successful students should be divided into small groups so that individual participation can take place.

At the back of the teacher's guide are seven appendices giving methods for setting up small group work, statistics on road crashes, the effects of alcohol on driving, role playing, drink-driving and the law.

The videotape which accompanies the *PASS* kit contains four different stories each one associated with a specific lesson.

- 'I'm Okay' shows how even low blood alcohol levels adversely affect driving skills.
- 'Party of the Year' explores the choices that are available to young people to avoid the drink-driving situation.
- 'Consequences' examines the outcomes of drink-driving behaviour. These include the likely consequences with parents and police.
- 'Assertion' provides students with models of assertive strategies that they can use to avoid being a passenger with a drink-driver.

Author: Road Safety Education, Department of Education,

Queensland

Title: Road Safety Education

Published by: Road Safety Education, Department of Education,

Queensland

This is a three page document produced by Road Safety Education for teachers' use. There are no aims or objectives or details of resource materials, only a list of topics to be taught at each year level.

Years 1 and 2 are combined and emphasise playing safely, pedestrian and passenger safety. At Year 3 level the visibility of the pedestrian and seat belts are emphasised.

Bicycles are introduced in Year 4 but the topics are concerned only with choosing the correct bicycle, dangers associated with cycling and safe places to ride. Pedestrian safety is continued with the emphasis on road crossings and roads without footpaths. Also consideration for other road users is included.

Year 5 continues the theme of pedestrian safety, focusing on crossings at intersections, visibility and night crossings. Cycle safety introduces some practical cycling skills such as braking, stopping distances and maintenance of brakes.

For Years 6 and 7 the topics are combined and concentrate solely on cycle safety, looking at traffic signs, behaviour of other cyclists and safety equipment. The Safe Cycling Course is recommended.

These topics are followed by a list of teaching techniques which may be used for road safety lessons or for integrating road safety into other areas of the curriculum. Author: Queensland Road Safety Council

Title: Road Safety Education

Published By: Queensland Road Safety Council

Road Safety Education consists of a series of six teachers' guides one each for:

pre-school and kindergarten

Years 1 and 2

Year 3

Year 4

Year 5

Years 6 and 7.

At the beginning of each guide is an introduction and rationale for teaching road safety. The format in the teacher's guides for Pre-school and Kindergarten and Year 3 differs from that for the other years. These two guides provide general information for each topic and this is followed by objectives and learning activities. For the other teacher's guides, objectives are not given.

At the back of each teacher's guide is a list of suitable teaching aids for that year. These can be ordered from the Council and include posters, cassettes, film strips, films and literature and project material.

At the pre-school and kindergarten level the road safety topics include:

- pre-crossing training
- the footpath
- traffic direction, speed and sound
- cars and seat belts
- travelling by bus.

For Year 1 the emphasis is on playing safely and pedestrian safety, while in Year 2 the emphasis is on pedestrian and passenger safety including travelling by bus.

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Year 3 concentrates on being alert at night, in bad weather and when riding

a bicycle.

The Year 4 topics include a short history of the bicycle, exploring reaction

time, traffic signs and pedestrian safety.

The topics for Year 5 include stopping time and distance, crossing roads,

being visible, early transport and statistics and graphs of children involved in

traffic accidents.

In Years 6 and 7 the emphasis is on traffic accidents and the factors which

cause accidents, road rules, vision, commuting to school and the effects of alcohol

on drivers.

Many of the activities in these teachers' guides can be easily integrated into

other subjects such as reading, science, maths, written expression and social

studies.

Title:

Road Safety Education News

Published by:

Road Safety Education, Department of Education,

Queensland

This is a one page (front and back) newsletter published monthly and distributed

to primary and secondary schools. It contains short articles about road safety,

current statistics, information on the latest resources, courses, etc.

It is through this newsletter that the Road Safety Education hopes to reach

high school students. The newsletter is sent to all student councils so that they

can disseminate the information to fellow students.

Title:

Safe Cycling

- a videotape and print resources package - Bicycle safety

Published by:

Production and Publishing Services Branch, Division of

Curriculum Services, Department of Education, Queensland

Safe Cycling is a road safety package containing a videotape and student handbooks, "Safe Cycling - the cyclist's handbook". The latter has been produced by the Road Safety Council of Queensland and is used by students taking part in their "Safe Cycling Course".

This package is suitable for students in upper primary school (9+ years) and lower secondary. The videotape entitled "Safe Cycling" deals with the key elements of bicycle safety and developing an awareness of the cyclist's responsibilities. The 30 minute videotape is divided into six parts:

- 1. Introduction a bike is not a toy
- 2. Maintenance
- 3. Safety equipment
- 4. Bicycle control
- 5. Rules of the road
- 6. Summary

An information sheet is provided to accompany the videotape.

It is recommended that the videotape be used as part of a safe cycling course, either shown in its totality to motivate students or, ideally, each segment viewed separately to support the topic being covered.

The cost of the videotape is \$23 and the student handbook is \$1 each.

Author: Queensland Road Safety Council

Title: Safe Cycling Course

Focuses on improving students' bicycle riding skills, the

need for correct bicycle maintenance and the use of bicycle

helmets

Published by: Queensland Road Safety Council, 1988

The printed material for this course consists of an instructor's manual and the cyclist's handbook. The course aims to teach 9 to 13 year old children correct bicycle riding skills and the ability to recognise and avoid traffic hazards.

The Safe Cycling Course is divided into four sessions, each of one and a half hours duration (15 minutes devoted to in-class activities and one and one quarter hours of practical activities).

It is recommended that the class size be limited to twenty students and for the practical exercises the ratio should be one instructor to four students.

The instructor's manual has been written for teachers and volunteer instructors who have completed a Safe Cycling Course in-service. At the beginning of the manual is an introduction and a list of general objectives. The first page of each session contains:

- an outline of the session
- specific objectives
- lesson content 15 minutes
- bicycle exercises 1 1/4 hours
- materials and aids needed

This is followed by very detailed notes on how to run the session. Each page is divided into two columns, one "What to Do" and the other "What to Say". The first column contains sub-headings for easy reference to the student book, advice and guidance to the instructor. The "What to Say" column contains what

the instructor is to say together with questions and the answers. Throughout this section there are many diagrams and illustrations to aid the instructor.

Session One is an introduction to the course and the theory section focuses on the need for signs and rules, the cyclist's responsibilities, choosing a bicycle, maintenance and helmets. The practical section includes a bicycle check, mounting, riding, turning, braking, avoiding an obstacle and one hand steering.

During the second session traffic signs and signals, hand signals, braking and parking and locking the bicycle are discussed. This is followed by the practical session on slow riding, balance skills, stopping, pattern and slalom riding.

The third session begins with an in-class lesson on road markings, riding in traffic, giving way, right and left turns, overtaking and highway riding. The practical riding exercises include change in balance, riding up to, stopping and giving way at an intersection.

The final session called "Defensive Cycling" discusses visibility and equipment for night riding and stopping distances. The practical session begins with a bicycle check and is followed by the "Rodeo" which is the test of all the skills the students have been taught in the previous sessions. It is recommended that successful students should be presented with a certificate.

At the back of the manual are sheets which can be photocopied for the instructor's use together with answers to the students' tests.

The student handbook contains information corresponding to each session together with many helpful diagrams and illustrations. At the back is a bicycle check list and three test papers, which are to be completed by students at home, one after each of the first three sessions.

A "Rodeo" course, the lay-out for which is given in the instructor's manual, needs to be marked out on a suitable riding surface in the school yard.

Author:

Transport Department, Queensland

Title:

Starting School

A parent's guide to road safety instruction.

Published by:

Department of Transport, Queensland, 1989

This is a two page leaflet sent out to primary schools at the beginning of the school year and to be distributed to parents via the children.

It provides some very useful information on:

- using the footpath safely
- crossing the road safely
- driving to and from school
- the vital importance of car seat belts
- the facts (about seat belts and accidents)
- wearing your seat belt at all times
- bicycle safety
- travelling on school buses.

Author:

Department of Transport

Title:

Student Driver Education

Explores functional aspects of driving and car care and aims

to develop safe driving attitudes

Published by:

Department of Transport, Queensland

ISBN 0909891036 - Teacher's Guide

0 909 891 028 - Student Text

This student driver education program does not include any practical driving lessons but aims to teach students of Years 11 and 12 the functional aspects of

driving and car care and to develop safe driving attitudes. Only accredited teachers who have completed a four day in-service course are eligible to teach the course.

The teacher's guide is a very comprehensive document divided into 19 teaching units together with an introduction to the program and 73 reproducible masters to be used with the appropriate units.

The units follow a logical sequence of driving information and skills. Each unit gives an

- outline of the unit.
- objectives.
- classroom procedures.
- materials required including student text unit, videotapes,
   reproducible masters, parent newsletters, etc.
- connections reference to other units in the student text.
- references other printed material available throughout Australia.

The 19 units covered in this program are:

- 1. An Introduction to the Program
- 2. The Need for Regulations
- 3. Understanding the Car
- 4. Preventive Maintenance
- 5. Preparing to Drive Off
- 6. The System of Car Control
- 7. Steering, Braking and Gear Change
- 8. Automatic Transmissions
- 9. Acceleration and manoeuvring
- 10. Giving Way
- 11. Road Observation
- 12. Driving in Traffic

- 13. Cornering and Overtaking
- 14. Skid Prevention
- 15. Driving at Night
- 16. Alcohol and Other Drugs
- 17. Driving Under All Conditions
- 18. First Aid in Accidents
- 19. Buying a Car

There are 19 videotapes which are used throughout the programme and they can be borrowed from the Department of Transport. Other literature such as brochures, traffic codes, can also be obtained from the Department of Transport.

The student textbook is given to each registered student and the 19 units correspond to those in the teacher's guide. At the end of each unit is a glossary of unfamiliar terms, an at-home test and student activities.

There is no cost for the materials which are provided free to accredited teachers and their registered students.

The units follow a logical sequence of driving information and skills. Each unit gives an:

- outline of the unit.
- objectives.
- classroom procedures.
- materials required including student text unit, videotapes,
   reproducible masters, parent newsletters, etc.
- connections reference to other units in the student text.
- references other printed material available throughout Australia.

Author:

Road Safety Education, Department of Education,

Oueensland

Title:

The Safe Cycling Course

Published by:

Department of Education, Queensland

This manual has been compiled by the Road Safety Education Officer of the Department of Education and is used by teachers to conduct cycling courses when their school borrows a bicycle trailer. The manual is adapted from the Safe Cycling Course produced by the Queensland Road Safety Council. The aims and objectives and activities are the same but the lesson format has been altered to thirty minute sessions which can be integrated into the health education or social science curricula or as part of sport activities.

A suggested lesson format is given for 12 sessions and a list of resources and videotapes available from the Road Safety Education appears at the back of the manual.

Author: The Traffic Safety Section - Department of Transport,

Queensland

Title: Traffic Safety Projects - A Teacher's Guide for Years 8, 9 and

10

Deals with traffic safety education

Published by: Department of Transport, Queensland

This program uses a range of teaching techniques to integrate road safety ideas into the curriculum. So far materials have been written for English, geography, social science, health/physical education and citizenship education.

Each subject unit contains:

- an outline of the unit
- content objectives
- process objectives
- skills objectives
- affective objectives

These are followed by a range of activities.

Author:

Road Safety Division, Department of Transport, South

Australia

Title:

Cyclesafe

A practical bicycle riding course.

Published by:

Government Printer, South Australia

This programme written by the Road Safety Division of the Department of Transport of South Australia has been designed not only for use in schools but by the whole community.

It consists of two books:

- The Note Book is an eight page book which provides information on how to use the programme, bicycle helmets, bicycle crash statistics for South Australia from 1978-1987 and the law and how it affects the cyclist.
- The Exercise Book, which provides the details for the practical exercises to be taught. The exercises are divided into four major areas and are colour coded.
  - 1. Blue for Bike Handling which includes mounting and dismounting, looking further ahead, single and double lanes, and anticipating hazards and acting appropriately.
  - 2. Red for Braking which includes correct braking for footbrake and handbrake.
  - 3. Yellow for Defensive Cycling This includes exercises on looking behind, balance-slow riding control, riding with one-handed control and turning on a figure eight.
  - 4. Green for Law Requirements includes hand signalling (balance and correct signals).

Each exercise is set out very clearly giving a purpose, objectives, unfamiliar vocabulary, instructor's notes, equipment needed, points to be demonstrated and the practical exercises. Photographs or diagrams of important points are included for each exercise. It is recommended that each lesson should be no more than one hour's duration and that the class be divided into groups of about 8-10 students per instructor.

At the end of the book is a two page evaluation checklist of all the exercises.

The Exercise Book is not large, it is wire bound and the pages are of a sturdy cardboard which makes the book easy to handle and ideal for outdoor situations.

Cyclesafe is essentially a programme to teach the practical skills of safe cycling and does not include any written work, safety checks of bicycles or knowledge of bicycle maintenance. However, it points out that Cyclesafe does complement other bicycle safety programmes and indicates that further resource material is available from the Education Department of South Australia.

Cyclesafe has been produced to show teachers, parents and volunteers how important bicycle safety is and how simple it is to teach the Cyclesafe course.

Author:

R-7 Sub-Committee

R-12 Road Safety and Driver Education Curriculum

Committee, South Australian Education Department

Title:

Getting There and Back Again - Draft Only, 1986

A road safety syllabus for Years R-7 covering passenger,

pedestrian and cyclist safety

**Publisher:** 

Road Safety Division, South Australian Department of

Transport

This draft document *Getting There and Back Again* is intended to be a guide from which schools can develop their own road safety programme. It outlines the topics that need to be covered at each year level and emphasises that there should be a heavy practical component for children to experience real life traffic situations.

There are three main areas, passenger, pedestrian and cyclist, each one colour coded and divided into year levels. An overview of topics for all primary years is set out at the front followed by a list and description of three major resources.

At the beginning of each section is an introduction containing background information for the teacher.

The teaching of passenger and pedestrian safety is concentrated in Years R to 3 with the development of positive attitudes and reinforcement of knowledge and skills in Years 4 to 6. The need for parent education through leaflets and newsletters is recommended in Years R and 1.

The area of bicycle safety is commenced in Years R to 3 but it is recommended that children of these ages be discouraged from riding on or near roadways. Hence the main aim in Years R to 3 is to teach children 'safe' and 'unsafe' places to ride.

The major thrust for teaching bicycle education to students takes part in Years 4 to 7. The topics for all four years are the same:

- bike maintenance
- helmets/apparel
- riding skills
- traffic skills
- road rules
- bicycle recreation Years 6 and 7 only

However, the learning activities increase in number and difficulty in successive years. The practical riding components of this section are to be taught under controlled conditions.

For each topic in each of the areas of road safety an aim is given followed by a teaching activity. At the end of each topic is a list of teaching references including books, leaflets, posters, audio-visual aids. 150

Title:

Pic-a-Pak

Produced by:

Educational Technology Centre, 1980

Education Department of South Australia

The Educational Technology Centre has produced a number of *Pic-a-Pak* kits which consist of a strip of 35mm colour transparencies which need to be cut and mounted as slides. These are accompanied by a set of teacher's notes which contain introductory and background information, notes to accompany the slides, and suggested ways the pak can be integrated with different subjects.

The titles include:

- Walk Don't Walk
- Road Signs Part 1 and Part 2
- Signs and Symbols
- Traffic Lights
- Ride for Your Life.

Title:

Ride for Your Life - Bicycle Safety Education

Produced by:

The Road Safety Curriculum Committee, Education

Department of South Australia, 1981

Ride for Your Life is a bicycle safety package which was written for primary schools to be used in conjunction with the Road Safety and Driver Education Syllabus. Outline and Curriculum Guide R-12. It aims to develop children's bicycle skills and techniques and attitudes towards safe road use.

The teacher's manual includes lesson notes, teacher information and resource material for practical activities. Plans for a bike course which can be marked out on the playground are also given.

In the package are 12 cards, one for each lesson of one hour's duration.

Each card contains:

- lesson topic
- objectives
- material required for the lesson
- teacher information with corresponding student activities
- resource materials.

## The lesson topics are:

- 1. The bicycle size and riding position
- 2 Bicycle identification, maintenance and control
- 3. Bicycle inspection, intersection control and rules for the road
- 4. Traffic knowledge road signs, line markings and give way signs
- 5. Pedestrian crossings
- 6. Ride to survive right turn procedure
- 7. Braking and swerving
- 8. Visibility, observation and self preservation
- 9. Riding skills
- 10. Group riding techniques
- 11. On the road
- 12. Test of practical tasks and written knowledge.

There are masters of a bicycle inspection checklist and a bicycle identification record sheet which may be copied. A set of overhead projector transparencies are also part of this package.

Author: Road Safety Curriculum Committee

Education Department of South Australia

Title: Road Safety and Driver Education

This is a syllabus outline and curriculum guide for R-12

Published by: Publications Branch, Education Department of South

Australia, 1979

ISBN 0724349707

The syllabus outline is divided into three levels -

Year R - 7 Road Safety

Years 8 - 10 Road Safety and Pre-driver Education

Years 10 - 12 Driver Education

There is a general introduction together with aims and objectives and a syllabus outline at the beginning of the book.

Each level is divided into topics with a number of core units and optional units. While not sub-divided into year levels the core units appear to develop a sequential programme in road safety.

For the primary school level and Years 8 - 10, there are three major topics each, while at the Years 10 - 12 level the Driver Education programme contains four topics plus a practical driving component.

For R - Year 10 each topic is sub-divided into units - core and optional, and each unit contains:

- objectives
- key words for primary grades
- subject relevance for high school grades
- content to be taught
- a list of activities which may be practical excursions or theory to be integrated into other subjects

• resources – for Years 8 - 10 only.

At the end of each section is a list of resource material.

For the Student Driver Education section the format is slightly different. There is an introduction to the syllabus, general aims and objectives and a course outline. The topics are then sub-divided into units and a brief description of the content to be taught.

Author: Road Safety/Driver Education

Title: Road Safety for Pre-school Children

Published by: Road Safety/Driver Education, Marden Curriculum Unit,

Education Department of South Australia

Road Safety for Pre-school Children is a booklet which contains a brief introduction explaining that there are no curriculum guidelines (in South Australia) for pre-school children, mainly because children of that age (4-5 year olds) are not ready for formal education. However, it does suggest ways in which teachers may introduce road safety to pre-schoolers through short activities and the attitudes they need to develop such as:

- use of seat belts
- safe places to play
- bikes are not toys
- safe places to ride bikes
- safety when walking near or crossing the road.

The following two pages contain ideas for activities adapted from a primary school package called *Take the "Magic Bus" to Safe Places to Play*. These are simply activities, listed under different subject headings, that the teacher could use to introduce road safety into his/her programme.

More ideas to incorporate road safety activities into a pre-school programme are given on the next five pages. This is followed by an example of a pre-school programme on the theme 'Transport'. It is a fortnight's programme of discussions and activities dealing with various types of transport, in particular road transport, aiming to make children aware of road safety. All activities and resources are listed.

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Title: Road Workers

Produced by: The R-12 Road Safety Curriculum Committee of South

Australia

Road Workers is a set of 10 cyclostyled sheets containing road safety lesson ideas and 27 worksheets for students. These sheets can be used in conjunction with the Year 4 social studies "Learning and Living" unit entitled "Worker" or they can be integrated into other areas of the curriculum. The ideas can be integrated into language arts, art and craft, music, science, maths and social studies.

The ideas and worksheets are suitable for Years R-4.

Title: Take the "Magic Bus" to the Safe Places to Play

Produced by: The R-12 Road Safety Curriculum Committee of South

Australia

This is a set of looseleaf sheets of learning activities designed for Years R - 4 by the R-12 Road Safety Curriculum Committee. They are activities which could be used to develop the theme "Safe Places to Play".

They include ideas which can be integrated into language arts, art and craft, science, maths, physical education and social studies. There are a number of worksheets which can be photocopied for student use.

Author: South Australian Police

Title: The Complete Driver's Companion - Student driver

education

Published by: State Government Insurance Commission of South

Australia

ISBN 073804186

Most of the material in this student driver textbook has been reproduced with permission from the *Student Driver Education* student text produced by the Queensland Road Safety Council. Some alterations have been made such as the omission of Chapters 1, 3 and 18 to be replaced by:

- Chapter 1 The Motor Vehicle and Society
- Chapter 3 Controls of the Car
- Chapter 18 Driving in Remote Areas

Other omissions include the chapter summaries and tests.

A further two chapters have been added. These are Chapter 20 - Towing a Caravan and Chapter 21 - A Guide to Practical Instruction.

Each student of Year 11 or 12 who attends the Police Youth Driver Training lectures (two by 2 hours) is given a free copy of this manual.

Author: Education Department, Tasmania.

Title: Health Education in Tasmanian Schools and Colleges

- A Curriculum Framework - Draft

Published by: Education Department, Tasmania, 1987

This health education document has eight curriculum topics and road safety is incorporated into the topic called 'Safety and Accidents'. The curriculum framework is divided into three sections, K to Year 4, Years 5 to 8 and Years 9 to 12.

Every school in Tasmania receives at least one visit a year, more in some cases, from a Road Safety Officer of the Transport Department. It is his role to teach some road safety to all school children.

Using the guidelines set down in the curriculum framework, schools will develop their own health programmes and include road safety to suit their needs.

The topic of 'Safety and Accidents' is divided into a number of sub headings. For K to Year 4 the main focus for road safety is on:

- pedestrian and cyclist safety (using the assistance of the Road Safety Officer)
- use of cycling helmets and seatbelts
- traffic lights and road signs
- the role of the police officer
- procedures for coping with an emergency.

For Years 5 to 8 the focus is the same except there is a much greater emphasis on developing the knowledge and skills of the cyclist. With the assistance of the Road Safety Officer as appropriate, safe riding techniques, awareness of traffic hazards, warning systems and road markings will be included into the road safety programme.

In Years 9 to 12 the emphasis is on driver education again with the assistance of the Road Safety Officer. The content of this section includes:

- to learn and practise safe driving techniques.
- to be aware of problems associated with drug use and driving.
- to become familiar with traffic regulations and a variety of road conditions.

Other topics to be studied in the road safety area are to discuss the function of protective clothing, traffic lights and road signs and to understand the procedures for coping with an emergency.

Author: Ron Shepherd

Title: Bike Ed.

Published by: Road Traffic Authority, Victoria, 1988

ISBN 0724167889

This Bike Ed Kit is the revised edition of the original one published in 1979. It is a far more compact and attractive package than the earlier edition and consists of:

- an instructor's manual
- 3 vehicle cards
- 8 discussion prints, which are photographs with captions
- 30 certificates

These are packaged in an easily carried plastic covered folder which can be folded into a stand to display the discussion prints.

The *Bike Ed* Course is for students aged 9-13 years and it aims to teach children to ride safely and competently on roads and paths. The 'core' topics are a set of sequential practical activities with some classroom activities which can be integrated into mathematics, science, physical education and art. Throughout the instructor's manual the 'core' topics emphasized include:

- equipment
- handling skills
- riding skills
- simulations and road rules
- traffic skills
- local routes
- certificate.

Optional units have been included to add additional interest to the course.

These are:

- footway riding (bike paths)
- additional riding skills (slalom, balanced stop, rock dodging, instant turns)
- rodeo
- picnic
- fixing your bike
- further activities which may be used to develop a 'Bicycle' theme.

Each topic is colour coded and set out very clearly for the teacher giving suggested time allocation, venue, age level, class organisation, preparation, objective, evaluation, why the topic is important, list of activities.

There are many photographs of children performing certain skills to be taught, e.g, wheeling a bike, riding between markers, scanning, braking procedure, coming to an intersection. These would be very valuable to the instructor to ensure he/she understands fully all the procedures to be taught. Also, there are some worksheets and letters to parents which may be photocopied.

Immediately following the 'core' topics is a unit entitled 'Starting Bike Ed in your School'. This gives school staff ideas on how to set about incorporating bikeed into the school curriculum, ways of timetabling, how to involve the community in the course, sample letters to parents a list of resource materials needed for each topic, information on suitable bicycles, helmets, vests and setting up a school policy.

The amount of time each teacher would spend on the course would vary from between 10-20 one hour lessons depending on the bicycle-riding experience and maturity of the students.

Generally teachers or volunteers from the community who teach the *Bike Ed.* Course are required to complete a two-day instructor's program.

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**Author:** Road Traffic Authority of Victoria

Title: Children in Traffic

A pamphlet concerned with crossing roads, seatbelt wearing

and cycling

Published by: Road Traffic Authority, Victoria

This is a two page pamphlet written by the Road Traffic Authority of Victoria and aimed at parents and other caregivers. It highlights the reasons why children are at risk on roads and points out ways parents and caregivers can help children of different age groups understand road safety.

Author: Jenny Houlihan

Title: Language on the Road

Focuses on passenger, pedestrian and bicycle safety

Published by: Longman Cheshire, 1987

ISBN 0582657903

This is a teacher's manual which contains a sequential traffic safety program that can be used in primary schools. The introductory chapter gives the rationale for teaching road safety, suggestions on how to use the book, introduces the characters 'Careful Cobber' and 'Mad Mate' and gives evaluation techniques.

'Careful Cobber' represents the friendly, responsible road user while his friend 'Mad Mate', who lacks any understanding of road safety, causes accidents and unhappiness. These characters are used to reinforce and reward positive safety attitudes and behaviour. It is the role of the students, through the use of 'Careful Cobber', to teach 'Mad Mate' the way to use roads correctly.

The program consists of 37 topics focusing on pedestrian, passenger and bicycle safety. A suggested division of the topics for the seven years of primary school has been made:

Topics	1 - 8	-	Introductory year
	9 - 13	-	Year 1
	14 - 18	-	Year 2
	19 - 23	-	Year 3
	24 - 27	-	Year 4
	28 - 32	-	Year 5
	33 - 37	_	Year 6

## The topics include:

- footpaths
- traffic on roads
- crossing the road near parked cars
- safe places to play
- seatbelts
- passengers
- road rules
- signs and lines
- visibility weather, colour
- cycling
- helmets
- stopping distance
- cyclist and rules

Each topic gives the purpose, essential experience, learning activities, a list of follow-up activities, and reinforcement activities involving 'Careful Cobber' and 'Mad Mate'. There are blackline masters which may be photocopied and used with the appropriate topics.

At the back of the book information is provided on how to set up a cycling skills course, the preliminary procedures and the basic skills that need to be taught.

A set of four, colourful reading books have been written for use in conjunction with this safety program in the junior primary levels. They are entitled:

- Crossing the Road
- Footpaths
- Roads
- Traffic

Author: Geor

George Sarantis

Title:

Roads and Traffic

Deals with various aspects of the road traffic system

Published by:

Curriculum Branch, Education Department of Victoria, in

conjunction with the Road Traffic Authority (1984)

ISBN 0 7241 7399 4

(Set)

0 7241 7411 7

(Student Resource Book)

0 7241 7412 5

(Teachers Book)

This unit of road safety has been designed to be integrated into the curriculum in subjects such as social science, geography, humanities, integrated studies and social studies at the middle-seconday level, i.e. Years 9 and 10. The material consists of a teacher's guide and a student resource book.

The aim of the unit is to help students understand various aspects of the road traffic system. The teacher's guide sets out the rationale and objectives for teaching road safety together with detailed information for each of the nine student activities presented in the student resource book. There is also a list of other useful resources, such as films, books, pamphlets, accident statistics, that the teacher may wish to use. This is followed by a copy of the student resource book which contains factual information, stimulus material and activities.

By studying this unit it is anticipated that students will be able to -

- Gain an understanding of traffic, traffic management, the hierarchy of road, intersections.
- Understand the need for such features as median strips, traffic lights and road signs.
- Recognise problems that are present on roads to-day.
- Evaluate road locations in terms of safety and function.
- Understand the road laws.

Author:

Road Safety and Traffic Authority of Victoria

Title:

Roadswork - Road Safety for Primary Schools

Published by:

The Publications and Information Branch, Education

Department of Victoria, in conjunction with the Road Safety

and Traffic Authority

ISBN 07241 26597 - Roadswork Teacher's Manual

This road safety material was designed for primary school students and was first published in 1982. 'The Kit' consists of -

- a teacher's guide
- a set of 38 worksheets
- a set of 10 coloured discussion prints
- an audio cassette of traffic sounds
- three sets of slides

The teacher's guide contains an introduction and a rationale for teaching road safety. It aims to provide teachers with a sequential program with the emphasis being placed on pedestrian safety together with relevant sections on passenger safety and off-road cycling. The program is designed to be integrated with other subjects in the curriculum through discussion, practical experience and follow-up classroom activities.

The topics listed in the teacher's guide are -

- Introducing Road Safety
- Footpaths: Discussion and Reality
- Roads and Vehicles
- Speed
- Visibility and Pedestrians
- Safest Route to School
- Crossing Roads

# • The Crossing Procedure.

It is recommended that a teacher follow the topics as presented in order to develop a sequential program.

The guide is not only organised sequentially, but in an "ungraded" format. Work in the first section (white) is easier and is a prerequisite for the second section (grey) and both these sections should be completed before commencing the third section, the road crossing topics.

The worksheet masters are graded in suitability and use of these is indicated throughout the teacher's guide. They are designed to reinforce concepts and activities introduced in the guide.

The discussion prints are large and colourful and on the back of each are objectives, focus questions, teacher information and follow-up activities.

The slides are divided into three sets.

- Slide Set 1, Roads, could be used to introduce the work on "Roads and Vehicles" or as a revision of this work.
- Slide Set 2, Safe Places, although these can be shown at any time, they are particularly relevant when studying crossing procedures.
- Slide Set 3, Crossing Situations, can be used to reinforce crossing
  procedures for children, e.g. school crossings, pedestrian crossings,
  crossings using traffic lights, pedestrian operated crossings,
  uncontrolled crossings.

Printed in the guide are focus questions for the teacher to use with each slide.

The audio cassette contains sounds of general traffic noise in busy and in quiet streets and traffic sounds which help to develop concepts of speed, distance and danger. The teacher's guide lists the sound as they are heard on the cassette and suggests teaching activities and discussions to follow.

In 1986 a supplementary package was developed and this suggests a program to be followed by each year level in the primary school.

The package consists of:

- a poster an overview of Roadswork as a sequential program for Years Prep. - 6.
- Easy Roads to Roadswork a book which sets out a suggested program that can be easily followed by the class teacher at any year level.

Each year level program contains:

- Content to be taught
- Teacher's guide pages
- Discussion print numbers
- Worksheet numbers
- Slides
- Cassette Side
- Films and videotapes.

In the programs for Years 4 - 6 the topics are cross-referenced with *Bike Ed*. Additional resources useful to the program are listed at the back of the book.

"Wonderful Ways with Worksheets" – this book contains ideas for extending the use of the 38 worksheets into other subject areas. These suggestions are categorised under subject headings. For example, for Worksheet 1, there are 8 language activities, 3 art activities, 1 maths activity and 1 social studies activity provided.

Geoff Shanks

Title:

Science and the Road

The Driver

- The Vehicle

Deals with the biological elements involved in driving and

the physical laws involved in vehicle movement

Published by:

Road Traffic Authority, Victoria

ISBN	0 7241 2650 3	(set)
	0.7241 2723 2	(The Driver - Teacher's Guide)
	0.7241 2652 X	(The Driver - Student Book)
	0.7241 2658 9	(The Vehicle - Teacher's Guide)
	0 7241 2651 1	(The Vehicle - Student Book)

Science and the Road is a road safety program which can be integrated with the Year 10 science course in Victoria. The package consists of a human biology unit, "Science and the Road - The Driver" with a Teacher's Guide and Student Book and a physics unit, "Science and the Road - The Vehicle" with a Teacher's Guide, a Student Book, a set of slides and five overhead projector transparencies.

"The Driver" considers the biological elements involved in driving and using the road, these being the effects of drugs, alcohol, age and fatigue on the nervous system. The topics covered by means of experiments and activities, are:

- Reaction Times
- The Nervous System
- The Vertibrate Brain
- Age
- Alcohol
- Other Drugs
- The Eye
- Eye Movements

- Peripheral Vision
- The Ear
- Directional Hearing.

The physics unit, "The Vehicle" deals with inertia, friction, energy and circular motion. There is a core unit for all physics students and extension exercises for the more able. By means of experiments and discussion the following topics are covered:

- Inertia
- Stopping
- Static Friction
- Bikes
- Speed and Stopping Distance
- Mathematics
- Curves
- Energy
- Extension Exercises
- Mathematical Calculations
- Vehicle Design
- Tyres
- Internal Combustion Engine
- Oils
- Alternative Types of Motors.

The teachers' guides for both "The Driver" and "The Vehicle" contain the rationale, aims and objectives for teaching road safety. Additional resources are listed at the back of each guide.

Author: Sally O'Donohue

Title: Starting Out Safely - Traffic Safety Education for Pre-school

Children

The subject for this program is pedestrian and passenger

safety

Published by: Education Services, Road Traffic Authority, Victoria

ISBN 073060327 Starting Out Safely

The intention of this program, designed for children aged 3.5 to 5 years old, is that Road Safety be taught regularly throughout the year. It emphasises the need for first hand or concrete experiences. The program is divided into four units, one for each term and each unit is colour coded for easy reference.

The program consists of:

- A teacher's manual containing teacher information and learning activities which are divided into three sections, the introductory or core experiences, follow-up experiences to reinforce these concepts, and extension experiences. The learning activities are presented very clearly for easy use and an indication is given as to when discussion prints, audio tape, parent sheets, etc., are to be used. The last section of the manual is a resources unit containing information such as the involvement of parents, child restraints, walks and excursions, visitors, craft activities, extra resources and song sheets.
- A program planner, which enables the teacher to plan a Road Safety program for the year.
- Parent sheets containing information for the parent and activities that reinforce the concepts being developed at pre-school.
- Passenger Safety Certificates which can be used to motivate children to wear their seat belts and which contain information for parents about the wearing of seat belts.

- Discussion prints. There are eight large colourful pictures of particular traffic experiences which are easy to interpret. On the back of each print are 3 or 4 discussion points to assist the teacher.
- Audio tape contains four catchy songs each with a specific message and four listening activities which the children would enjoy.

The four units of the program deal with:

- Unit One Travelling Safely
   This unit includes travelling to and from a centre, using restraints, and other safe passenger issues culminating in a special fun day at the end
  - of term when parents are invited to join in activities and watch the
  - -Unit Two - Looking, Listening and Waiting

presentation of the "Passenger Safety Certificates".

- Deals with safety and the road environment. Learning activities include using footpaths, holding hands, looking and listening, different types of road and traffic lights.
- Unit Three Safe Play
  - The activities in this unit aim to teach the children to be able to stop themselves when in motion, to identify safe places to play, and to be aware of certain safe play issues e.g, wearing helmets when riding bikes.
- Unit Four Going Places
   Includes a revision of all the concepts taught and preparation for going to and from school safely the next year. Activities include taking an excursion to the school, taking the safest route, crossing the road at marked school crossings, crossing with an attendant, and understanding road signs.

Throughout the teacher's manual are many useful tips for teachers and reminders of the abilities and limitations of children of pre-school age.

Lyndall Horton-James

Title:

Streets Ahead - Traffic Safety Education for Primary Schools

Focuses on pedestrian and passenger safety

Published by:

Road Traffic Authority, Victoria

ISBN 0724177132 series

0 7241 7714 0 - Prep - Keeping Safe

0 7241 7715 9 - Year 1 - Getting There Safely

0724177167 - Year 2 - Moving On

0 7241 7717 5 - Year 3 - On Your Own Two Feet

0724177183 - Year 4 - Coming to Grips with Traffic

0 7241 7719 1 - Years 5 and 6 - Traffic Safety Units

This programme has been developed by the Victorian Road Traffic Authority and focuses on pedestrian and passenger safety. It consists of six teachers' manuals, one each for Prep to Year 4 and a combined manual for Years 5 and 6. Also included is an audio tape of songs and listening activities and there is a set of twelve large, colourful discussion prints with questions, discussion points and follow-up activities printed on the back.

The programme for the years Prep to Year 4 is divided into the following topics:

- 1. The local area
- 2. Crossing procedure
- 3. Passengers
- 4. Pedestrians
- 5. Road and Vehicles
- 6. Self and Sensibility

The programme for the Years 5 and 6 concentrates on developing responsible behaviour.

The teacher's manuals have been well prepared giving the rationale for teaching road safety and introductory information for the teacher. The emphasis is on first-hand experience, observing and interacting with traffic. It is intended that the *Streets Ahead* programme be integrated with many subjects such as language, maths, science, art and music.

Each of the Prep to Year 4 teachers' manuals is divided into five or six topics and for each topic concepts, skills, attitudes and objectives are given. There may be three to four objectives per topic and each objective has several activities from which teachers may choose depending on the amount of time they wish to devote to that objective.

For each topic there is a Topic Guide which outlines the number of activities which need to be covered in order to complete the minimum or core experiences for that objective. There are also several other activities for teachers who wish to reinforce or expand on an objective.

A list of resource materials needed for each activity is given e.g. worksheet 4, paste, scissors, paper, chart paper. Other resources to supplement *Streets Ahead* are listed in the front of each teachers' manual but they are not graded into year levels.

At the end of each topic (6-9 activities) there are culmination and evaluation tasks. Blackline masters of worksheets, songsheets, certificates and letters to parents are found at the back of each teacher's manual.

The programme for Years 5 and 6 has been divided into four units and each unit subdivided into a number of topics with their own specific objectives.

The units are entitled:

- Using the Road
- Transport and Change
- Traffic in the Media
- Developing Responsibility

When planning a program at these year levels it is suggested that the teacher treat a maximum of two units per year. The activities have been divided into core or extension experiences allowing the teachers to choose those most appropriate to their class. Resource material is listed for each activity and blackline masters are at the end of each topic.

While units 1 - 3 are directly related to road use, road safety, and transport, Unit 4 aims to develop responsible behaviour, positive attitudes and a system of values which may help to guide many aspects of the students lives, including how they participate in the traffic environment.

A videotape has been made to promote the teaching of road safety and shows the appropriateness of the *Streets Ahead* material. The videotape contains interviews with teachers and shows examples of lessons from the *Streets Ahead* programme at all year levels.

Driver Education Centre of Australia

Title:

Student Driver Program

Focuses on developing correct basic driving skills and

positive attitudes towards traffic regulations and driving

tasks

Published by:

Driver Education Centre of Australia, Shepparton, Victoria

The Student Driver Program is an intensive five day course for students of Years 10 to 12 and is conducted at the DECA Centre in Shepparton, Victoria. The course consists of both theory and practical activities and students are given in-car instruction, taught road law and the basic fundamentals of operating and maintaining a car.

The course consists of twenty-eight 50 minute lessons. A theory lesson is given first and is then followed up by a practical session. The theory lessons are conducted in a classroom using, videotapes, overhead projectors, computer programmes, chalkboard and worksheets. The practical sessions are given in late model four cylinder cars with one instructor to four students. The students drive within the specially set-up driving track at the DECA Centre.

The course outline is as follows:

### Theory

Lesson 1 - Basic Vehicle Maintenance

Lesson 3 - Physical and Mental Requirements of the Driver

Lesson 5 - Road Law

Lesson 7 - Steering, Gear Changing and Braking

#### Practical

Lesson 2 - Vehicle Inspection Cockpit Drill

Lesson 4 - Stopping and Starting

Lesson 6 - Steering and Gear Changing

Lesson 8 - System of Car Control

Lesson 9 - System of Car Control Lesson 10 - Systems and Observations (Signs and signals) Lesson 11 - Signs and Signals Lesson 12 - Reversing and Pullpush Steering Lesson 13 - Road Law Lesson 14 - Consolidation of Previous Lesson Lesson 16 - Three Point Turns Lesson 15 - Visibility, Manoeuvres and Vehicle Control Lesson 17 - Cornering and Lesson 18 - Parking Overtaking Lesson 19 - Road Law Lesson 20 - Overtaking and Cornering Lesson 21 - Alcohol - attitudes, Lesson 22 - Consolidation effects, B.A.C., Penalties Lesson 23 - Night Driving -Lesson 24 - Night Driving problems and precautions Lesson 25 - Mechanised Death Lesson 26 - Consolidation of all Practical Lessons Lesson 27 - Tests on Road Law Lesson 28 - Final Assessment Road Craft Drive

There is a Student Driver Booklet which contains some notes, definitions and spaces for students to fill in their own information. During the course students complete five test sheets, one on each of the first three days and two on the final day.

It is not intended that students will be up to licence standard by the end of the course. Author: George Sarantis

Title: Surveys

Teaches survey techniques using a traffic safety theme

Published by: Road Traffic Authority of Victoria (198 6)

ISBN 0724173986 (set)

0 7241 7398 5 (teacher's book)

0 7241 7398 7 (student book)

Surveys is a social science unit written for middle secondary school students. It aims to integrate the teaching of survey techniques with traffic safety. The material consists of a Teacher's Guide and a Student Resource Book.

While developing a basic understanding and knowledge of surveys this unit aims to make students more aware of safe traffic behaviour through:

- Evaluating the behaviour of teenagers on bicycles.
- Providing positive suggestions on how to cycle more safely.
- improve their knowledge of the road laws and regulations.

The activities are in the form of practical research work with follow-up tasks.

The teacher's guide contains a set of duplication masters and a list of other resource materials.

Howard M. Brown

Title:

Survival Trails

Moving around and surviving in the Local Neighbourhood

This book aims to develop traffic safety strategies

Published by:

Road Traffic Authority of Victoria, 1986

ISBN 0724156291

This book is a teacher's manual for a social science unit for junior post-primary school students in Victoria, i.e students of Years 7 and 8. In the introduction the rationale for teaching traffic safety strategies are given as well as knowledge, skills, values and objectives.

The material developed in this unit relates to a number of social science themes and can be integrated into existing programmes. The most common themes are:

- Being Human Year 7
- Belonging to a Community Year 8
- Cross-level/subject topics:

Survival

Local Area Study

Mapping Skills

Survival Trails is divided into four sections which follow a sequence of ideas. The sections are:

- Travelling to School
- The Journey between Home and School
- Follow that Road
- Survival Trails

with a final section of extension activities.

The activities provided in the book include:

- Mapping Skills.
- Research and Data Gathering.
- Suggestions for Local Excursions and Fieldwork Exercises.

These activities are aimed to develop students awareness of traffic situations and to enable them to develop suitable survival strategies to deal with familiar and new traffic situations.

Each section includes an overview followed by a number of subsections each of which contains a teacher's guide for the activities. These are accompanied by blackline masters which can be duplicated for student use.

The programme has been designed for students of all abilities from the poorly-motivated to the highly-motivated. It is suggested that teachers select units which suit their needs or simply mix and match activities. A suggested guide of three different programmes shows how the material can be organised, one a "Filler" of 11-14 periods, another of 18-23 periods, (the "Unit Size"), and finally a "Term Size" programme.

The lessons in this unit are well planned and easy for a teacher to use. There is also a list of material and resources which would be helpful to the teacher.

Elsy Edwards

Title:

Teenagers, Alcohol and Road Safety

Highlights the dangers of drinking and driving

Published by:

Road Traffic Authority, Victoria, 1983

ISBN 072415194X

This publication is a teacher's handbook for use with students of Years 8, 9 and 10 and contains values clarification material dealing with alcohol and road users.

The introduction to the book gives statistical data and the rationale for teaching drink-driving education in secondary schools together with important background information.

The material could be integrated into the school curriculum and used by school counsellors and teachers of English, social science, transition education and human studies where open discussion occurs readily. Such teaching methods as group discussions, role-play, values clarification, debate are recommended.

The material is divided into three sections:

- Section 1 Provides information about alcohol, driving skills, problems caused by drinking and driving.
- Section 2 Deals with values clarification, socialising, family and group values, peer-group pressures and the importance of individual choice in deciding standards, behaviour and attitudes.
- Section 3 Offers strategies and suggestions on how to avoid dangerous situations and gives practice in decision-making skills.

It is recommended that at each year level at least three lessons should be given, one from each of the three sections. Each lesson outlined in the handbook contains teacher's notes and student sheets which can be duplicated. Other resource material such as reference books and films are listed.

Ahern, J. and Nolan, C. (eds)

Title:

The Age - Road Safety

Published by:

"The Age" Education Unit

ISBN 0 909930 627

This booklet is a selection of articles published by "The Age" newspaper between July 1981 and August 1987. It contains issues such as:

- Planning the physical environment
- Social Responsibility
- Women and driving
- Alcohol and drugs
- Cycling
- Legal issues

"Teenagers and Traffic" is a video which documents the use of the programmes Survival Trails, Roads and Traffic, Surveys, Science and the Road and Teenagers, Alcohol and Road Safety in schools.

Its aim is to make secondary teachers aware of what road safety material is available and how it can be integrated into many subjects using a number of curriculum concepts.

It shows typical lessons in schools which run these programmes, and teachers and students are interviewed and asked their opinions about the courses.

Jennifer R. Newlands

Title:

The Bike Ed. Course

Teaches safe bike riding techniques, road law, careful habits

and alertness in traffic

Published by:

Road Safety and Traffic Authority, Melbourne, Victoria, 1979

ISBN 07241 20440

The Bike Ed. Course was designed for 9 - 13 year old children and it contains both theoretical and practical components. The course was expected to take two terms to complete devoting at least one hour per week to it.

The kit contains a teacher's manual with worksheet masters, a set of fifteen discussion posters, and two sets of colour slides with an accompanying audio tape.

Prior to commencing this course with students, the teacher is required to attend a two-day in-service course. For the practical work involved it is suggested that the staff to student ratio be 1:10 and hence it is recommended that at least two staff members in a school should teach the course.

The course incorporates four main areas of skills:

- Sharing the road with others emphasises the way the road system
  works focusing on traffic signs and signals and behaviour required at
  key signs. It identifies procedures for riding in traffic, major hazards for
  cyclists and explains defensive strategies that bike riders should use.
- 2. Bike Maintenance identifies key features of a bike which must be kept in good working order.
- 3. Riding Skills the skills taught in this unit begin with simple exercises for control and lead to the important skills of emergency braking and

- turning. These exercise need to be taught on a skills course marked out on the playground.
- 4. On-the-road unit aims to give students the necessary experience of riding in real traffic situations. A few key strategies are emphasised such as riding up a hill, passing a parked car, the correct behaviour at stop and give way signs and the need to behave predictably. Prior to the commencement of this unit approval must be obtained from the Education Department to take the students onto the road. The ultimate test is an on-road certificate test over a 3-4 kilometre course. Each student goes alone and is judged by observers along the course.

The final unit is a Bike Rodeo which could be run at the end of the course as an incentive to complete the course or as an end of term activity.

Driver Education Centre of Australia (DECA)

Title:

The Careful Cobber Programme (2nd edition)

Subject:

Pedestrian, Passenger and Cyclist Education

Publisher:

DECA, Victoria, 1986

ISBN 0582 65790 3

The Careful Cobber Programme is a seven year (P-6) sequentially developed traffic safety education programme for use by teachers in primary schools.

Activities are presented in separate Grade level books (Prep to Grade 6). A teacher's guide entitled *Language on the Road* (Houlihan), contains scope and sequence plans and a wide variety of activities, ideas and information.

A number of books for children have been developed including such titles as 'Footpaths', 'Roads', 'Traffic', 'Crossing the Road'. Also available are wall charts and soft-toy hand puppets of 'Careful Cobber' and 'Mad Mate'. The puppets can be used to role play situations and consequences pertaining to both positive and negative safety behaviour on roads.

For schools using the programme a small motorised 'Careful Cobber' car can be brought to a school in the 'Careful Cobber' Van to visit the children. Schools are encouraged to visit the DECA centre in Shepparton where children are permitted to drive the 'Careful Cobber' cars as part of a follow-up activities day to the programme.

Ministry of Education, Victoria

Title:

Traffic Safety Education Curriculum Guidelines

A component of the Personal Development Framework P-10

Subject

Traffic Safety

Publisher:

Ministry of Education, Victoria, 1988

The volume contains the following sections:

Rationale

Teaching and Learning

**Programmes** 

Resources

The rationale examines why traffic safety education should be taught and considers especially children and teachers who are at risk when they undertake certain behaviours.

The content areas indicated are the transport environment, the vehicle and the human factor. The emphasis in teaching situations is upon student decisionmaking and inquiry/action.

Details are provided about resources which might be used in schools including off-road facilities available locally and at specialised centres such as the Keith Edmonston Regional Traffic Safety School and the Driver Education Centre of Australia.

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Author:

Traffic Safety Education Committee

Title:

Traffic Safety Education - Pre-Driver Education

Published By:

Department of Education, Victoria, December, 1982

This "Pre-Driver Education" document was designed to assist teachers new to Traffic Safety Education. The course is divided into nine units and each of these is then subdivided into a number of topics. For each topic information is given as to whether it is an essential or non-essential topic, the duration of the lesson, subject integration, suggested content, teaching techniques, resources and references. It is anticipated it would take 36 hours to cover the essential elements of the course, and a further 5 hours for the non-essential.

The nine units are:

- The development of the motor vehicle and its social implications
- The motor car its capabilities and limitations
- Economics of buying and running a car
- Transportation network
- The driver
- Road crashes
- Motor car and government
- Traffic laws
- Roadcraft

This programme does not include any student driver training.

Author: Education Department of Western Australia

Title: Health Education, K-10 Syllabus

Focuses on passenger, pedestrian and bicycle safety

Published by: Education Department of Western Australia

ISBN 07244 9837 0 K-10 Syllabus
Kindergarten Teacher's Guide
07309 0508 X Year 1 Teacher's Guide
07309 0652 3 Year 2 Teacher's Guide
Year 3 Teacher's Guide
107309 0516 0 Year 4 Teacher's Guide
07309 0684 1 Year 5 Teacher's Guide
07309 04059 Year 7 Teacher's Guide

Road Safety in the *Health Education*, *K-10 Syllabus* is included in the strand "Community and Environmental Health". Each teacher's guide contains teacher's notes along with suggested learning activities, student worksheets and a list of resources.

In the pre-primary year emphasis is placed on the importance of seatbelts and safe behaviour in moving vehicles, rules for crossing a road, rules for riding bicycles on cyclepaths and safe places to play.

The learning experiences include many practical activities involving crossing the road in small groups, simulated traffic situations and recognising traffic signs and signals.

For Year 1 the content to be covered is safety rules to and from school. This focuses on the safety kerb drill, traffic lights, crosswalk attendants, ways of travelling to school, behaviour in the car and bus, and on the senses of seeing and hearing as they relate to road safety.

The objective of the Year 2 topic is for the students to practise safety skills and apply their knowledge to minimize the need for first aid. Again the emphasis is on safe ways to cross the road, wearing of seat belts, recognising different sounds, dangers encountered when travelling to and from school, wearing bright colours on dull and wet days and safe places to play.

Road safety covered in Year 3 includes learning the procedures to cross the road safely, first in the playground then on the road; recognising safe places to cross the road; identifying road hazards in the local environment and traffic signs and signals. Some learning activities also include the road worthiness of bicycles, general bicycle riding safety and the wearing of protective apparel.

The major concerns at the Year 4 level (9 year olds) are that students should know the cycling rules of the road, the features of a well maintained bicycle and to be able to develop some practical cycling skills in a simulated situation. The syllabus suggests the use of the Victorian *Bike Ed* Course.

At the Year 5 level very little provision is made for road safety. Some awarenesss of safety practices and vehicle maintenance could be included in the topic "Safety requirements for machinery". Suggested activities include the research and discussion of safety components built into most cars and student surveys of passing traffic to note how drivers comply with traffic rules, e.g. observing signs, wearing seat belts, using indicators, adhering to speed limits, respecting crosswalks.

In the draft Year 6 syllabus (to be published in 1990) road safety is mentioned only briefly in the topic "Life-Style Diseases". In this topic it is pointed out that traffic accidents accounted for 3% of all deaths in Australia in 1986. Statistics are given indicating which age groups and sex are more prone to traffic accidents. It also points out that alcohol and inexperience are factors relating to traffic accidents.

In the Year 7 syllabus (the last year of primary school) road safety becomes part of the topic which deals with factors which are associated with accident occurrence and prevention. It looks at:

- 1. the human factors, eg. alcohol, fatigue, discourtesy, lack of skills, law breaking.
- 2. agents, eg. poorly maintained vehicles.
- 3. physical conditions, eg. bad weather, limited visibility around parked vehicles.

Provision is made to study accidents, in particular those of cyclists and pedestrians, of school age and the elderly.

At the secondary school level alcohol and road use and blood alcohol levels and the law are part of the Year 9 syllabus. In Year 10 students identify and consider the major factors which contribute to the road toll.

Terry Watt

Title:

Kangaroo Creek Gang

**Publisher:** 

Kangaroo Creek Gang Ltd., Subiaco, 1985

The Kangaroo Creek Gang package contains material on "Keep Australia Beautiful", tourism in Western Australia, and Safe Bicycle Riding. It consists of a teacher's resource file, a videotape and an audio cassette tape.

The cycling topic is concerned with riding a bicycle safely and the same topics are offered to middle primary and upper primary. However, it is expected that in the upper primary area the students will complete the activities in greater depth.

There are no bicycle skills taught but there is information regarding the setting up of a Bike Rodeo Competition and the promotion of a Bike Education programme based on the Victorian *Bike Ed*. One activity suggests that students approach the principal with the possibility of the school running a bicycle education programme.

An idea for using road safety as a theme is suggested and many activities for subjects such as oral language, written expression, reading, social studies, maths, science, art and craft, music and dance are given. There is also an overview indicating how each activity can be integrated into a number of subjects.

There is an audio cassette tape which contains songs and dances. The characters of the videotape are animated and there are three stories told, one for each topic covered in the resource file.

The videotape story for the safe bicycle riding segment contains some very good advice for your riders, such as, have a roadworthy bicycle, wearing a helmet and take bike-ed lessons.

Author: Health Department of Western Australia

Title: Live to Ride

Subject: Alcohol Education/Health Education

Publisher: Health Department of Western Australia, 1988

The package consists of a loose-leaf teacher's guide (33pp) and a videotape entitled "Live to Ride" (Parts I and II - 25 minutes).

The teacher's guide contains:

- (a) knowledge based activities.
- (b) skill-based activities on decision making, assertiveness and survival strategies.
- (c) worksheets on alcohol and its deleterious effects.

#### Audio Visual Aids

The Driver Education Centre of Australia (DECA) has produced a number of videotapes and also have in their library many films and videotapes produced by other agencies.

To make the selection of audio visual material easier, DECA have produced a video catalogue which lists all the videotapes that are for sale. Following the title is a brief summary of the content of the video.

The videos are classified under:

- Defensive Car
- Coach Division
- Motorcycle
- Four Wheel Drive
- Truck Division
- Learn to Drive
- Disabled Section

A number of videotapes called "Prepare to Drive Series" have been produced by DECA to be used in conjunction with the theory lessons of the Student Driver Education Course. Teachers and Student Notes have been prepared for use with each videotape. The videotapes are:

- The Key to Understanding Your Car
- The Winning Combination
- Getting Around
- Off and Running

The Victorian Road Traffic Authority has produced a catalogue entitled "Road Safety - Film and Video Catalogue - June 1988".

The films and videotapes listed are available for loan, free of charge, from the Film Library of the RTA. A brief summary accompanies each title. The topics the videotapes and films cover are:

- cycling safety
- child pedestrian and general child road safety
- how to drive
- defensive driving
- alcohol and drugs
- motorcycle safety
- first aid
- adult pedestrian safety
- seat belts and safety
- town planning
- teacher resources
- general

The age of the viewing audience ranges from lower primary school through to senior school level, teachers and parents.

Film Victoria have produced two videotapes for the Road Traffic Authority of Victoria. One advertises the *Streets Ahead* material which is available to primary schools. The other videotape points out the need for children to be taught bicycle safety and shows how the *Bike Ed*. Course can do just that.

The State Bicycle Committee have produced a videotape called "Ride Straight Kate". This shows the risks that children take and the dangers that confront them when riding in traffic. It also shows the advantage of having completed a *Bike Ed*. Course.

The Education Department of Victoria have had two videotapes made. One, "Bike Ed in Action" documents the aims and objectives of the *Bike Ed*. Course and shows the skills taught and types of lessons.

The other "Which Bike for You" shows the different types of bicycles that are available and how to go about selecting the right type and size.

The videotape "Bike Safety" was produced for the Shire of Ballarat. Its content shows:

- the types of bike paths in Ballarat.
- how parents can teach their children some bike safety skills.
- bike maintenance.
- the need for motorists to watch out for children.

"Teenagers and Traffic" is a videotape produced by the Road Traffic Authority of Victoria. It describes the use of road safety material written for secondary schools, shows typical lessons and interviews with teachers.

The materials described are:

- Teenagers, Alcohol and Road Safety
- Survival Trails
- Roads and Traffic
- Surveys
- Science and the Road

The videotape "The Way to Go" is produced by the Traffic Authority of NSW and discusses the need for teaching road safety in schools. It goes on to describe the programmes which have been produced. These are:

- Kids in Traffic
- Street Sense
- Are You in Control?
- Belt Up

The Educational Technology Centre for the Education Department of South Australia have produced a videotape called "Drink-Driving Education, Resource Materials". This videotape contains:

- "Drinking, Driving, Surviving" produced by the Office of Road Safety, Department of Transport, Australia. This videotape describes the affects of alcohol on driving skills and what a drinkdriver should do to counter this.
- "Saturday Night Again" produced by the Traffic Accidents
  Research Unit of NSW describes how a number of youths drink
  all night and when it is time to go home the driver's girlfriend
  refuses to let him drive.
- "The Thirsty Season" also produced by the Traffic Accidents
   Research Unit of NSW describes the procedures followed to
   produce an advertisement for a beer company.
- "Drink-Driving Advertisements" is a series of advertisements
  made in a number of Australian states and overseas. The
  emphasis is on don't drink and drive. One advertisement shows
  the importance of seat belts.
- "Al-Co-Hol a mini course for Junior High School". This is an American production which shows how to teach drink-driving education through role playing.

The Road Safety Division of the Department of Transport of South Australia have produced two videotapes. One, "Cyclesafe" advertises the course *Cyclesafe* and shows how it can be set up and contains examples of some lessons. The other, "Bicycle Helmets for Headstrong Children" begins by detailing statistics of bicycle accidents and fatalities and describes some ways of making bicycle helmets acceptable to children.

The Tasmanian Police Force have produced a video "Your Turn Next" which shows some of the consequences of drinking and driving.

# 4.3 Concluding Comments

A number of very exciting and comprehensive road safety education packages/kits have been produced but many are not used outside of the State of Territory in which they were developed. Issues relating to dissemination are discussed in some detail in the final chapter.

### Chapter 5

### Case Studies of Exemplary Practices

#### 5.1 Introduction

A major emphasis in the project specifications was to examine exemplary practices occurring in primary and secondary schools throughout the country. Definitions and parameters of exemplary practice were not specified in the project apart from stipulating that case studies for each state and territory were to be undertaken and that key role players at each school must be contacted in the production of each case study (see Figure 5.1).

#### 5.2 Case Studies

Case study methodology has gained enormously in popularity over recent decades as a supplement to, and in some instances, as a replacement to traditional, nomothetic methods.

Evaluators over recent years, such as Eisner (1977), Stake and Easley (1978), House (1986), Carr and Kemmis (1986) and Sherman and Webb (1988) have made major advances in case study research.

There are a number of advantages in using case study methodology. One important aspect, as noted by Nisbet and Watt (1984) is that a case study gives a portrayal of a specific situation in such a way as to illuminate some more general principle. These portrayals enable the reader to identify unique factors of interaction and to make sense of them in context.

Further, it can be argued that a case study can be more easily understood by a wider audience as it does not require specialised knowledge of statistics. Each reader in turn, is encouraged to make intelligent interpretation of similar cases from his/her experiences.

Another advantage of a case study is that particular elements and factors can be highlighted which, because of their infrequent occurrence, might not be discernable by the more traditional statistical analyses. According to Hyde (1985:352), a case study approach enables a researcher "to focus progressively upon relevant facts and ideas by virtue of his or her sensitivity, responsiveness and adaptability."

Figure 5.1

Exemplary Practice is Multidimensional

#### **ADMINISTRATORS**

Is it supported by senior administrators?

#### **TEACHERS**

- Does it address the real needs of students?
- Does it complement mandated requirements?
- Can it be easily used?

#### **PARENTS**

- Is it supported by parents?
- Can parents assist in implementation?

### **STUDENTS**

- Does it promote effective learning?
- Does it lead to development of skills and knowledge?
- Is it gender inclusive?

(FORS Project Specification, Road Safety Education in Australian Schools, 1988)

### 5.3 Methodology

"Exemplary practice" in road safety education is a term which conjures up various responses. The responses depend to a large extent upon the intended clients. The following statements have been derived from interviews and from the literature:

# Exemplary practice is:

(for students)

- getting students excited about practical activities in road safety.
- ensuring students acquire important knowledge about pedestrian and bike safety.
- alerting students to positive and responsible road safety behaviour.
- providing students with an opportunity to practise sound road safety behaviour.
- encouraging students to assist with the organisation of road safety practices at school.
- encouraging students to participate in community road safety activities.

### Exemplary practice is:

(for teachers)

- finding time in the school timetable to teach road safety (formally and incidentally).
- a willingness to seek out and use 'quality' road safety kits and materials.
- responsiveness to initiatives by other teachers to plan school-wide road safety activities.
- a willingness to be a positive role model about road safety behaviour.

- being knowledgeable about specialised road safety elements such as bicycle education.
- a willingness to organise and plan road safety activities with parents.
- an interest in on-going professional development activities on road safety (workshops, conferences).

### Exemplary practice is:

(for principals)

- encouraging one or more teachers to undertake leadership/ coordinator roles in road safety.
- providing resources (time and funds) to ensure road safety is given a high priority.
- a willingness to be involved and to initiate school and community activities related to road safety (e.g. fetes, competitions).
- encouraging teachers to plan and include road safety units in their programmes.
- encouraging parents to support road safety education programmes.
- seeking support from regional and head offices for road safety education programmes.
- ensuring that traffic movements around the school are efficient and safe.

### Exemplary practice is:

(for parents)

- providing positive role models about road safety to their children and to others.
- being willing to cooperate with a school on traffic movements.

 being willing to assist teachers with specific road safety programmes and special events.

It is, of course, idealistic to consider that schools could aspire to all these expectations about exemplary practice. Schools differ greatly in terms of quality of staff, student characteristics and parent and community commitment. Some schools do remarkably well on a number of criteria but this can be short-lived due to staff changes or a loss of resources.

The ultimate criterion for exemplary practices in schools is that the number of children and adults involved in road accidents will be reduced. There is no simple or single causal linkage between exemplary practices and road accident statistics, but few would deny that sound educational practices must contribute significantly to a reduction in road accidents.

The procedures used to select case study schools and to obtain relevant data were to a large extent based upon techniques the author had used in previous national studies (Marsh (1987 (a) and (b)), Marsh 1989). Initial criteria used for the selection of case study schools were based upon:

urban/rural locations
government/non-government schools
pre-primary/primary/secondary
examples of key personnel

- e.g. active leadership by school principal
- e.g. active involvement by external advisory teacher/consultant examples of key programmes developed
  - (i) locally at school level
  - (ii) state/interstate levels.

The final decisions about schools to be selected depended upon judgements made by key road safety liaison personnel contacted in each State and Territory.

These individuals were aware of the criteria established by the author but other factors had to also be taken into account. Some of these factors included:

- (a) the willingness of education systems to grant the author permission to visit specific schools.
- (b) the timing of visits and the extent to which these times were convenient for specific schools.
- (c) the priorities that road safety personnel considered were important in illustrating exemplary practice.

Notwithstanding, a very diverse range of schools were made available to the author. At each case study school it was envisaged that various data-collection procedures would be used, namely:

- (i) an analysis of school documents and policies on road safety education.
- (ii) informal discussions with the school principal and key teachers.
- (iii) observations of road safety lessons.
- (iv) informal discussions with students and parents.

A check-list consisting of 15 items was designed by the author to use at each school (see Appendix 1). Some of the items were based upon check lists used by the Royal Society for the Prevention of Accidents (ROSPA) in their "Good Practice in Safety Education Project" (Singh 1988). The check-list was found to be most useful in teacher and principal interviews.

Data obtained from observations of classes and various interviews were supplemented by a multitude of written materials such as school handbooks and policies, memoranda and school notices, minutes of meetings, teacher programmes and lesson notes, school newsletters and notices of competitions.

A number of schools (and centres) were visited across Australia, (see Summary Tables Vol. II, pp.125-126), namely:

ACT	NSW	NT	Qld	
6	12	7	11	
SA	Tas	Vic	WA	
5	6	8	4	Total = 59

From these visits it was possible to concentrate upon those schools and centres at which outstanding exemplary practices were occurring, and/or important aspects of curriculum dissemination and implementation were in evidence.

A summary record of each of the 59 schools and centres is provided in Volume II. Detailed case-studies of 28 of these schools and centres are also contained in Volume II. The distribution of case studies is as follows:

ACT	NSW	NT	Qld		
3	5	4	3		
SA	Tas	Vic	WA		
4	2	4	3	Total =	28

It should be noted that these case studies cannot be considered in any way to represent typical standards/levels/achievements of a particular State or Territory. Nevertheless, they do provide fascinating insights into the achievements and successes, failures and frustrations of individual school communities. Some important patterns are presented and analysed in the following section of this chapter.

# 5.4 Significant Patterns

By undertaking a meta analysis of the 59 schools visited it was possible to isolate some recurring patterns. Although it is important to remember that each school has unique characteristics, it is possible to examine patterns which occur across States and Territories.

# 5.4.1 Kindergarten/Primary Schools

In Tables 5.1 and 5.2, six major patterns are isolated which were derived from the data obtained from 37 kindergarten and primary schools (see Summary Tables pp.125-126). These include the following:

school context
personnel
resources and organisation of teaching
parent support
achievements
problems.

#### School context

At a number of schools, potentially dangerous road hazards in adjoining streets were well known to staff and appear to have been a major incentive for teachers to initiate road safety programmes.

In case study 6 the principal is very aware of hazards in the vicinity of the school – the area is quite hilly with steep winding roads. The principal enforces "a school rule whereby no children are permitted to ride their bicycles to school. The parents and staff are very concerned about road safety".

In case study 7 the principal indicated her concern to the researcher about unsafe driving and speeding by local residents. "The road pattern is not the typical grid-iron but one of sweeping curves and T junctions. Not unexpectedly, residents travel very fast in their vehicles on these wide, sweeping avenues."

The school principal in case study 16 is also very concerned about the roads adjacent to his school – "the topography is hilly and there are a number of dangerous corners and rises in the roads adjacent to the school – teachers from time to time have been concerned about minor road injuries and the possibility of more serious accidents occurring."

Table 5.1

Factors related to Exemplary Practice in

Case Study Kindergarten/Primary Schools

	Factor	cited in Summary Tables	Total	%
(a)	School context staff aware of traffic hazards adjacent to school	2, 8, 12, 26, 27, 28, 29, 33, 37, 44, 49, 57	12	32
(b)	staff aware of recent and serious road accidents involving students	16, 30	2	5
(a)	Personnel enthusiastic staff member	3, 4, 10, 11, 13, 14, 15, 27, 31, 32, 37, 48, 56, 57	14	38
(b)	road safety consultant available and active	1, 2, 3, 4, 20, 42, 43, 44, 45, 48, 49	11	30
(c)	police officers visit schools and give talks	3, 16, 19, 20, 28, 29, 52, 56, 57, 58	10	27
(d)	bus company officers visit schools and give talks	3	1	3
(e)	Principal maintains visibility of road safety to parents via newsletters and competitions	3, 4, 7, 9, 10, 12, 14, 15, 19, 29, 30, 32, 37, 44, 45, 48, 49, 50, 51, 52, 53, 56, 57, 58	24	65
(a)	Resources and organisation of to availability of traffic centre for day excursions	eaching 1, 2, 4, 19, 48	5	14
(Ь)	miniature traffic centre/bike track is available at the school	37, 42, 53	3	8
(c)	school has 3 or more road safety kits/materials	4, 7, 8, 9, 10, 11, 13, 14, 15, 19, 27, 28, 29 37, 42, 43, 44, 48, 49, 50, 51, 52, 56, 57, 58	25	68
(d)	funds available for road safety from external sources	2, 50	2	5
(e)	road safety integrated across several subjects	1, 2, 3, 4, 13, 16, 29, 30, 31, 32, 37, 49, 50, 51, 57	15	31
(a)	Parent support general support given by parents/school board	1, 2, 29, 30, 37, 43, 44, 48, 50, 51, 52, 53, 56, 57, 58	15	41
<b>(b)</b>	initiatives taken by parents	15, 19, 26, 28, 29, 30, 44	7	19
(c)	parents visit school and help supervise road safety activities	3, 9, 10, 13, 15, 16, 31, 32, 48, 51, 52, 53	12 (N = 37)	32

Table 5.1 (cont)

Factors related to Exemplary Practice in
Case Study Kindergarten/Primary Schools

	Factor	cited in Summary Tables	Total	%
(a)	Achievements have an official school policy on road safety/bike ed	10, 13, 15, 44, 48, 50, 51	7	19
(b)	tangible improvements have occurred	26, 27, 28, 37, 44	5	14
(c)	children enjoy road safety activities	2, 15, 33, 49, 50, 51, 52	7	19
(d)	children have achieved higher bike-riding skills	4, 14, 37, 48, 49, 50, 51, 52	8	22
(e)	parents exhibit improved road safety behaviour around school	17, 49	2	5
(f)	road safety kits make it easy for teachers to plan lessons	7,8	2	5
(a)	Problems many teachers have little interest in road safety	10, 11, 13, 15, 19, 20, 30, 37, 44, 45	10	27
(b)	parents exhibit poor road safety behaviour around school	27, 28, 32, 45, 49, 50	6	<b>1</b> 6
(c)	difficult to store bikes at school	1,51	2	5
(d)	road safety takes too much preparation time	4, 16	2	5
(e)	students need more time	3, 15	2	5
	to practice practical skills		(N = 37)	

In some schools disastrous accidents had occurred to school students, or to near relatives. For example, in case study 21 (a school covering grades P-10) "the community is still mourning a recent catastrophe when four young local people were killed when a car careered out of control into a tree. Recreational facilities in the town are very limited and a favourite activity for many young people on weekends, especially males, is to drive around the main streets, using them as a race circuit. It was on such an occasion that the recent quadruple fatality occurred."

It appears that the effects of these actual accidents and perceived road hazards have heightened the awareness of school staff in many schools to the need for road safety. In some cases parent demands have put pressure on school principals and teachers to come up with specific road safety programmes.

To the extent that road accidents can be perceived to have a positive dimension, it does seem to be the case that horrific road accidents can be powerful catalysts. Yet, it is also true that these incentives for action will not be sustained unless staff and parents establish programmes that are carefully planned, amply resourced and have long-term goals.

#### Personnel

In 32% of the schools visited (see Table 5.1) a key factor responsible for a successful road safety programme seems to have been a *committed*, active and well respected staff member. In many school situations they worked single-handed in searching out materials, gaining the support of external consultants, and initiating and supervising the implementation of specific programmes.

Consider, for example, the senior teacher in case study 23 who "is a major driving force, especially in terms of road safety. As a non-teaching staff member he has the opportunities to organise school-wide programmes in these areas. Not only is he a good organiser but he is an enthusiastic leader. He is very knowledgeable about 'bike-ed', having completed the instructors course several years ago. A number of the staff working with him on 'bike-ed' have also completed the training course or are in the process of doing so this year."

A class teacher in case study 16 is also a driving force as revealed in the following excerpt:

"The BMX bike track at the school remained in a state of disrepair and was infrequently used until a newly appointed teacher saw its potential as a 'children's safety centre'. This teacher not only had vision and enormous drive in getting road safety education initiated at the school but she made strategic

contacts with groups who were able to provide financial support. ... The completion of the bike-track was a very visible aspect of the project but only a small part of the total programme. The teacher was nominated by the school principal as the road safety 'key teacher' and she set about the process of inservicing all teachers."

In addition to class teachers, external consultants also have a major role to play. Various types of consultants were observed and interviewed, including curriculum developers, part-time teachers, traffic officers and police officers. Although they have very different backgrounds and training, common attributes are their enthusiasm and their ability to interact well with students.

For example, in case study 1 "the external consultant on bike-education was involved at this school. He is an enthusiast and has well-developed skills in convincing staff and parents about the need for road safety programmes and especially bike-education programmes. More important, he has developed a set of procedures, including easy-to-use handouts that appeal to teachers."

In case study 20 "the principal relies heavily upon the local road safety education officer to give lessons to individual classes, and evening talks to parents about bike safety. The officer visits several times during each year and on other occasions to distribute posters and brochures when there is a special need."

The school principal is undoubtedly a major force in establishing road safety education programmes (see Table 5.1). The principal has to be able to involve individual teachers, to give them areas of responsibility and to support their endeavours. In addition, it is essential that a principal keeps in close contact with parents, notifying them of coming events and seeking their support for specific activities. The principal has to make judgements about when to initiate and when to consolidate previous actions.

Some of the principals interviewed in case study schools were outstanding. For example at case study 6 "the current school principal has only been in the

position for two years and the deputy principal for four years, but it is very evident that they are a driving force at this school. The school hums! It is rare to see such concerted activity by teachers using well-honed planning skills to produce road safety activities integrated across a wide range of subjects."

In case study 22 the principal was instrumental in getting a school policy on bike-education accepted by the school council. In addition, "specific school rules about road safety were established such as no children in Grades P-2 are permitted to ride bicycles to school and all children riding bicycles to school must wear helmets. ... He also strongly supported efforts by the two teachers to establish a bike-ed programme at the school. He organised the school timetable to free up the staff. He was also responsible for encouraging other staff and several parents to do the Bike Ed training course and took the initiative to have a bicycle trailer housed permanently at the school."

# Resources and organisation of teaching

Having a range of up-to-date materials on pedestrian, passenger and bike safety appears to be a major prerequisite for exemplary practices to occur. The Federal Office of Road (FORS) Safety plays an important role in this regard as a great number of schools visited had copies of "Out and About" and various FORS pamphlets and charts (see Summary Tables pp.125-126). Other materials supplied free (or for a nominal amount) are popular with teachers such as the "Constable Care" package and "Bus Company" materials, Department of Health posters, and Police Department pamphlets.

Packages costing \$20 or more are found in some schools but they tend to be confined to those produced for their respective state. For example, Careful Cobber is a very useful package but it was not found in case study schools outside of Victoria. The Victorian Bike-Ed package was an exception in that the Mark I version appeared in a number of case study schools in NSW, ACT, Northern Territory and Western Australia. More recent packages such as those produced

in NSW and Victoria (Street Sense, Kids and Traffic, Streets Ahead) are only just appearing in schools and it may be several years before they are widely purchased.

In some States and Territories head office personnel in road safety have adapted text materials from existing materials published in other states and have made this available to schools. The resulting material is often presented as cyclostyled hand-outs although in some systems it has been reprinted under new titles, with appropriate acknowledgements to the original authors. These adaptations are a pragmatic and cheap alternative to systems which have limited funds available for road safety education.

Road safety kits and packages incorporating plastic blocks and markers, large cardboard and metal road signs (for example, "Metcon Playmat", "Vital Signs") were also evident in a number of schools. Computer software packages are also appearing in some schools.

Videotapes appear to be an essential resource for effective teaching about road safety. Some of these are available free (for example in Out and About) or are available for moderate amounts. Staff at case study schools were aware of videotapes produced in other states and had taken steps to obtain them, such as "Safe Cycling" (Queensland), "You and Your Bicycle" (Tasmania).

As indicated in Table 5.1 68% of schools visited had a sizeable number of road safety kits and packages (3 or more per school). Lack of funds to purchase the more recent but expensive materials can be a major problem. It was interesting to note that two schools which had access to substantial amounts of funding (see Table 5.1) had purchased a comprehensive range of curriculum materials. An alternative, and one which a number of school principals have not been reticent about using, is to acquire road-safety related curriculum materials via other programmes, such as alcohol and drug abuse, sport and fitness, which are currently priority areas for state and federal funding.

Another road safety resource which is sought after by many schools are the bike trailers (complete with bikes, and vests) available on short-term rentals. A

number of states have provided bike trailers consisting of 15-20 bikes of varying sizes, helmets and vests and these can be booked out to individual schools for short periods of 1-2 weeks for nominal rentals. This resource is very popular with case study schools on Queensland, Victoria and Western Australia (see case studies 13, 22, 23, 26).

At several case study schools miniature *traffic centres* have been established in the playground, consisting of intersecting roads, complete with a variety of road signs and crossings (some of which have electrically operated traffic lights). These traffic centres can provide ideal opportunities for children to practice pedestrian crossing behaviour and bike riding skills. They have also been a useful focus and incentive for individual schools to establish positive parent and community assistance and cooperation (see case studies 16 and 24).

Traffic centres are also available in close proximity to schools in a number of states and territories, especially in the ACT, NT, Victoria and SA. These can be an important resource for children to practice bike riding and to be tested on specific bike-riding skills. For those schools without access to bicycles, helmets and vests, the traffic centres provide a very convenient resource and an enjoyable day's excursion.

It was evident from schools visited that considerably more road safety activities are programmed by teachers than are stated explicitly in *official syllabi* and *curriculum documents*. The two common subject areas where this does occur are Health Education, and to a lesser extent, Social Studies. In some states newly developed syllabuses are emphasizing road safety. For example, as noted in case study 20, "Health Education has been mandated for all Tasmanian classes K-10. This has had the effect of legitimising road safety as an essential element to

be studied at each year level as from the beginning of 1989. It has also provided a stimulus for parents to join teachers in planning topics. Ten parents were involved on a committee during 1988. The Education Department assisted by

providing financial support for two half-day workshops for the committee and the Grade 6 teacher was given an additional two days free of teaching to plan and develop school-wide programmes based upon the committee's decisions."

However, there are a number of states and territories where road safety concepts receive minimal mention in any official syllabus documents. In these education systems teachers tend to treat road safety incidentally when the need arises (for example just prior to vacations); or do an intensive week/special projects (for example a Bicycle Week in conjunction with State Bicycle Committee promotions); or attempt to integrate road safety into other subjects.

The *integration* of road safety concepts across a number of subjects such as English, social studies, science, art and mathematics is an economical use of time by the teachers and possibly makes road safety education more meaningful and enjoyable to students. Road safety packages which have been produced recently (for example, *Street Sense* (NSW) and *Streets Ahead* (Vic)) have recognised this need and contain topics which enable primary school teachers to integrate their teaching across a wide range of subjects.

A number of the schools observed by the author did integrate road safety concepts across a number of subjects (see Table 5.1). For example, in case study 2, two teachers integrated maths, language, art, physical education, music, science and health - "from the beginning of the intensive fortnight the classroom became adorned with bike artifacts and materials - bicycle wheels, tubes and helmets were suspended from the ceiling - coloured flashcards on bicycle vocabulary were displayed in another corner. Large cardboard signs depicting major road signs were made by the children and used in many lessons in the classroom and out in the playground. Special orange folders were produced and children used these to file all their work in literature, language, art and craft, and maths over the two week period. The enthusiasm of the teachers and the students reached an all-time high!"

Lack of teacher background about road safety education concepts can be a problem, especially at the primary school level. Pre-service teacher training programmes have to cover a wide range of teaching areas and not unexpectedly, little if any attention is given to road safety education by teacher educators. Developers of materials on road safety have been cognizant of this deficiency, and have produced elaborate teachers guides and notes to ensure that their packages are "user-friendly" to teachers.

In the long term it is essential that ways are found of including road safety education as a unit for pre-service teacher education students but a short term solution is for schools to enlist the services of one teacher to specialise in teaching road safety to all classes. This policy was observed at a school in NSW (see Summary Tables pp.125-126) where a teacher was timetabled for relief teaching for half the week and to specialise in road safety for the other half. She gave one lesson a week to each grade and taught the lessons in a room specially used for road safety.

# Parent Support

To ensure that road safety education becomes a permanent aspect of the school curriculum it is essential that parents become involved, in terms of supporting school policies, and if possible, as co-supervisors of practical activities for children during school hours. Individual teachers can become very active in road safety projects but the momentum will soon dissipate if these individuals are transferred to other schools.

It is evident from Table 5.1 that parent support was very common in a number of schools visited. Teachers ensured that parents were kept informed about initiatives (such as bike-ed) that they intended to commence with their classes. School boards/councils at these schools were often keen to establish school policies about safety and about such matters as helmet wearing and minimum age levels for children riding bikes to school.

In some schools parents took the initiative on a number of matters relating to road safety such as coordinating helmet campaigns; obtaining bulk orders of helmets and selling them at discounted prices to the children; doing busy-bees around the school on bike tracks and bike racks; and agitating for shire councils to rectify local road hazards. For example, in case study 7 parents embarked upon a year-long campaign to get a pedestrian crossing established outside the school. This involved them in numerous deputations, lobbying activities and undertaking traffic surveys. The parent group were successful and since then has continued its activities – "they now oversee all traffic movement within the school grounds and entry and exit points into the school. A one-way system of vehicle movement is clearly marked and parents are expected to conform".

Parents can be invaluable in assisting with practical road safety activities, especially bicycle education, as small groups of children need to be carefully supervised both off-road, and quite definitely, on-road. In some states, especially Victoria, parents have volunteered to undertake training in bike-ed. In other states and territories parents do take an active role in these practical activities. For example in case study 5 a parent is deeply involved in the bike-ed activities and "undertakes all the clerical tasks associated with the programme; shares the supervision of the small groups with the teacher; arranges for the distribution and storage of equipment; and makes contact with outside groups for special events and visits".

#### Achievements

The most successful case study schools observed by the author were those ones where staff, parent and student involvement in road safety was sustained at a high level (see Table 5.1). Ensuring that *tangible improvements* occur is one method that seems to work. This can take various forms such as parent/teacher projects to build bike tracks, BMX tracks, traffic centres, or even one-way road markups into and out of school grounds. Another variation is to have a series of

on-going contests, fetes, competitions throughout the school year which involve road safety wholly or partially. These events can be initiated by parents or the school principal or teachers.

An important way of highlighting successful road safety education programmes is by demonstrating improvements in student skills. This can be done especially in bike ed where children can undertake training and then be assessed using various practical riding tests. Levels of competency can be included on special certificates awarded to individual students. It is possible to keep records of levels of competencies for different year levels at a school and these can be compared from year to year.

Children can also demonstrate their understanding of road safety skills in other ways too. At one school observed in NSW (see Summary Tables pp.125-126) a group of primary students from the senior grades of the school were rostered to wait at the kerbside of the pre-primary section of the school to assist young children alighting from their parents cars. These school monitors open and close the car door and escort each young child to the school gate. They are proud to undertake this responsibility and their actions speed up the flow of parents' vehicles along the one-way entry road into the school.

#### **Problems**

Even successful case study schools experience a number of problems (see Table 5.1). A problem often recounted by teachers revolves around the matter of inconsiderate parents. Teachers complain that parents are poor role models for road safety. They often park on the opposite side of the road at a school and call their children to come to them, thereby ignoring cross walks; they often park their vehicles illegally on adjacent roads and footpaths; and they do U turns and drive in an out of school grounds very erratically. Many schools have to cope with massive traffic congestion problems each morning and afternoon due to large numbers of parents bringing their children to school by car.

It would seem that road safety education packages should provide additional activities which focus upon parents' road safety behaviour. To a certain extent this occurs in *Out and About* and *Kids and Traffic* but more could be provided even in these packages.

Teacher apathy is a problem even in schools where exemplary practices in road safety are occurring. This may be due to some teachers' lack of training in road safety, as outlined above, or it may be due to teachers not giving it a high priority compared with other school subjects. In some schools observed by the researcher where one teacher was the major innovator and implementer, it was very noticeable that other staff members were quite passive or even ignored road safety activities entirely. Perhaps these teachers were rationalising that they did not need to become involved as the committed road safety teachers would come into contact with all grades over a period of years.

Only in three case study schools was it evident that a total staff was fully committed to road safety. As an example, in case study 23 it was apparent that the staff were all very involved in road safety education. They had a wide understanding and knowledge of various road safety curriculum materials. The library had a comprehensive range of road safety kits, games, and equipment. Over three-quarters of the staff had undertaken the instructors training associated with bike-ed. Needless to say, this school had no problem with teacher apathy.

# 5.4.2 Road Safety Centres

Five centres including traffic centres, a motor cyclist centre and an aboriginal community centre were observed in various states and territories. They all provide road safety education for school-age children as well as for adults. The information included in Table 5.2 was derived from the data collected about the five centres and contained in the Summary Tables (pp.125-126). It is useful to examine the centres in terms of:

achievements.

problems.

Table 5.2

Factors related to Exemplary Practice in

Case Study Road Safety Centres

	Factor	cited in Summary Tables	Total	%
	Achievements			
(a)	committed and energetic director	22, 24, 38, 39	4	80
(Ь)	instructors at the centre have had training in instructing	22, 24, 39	3	60
(c)	a strong and continuing demand for their courses	22, 24, 25, 38, 39	5	100
(d)	they have developed a comprehensive range of resources	24, 25, 38, 39	4	80
(e)	the community is very supportive of the centre and its activities	22, 24, 25, 39	4	80
	Problems			
(a)	staff have difficulty finding time to do all the activities	24, 25, 38, 39	4	8
(ь)	finding sufficient funds to operate is a continuing problem	24, 39	2	40
(c)	finding competent staff	24, 38, 39	3	60
(d)	getting a programme started	22	1	20
			(N=5)	

# Achievements

The road safety centres usually consist of a specially prepared miniature roadway and traffic signals including such aspects as a railway crossing and pedestrian crossing. Adjacent to the track are several buildings, one to house a

wide range of bicycles (and sometimes tricycles for handicapped children), helmets and vests, and the other is typically used as a teaching centre having audio-visual equipment, displays of various kinds and printed materials.

The centres provide children with the opportunity of practising pedestrian and bike riding skills without the attendant dangers of typical on-road situations. Children look forward to these outings as a break from the typical classroom routines. It is likely that teachers also welcome these visits when road safety experts can do the instruction and so providing them with a change of pace from their daily teaching.

The financial organisation of the centres varies in different states and territories. Sometimes they are funded solely by a department of transport or by the police or by an education department. Recent developments in some states have seen the growth of shared financing between local councils, departments of transport, education and the police. The centres have very limited budgets and depend upon commercial firms to sponsor them. They also rely upon volunteers to assist with maintenance of buildings and equipment, and in some cases, to help run the centres.

As noted in Table 5.2 the centres tend to be run by very committed, road safety enthusiasts – often persons with considerable experience as competitive bicyclists, motor cyclists or drivers. They are often able to relate very well to students and can recount incidents from personal experiences.

Because the centre directors are well-known locally they seem to be able to obtain a diverse range of resource materials from local suppliers at minimal cost. However, it also requires the directors spending a lot of their time maintaining contacts with local personnel and ensuring that their respective centres are publicised at every available opportunity. As an example, the author visited a motor cycle training centre (see Summary Tables pp.125-126) where the centre director has been able to provide well landscaped grounds, comfortable lecture rooms and a very comprehensive range of resources by enlisting the support

(financial and time) of numerous motor cyclists and contacts in the building and motor industries.

The centres tend to be very popular with students and many have bookings which extend across the whole school year. Primary-school age children visit the centres for short periods of 1-2 hours whereas secondary school children involved in driver education have extended periods on a once weekly basis or for an intensive week. Personnel at the aboriginal community centre visited intend to provide driver education training on a weekly basis for their youth workers.

Local communities are generally very supportive of these centres. Parents will often use the centres with their children on weekends and evenings so that they can practice their bicycle riding skills as a family. Volunteer help with the respective programmes is a feature of many of the centres. For example, case study 17 refers to 20 volunteer staff who provide two or more hours of their time each week at no charge to the centre. This does require of course the provision of training for the volunteers. "At this centre volunteers receive a one-day training programme prior to starting their job. A very detailed manual is provided for each volunteer and this explains the various activities they are to undertake with the groups of children. Sessions are arranged so that volunteers work in groups of three. Current volunteer participants include parents, retired persons, shiftworkers and unemployed youth."

#### **Problems**

The road safety centres can and do complement the road safety education taught in schools. However, in some states there have been evaluative studies into the financial viability of the centres (see Public Service Board (1985) in Chapter 2). Some centres have been closed down because running costs were too high. New organisational structures involving local councils have been among the initiatives undertaken, partly to provide community ownership but also to reduce financial commitments by Departments of Transport.

Volunteer assistance and sponsorship assists in keeping costs down to a minimum but operating costs are still worrisome. Some centres are contemplating charging children admittance fees to offset some of these costs. As noted in case study 17 "operating costs for the centre are quite high. Unless charges for students are levied for the primary level courses (provided free of charge) and higher rates required for the student driving course, then the present range of services will not be able to be maintained."

Another problem revolves around the work pressures placed upon the centre directors (see Table 5.2). They tend to be very hard-working, active people, overflowing with innovative ideas, but under considerable strain attending to a myriad of policy and routine matters. A problem common to many of the centres visited was the lack of time that directors had available to accomplish all the tasks that were needed to be done.

Of course the use of volunteers does have its penalties too in that centre directors need to spend a considerable amount of their time training volunteers and giving them special assistance when needed. Even obtaining volunteers can be a problem and the turnover of volunteers over a school year can be quite considerable.

#### 5.4.3 Secondary Schools

In Table 5.3 four major patterns are listed which were derived from data collected from 17 secondary schools and contained in the Summary Tables (see pp.125-126). These patterns include:

personnel
resources and organisation of teaching
achievements
problems.

#### Personnel

Teachers involved in road safety education in secondary schools tend to be teaching student driver courses of various kinds. Although these courses were operating extensively in all states and territories in the 1970s and early 1980s, the student demand and the resources to provide them have been greatly reduced over recent years. There are many reasons for this including changes to minimum driving ages; conflicting research evidence about the effects of driver education programmes upon subsequent driving behaviours; reduced education budgets for schools and problems of staffing driver education programmes; and reluctance by motor vehicle dealers to provide cars due to a massive downturn in the motor vehicle industry. Yet, the courses are still popular in a number of states and territories. There are even new programs developing in some states, supported by funds from commercial firms with interests in the transport industry.

The teachers of student driver education courses are generally enthusiasts with an interest in car racing or motor mechanics. They tend to be drawn from manual arts areas because their timetabled blocks of periods with classes enables them to be more available for practical driving lessons with students. However there are also teachers of science, commerce, English and many other traditional subject areas, who are involved as instructors.

All teachers of student driver education courses must undertake a period of instructor training which seems to vary from 6-8 hours to more intensive periods. This training usually comes under the jurisdiction of Departments of Transport or Police.

Table 5.3

Factors related to Exemplary Practice in
Case Study Secondary Schools and Colleges

	Factor	cited in Summary Tables	Total	%
(a)	Personnel enthusiastic staff member	6, 17, 18, 40, 41, 46, 54, 55,	8	47
(ь)	use outside resource person/ consultant	6, 46, 47, 59	4	24
(c)	school principal is supportive	17, 40, 41, 46, 47,	5	29
(d)	school based constables/ police officers involved	21	1	6
(e)	involves a lot of extra- curricula time for staff	5, 6, 18, 21, 34, 35, 36, 40, 41, 46, 47	11	65
(a)	Resources and organisation of tes school has 1 or more road safety kits	aching 5, 17, 18, 21, 24, 34, 35, 36, 40, 41, 46, 54, 55, 59	12	71
(b)	school has 3 or more road safety kits	5, 24, 34, 35, 36, 40, 41, 46, 54, 55, 59	11	65
(c)	road safety is an approved course	5, 6, 17, 23, 34, 35, 36, 40, 41, 46, 47, 54, 55, 59	14	82
(d)	road safety course has emphasis on attitudes	5, 6, 23, 34, 35, 36, 40, 41, 46, 47	10	59
(e)	road safety course includes practical component	5, 6, 23, 40, 41, 46, 47	7	41
(f)	a driver-ed car is available for students	5, 6, 23, 41	4	24
(a)	Achievements students very supportive of road safety	6, 23, 34, 35, 36, 41, 46, 47, 54, 55	10	59
<b>(b)</b>	students' attitudes to road safety have improved	6, 41, 46, 47, 59	5	29
(c)	parents supportive of road safety programme	18, 23, 36, 46, 47, 59	6	35
(d)	road safety programmes are of little cost to school/college	5,59	2	12
(e)	road safety programmes involve fewer staff	5	1	6
	· <del>-</del> - <del>- · · · · · · · · · · · · · · · · · </del>		(N = 37)	

Table 5.3 (cont.)

Factors related to Exemplary Practice in

Case Study Secondary Schools and Colleges

	Factor	cited in Summary Tables	Total	%
(a)	Problems relies on 1 committed staff member	5, 6, 18, 21, 34, 36, 41, 46, 47, 54, 55, 59	12	71
(b)	timetabling difficulties	5, 6, 41, 47	4	24
(c)	too time demanding for staff	18, 21, 41, 47	4	24
(d)	road safety programmes too	5, 18	2	12
	expensive for some students		(N = 37)	

Undoubtedly, teachers of student driver education courses have the opportunity to get to know students well and to impart positive values about road safety to them. The students tend to have a very high regard for these teachers and the courses are usually very well patronised. Consider for example case study 19 where the teacher is located in the heart of an industrial belt in Adelaide. "He has transformed a demountable building into a comfortable, exciting meeting-place for students enrolled in his "driver education/transition education" unit. On the walls he has mounted a number of large posters depicting various scenes of cars and motoring. The 35mm slide projection and screen are positioned in auditorium format rather than in traditional rows. Various handouts, brochures and magazines on road safety are located on several small tables in corners of the room."

It goes without saying that these teacher-enthusiasts spend long hours with new students. To fit in the practical driving lessons they often have to make time available before school, at lunch hours and after school, even when 2-3 students are allocated per vehicle. The teachers interviewed about this matter are aware of their heavy work loads but were content to do this because they are committed to driver education and can see the attitudinal and skills gains made by students.

School principals tend to give these teachers a fair allocation of relief time and exclude them from other school duties, but their work loads are still very heavy.

Variations occur in some States and Territories where external consultants assist with, or in some cases, run the entire course. As revealed in the Summary Tables (pp.125-126) these persons can include commercial driving instructors, road safety officers and police officers. For example, in case study 3 a commercial driving instructor, with an established good reputation, was invited to run a student driver education course at a senior college – "the arrangement could be construed as an admirable symbioses between industry and education. The students and their parents consider that the programme is worthwhile and is value for money. The administrators do not have to provide any staff nor do they have to be concerned about procuring, maintaining and garaging a motor vehicle."

At a school visited in Tasmania (case study 21) a local road safety officer visits the school and teaches the pre-driver education theory lessons of 2 periods a week for 8 weeks. Teachers (trained as instructors) at the school supervise the practical driving instruction. In Western Australia (case study 28) a school-based constable teaches a youth driver education course which consists of 4 hours of instruction on driving and road laws.

Recent reports on road safety education (for example Transport and Road Research Laboratory (1986)) highlight the need for road safety education units for lower secondary school students (aged 12-16 years). Until recently in Australia, there has been a dearth of materials produced for lower secondary students but some units have been forthcoming in NSW and Victoria such as *Are You in Control?*, *Belt Up, Roads and Traffic, Survival Trails*, and *Teenagers, Alcohol and Road Safety*. In addition, materials produced recently by Drug and Alcohol agencies such as *Plan a Safe Strategy* (PASS) and *Live to Ride* also have relevance for road safety teaching topics. During the authors' visits to the various

secondary schools some of these materials were observed being used by teachers but only to a limited extent. It may be, of course, that there has been insufficient time for many of these recently produced materials to be disseminated to schools.

Nevertheless, some enthusiastic users of materials were observed. For example the English teacher in case study 8 is very positive about *Are You in Control?* and uses it with low-achieving students in Years 7 and 8. "He believes in using real life material in his English lessons. Rather than teaching from traditional novels he prefers to use materials commonly available such as traffic handbooks. He maintains that aspects of everyday life such as written information about driving vehicles, filling in accident claim forms and having debates and role playing on topics such as "hit and run drivers", is far more meaningful to his students."

At the same school the "Belt Up: Technical Drawing" kit is used extensively by Industrial Arts teachers. They are very supportive of it because few curriculum resources are available in this subject.

# Resources and organisation of teaching

As can be seen from Table 3 most of the secondary schools visited had at least one road safety curriculum package per school, although it was evident that they did not have the range found in most primary schools. The newly developed packages in NSW and Victoria should enable schools to acquire a wider range of materials and for them to be of interest to teachers in a number of subjects such as social studies, science, English, mathematics and technical drawing.

A major resource used at the secondary school level is the videotape. High school students are attuned to video-clips in the teen culture and seem to always be interested in this medium. Videotapes are of special value in student driver education programmes because they can be used to illustrate and teach basic driving techniques, but also to graphically portray (on occasions and with due restraint) some of the horrors of road crashes. There are a number of videotapes

available on driving skills, the dangers of drink driving, and defensive driving skills from various sources including the Federal Office of Road Safety, Departments of Transport in various States and Territories and the Driver Education Centre of Australia (DECA) in Victoria. As an illustration, the road safety officer described in case study 21 used "the videotape "Ready for Take Off" (DECA) with Year 10 students. It was well received by students. Several of them stayed back and asked the road safety officer specific questions after the session had concluded."

In most States and Territories, subjects at the secondary school level are accorded formal status, using such terms as "board approved", "tertiary-entrance" or similar titles. By contrast some subjects are developed within a school and are not given status beyond the school and are typically listed as "registered" or "non-approved" subjects. Understandably, students prefer to enrol in the high status, approved subjects and few students enrol in the "non-approved" ones. For road safety to have an impact in a school curriculum it is therefore important that any such units are accorded "approved" status. As can be seen from Table 5.3 the majority of the schools visited have their road safety subjects (almost entirely student driver education) classed as approved subjects (82%).

The courses in student driver education are remarkably similar across the various States and Territories. This is not surprising as there appears to be a considerable amount of exchanging of ideas between colleagues. For example materials developed by teachers in the Northern Territory are used by teachers in some South Australian schools; materials used by school-based constables in Western Australia are based upon materials developed by police officers in South Australia.

Although theory topics are very similar across States and Territories, the emphasis given to practical driving instruction varies considerably. In most cases these differences are due to policy decisions about the resources available to implement this type of instruction. It can be a very expensive use of a teacher's

time to instruct students, on the basis of 8-10 hours per student in a motor vehicle. There is also the consideration of whether motor vehicle dealers are willing to donate a vehicle or whether it has to be purchased. The minimum ages required by law for learner permits and probationary licences also influences whether a practical component is included in a student driver programme or not. An examination of Table 5.3 reveals that 10 of the schools visited had theory courses in student driver education but only 7 had a practical component and only 4 had a car available at the school for students to use.

Case study 19 reveals a very comprehensive, practical programme for students. "Each student receives approximately 10 hours of driving tuition onroad and the only costs are \$20 for petrol. They also do various exercises on the school grounds including basic vehicle maintenance tasks and "monte carlo" steering and braking exercises."

A comprehensive theory programme but less substantial practical component is described in case study 21. "The pre-driver education course at this school is compulsory for all Year 10 students. It consists of 2 periods a week for 8 weeks followed by a day of practical driving in groups of 3 with approximately 2 hours per student."

#### Achievements

The major road safety emphasis in secondary schools, as indicated above, is student driver education, even though it has been reduced in scope in most states and territories over recent years. This type of course is extremely popular with students and with parents, as indicated in Table 5.3. Although a number of students and their parents may perceive it as a convenient and cheap way of obtaining a drivers license, it also receives support because of the attention given to adequate skills training and development of appropriate attitudes about road safety.

However, student driver education programmes are difficult to timetable and expensive to operate. As indicated in Table 5.3 it is difficult to timetable teachers so that they can be available as instructors. Most teacher-instructors involved in student driver education programmes spend many additional hours per week compared to a normal teachers load.

From observations made at a number of schools, the responsibility for a student driver education programme seems to fall upon one teacher at each school. These committed teachers generally undertake the planning and day-to-day activities without complaint but they are being imposed upon to a very great extent. As noted in case study 19, "the Driver Education/Transition Education course depends to a very large degree upon the enthusiasm and efforts of one teacher. Although another teacher has undertaken the necessary instructor training course, he is not directly involved in teaching it. The school administration are obviously appreciative of the case study teacher's efforts and he is widely respected in the local community. Yet, it is highly likely that this innovative approach to driver education would not continue at the school if he was transferred or decided not to continue taking the course."

#### 5.5 Concluding Comments

A number of worthwhile and exciting road safety education practices are occurring at the present time in schools across Australia. There are some common factors evident across schools which can facilitate or impede the development of exemplary practices and a number of these were analysed in some detail in this chapter. Notwithstanding, each case study portrays a unique environment and it is up to the reader to make judgments about the events of each case based upon his/her previous experiences, expectations and values.

# Chapter 6

#### Summary and Recommendations

# 6.1 Summary

Over a period of fourteen months the authors undertook:

- (a) to develop individual State/Territory profiles of the organisations, structures and resource materials relevant to road safety education, and
- (b) to conduct case studies of schools with road safety education practices considered to be exemplary.

In each State and Territory a total of 101 interviews were undertaken with major providers. Although there were some structural differences between states, typical road safety education providers included Departments of Transport, Departments of Education/Ministries of Education, Non-Government/Catholic Education systems, Road Safety Councils, State Bicycle Committees, Police Departments, Commercial firms/service organisations (for example, Automobile Clubs, Insurance companies), Medical groups (for example, Royal Australasian College of Surgeons, Child Accident Prevention Foundation), Tertiary professors, lecturers.

These interviews enabled important issues to be drawn out and they were then explored further via the use of three separate questionnaires.

Interviewees contacted early in the study were most helpful in targetting individuals to whom questionnaires should be sent. The three categories of questionnaires and numbers involved were as follows:

 a questionnaire sent to Policy Directors and Senior Administrators in Federal and state Government organisations and associated bodies (151 distributed, 74 returned, response rate of 49%).

- a questionnaire sent to Curriculum Consultants and Curriculum Developers in Departments of Transport, Education Departments and other bodies (72 distributed, 42 returned, response rate of 58%).
- a questionnaire sent to Administrative staff and Coordinators working in Departments of Transport, Education Departments and other bodies (83 distributed, 32 returned, response rate of 39%).

During the course of the 14 months, curriculum project materials of various kinds were collected/purchased from various road safety education providers and individually analysed, using a standard category system based upon Piper (1976) and using a format prescribed by A.C.I.N. (1988).

In total, 85 road safety education packages were obtained and analysed. They included materials designed for pre-primary, primary and secondary students and covered a wide range from single videotapes to elaborate packages containing 20 or more components.

The research literature on road safety education was studied systematically. Papers were obtained via various computer informal retrieval systems (including A.S.C.I.S. and A.C.I.N.), and major reports were obtained from state and federal agencies and from overseas agencies (especially the USA, Canada and the United Kingdom). In total, 105 technical reports, papers, monographs and books were analysed.

Information obtained from the literature, curriculum packages and questionnaire data was carefully analysed and presented in separate chapters of the report, namely in Chapters 2, 3, and 4.

Analyses of case study schools displaying exemplary road safety education practices was another major emphasis of the study. A selection process to obtain a comprehensive sample of urban/rural, government/non-government, pre-primary/primary/secondary schools was developed, but final decisions about schools to be visited was based largely upon recommendations made by road

safety education liaison officers in each State and Territory, and to a lesser extent, restricted by the willingness or otherwise of education systems and individual schools for visits to be made.

A total of 59 schools were visited over the 14 month period, representing all States and Territories and based upon the criteria listed above. At each school the authors had discussions with teachers and students and sometimes parents, they collected various school documents and policy statements, and they observed road safety education lessons wherever possible. A summary record of each of the 59 schools was made and detailed case study accounts were compiled on 28 schools.

In summary it can be concluded that:

- (a) providers in all States and Territories are relatively active in producing road safety education materials but the extent of communication patterns and their level of effectiveness ranges from substantial to minimal.
- (b) there have been some exciting curriculum developments, including joint projects between providers and these achievements need to be disseminated widely as examples of what can be accomplished.
- (c) there are lessons to be learnt from technical studies and reports on road safety education but too often the policies implemented and the curriculum materials produced by agencies do not reflect these findings.
- (d) throughout Australia there are some exciting schools where valuable teaching in road safety education is occurring. However, the incidence of successful schools is relatively low and most of the successes are confined to primary schools.

The following section provides an elaboration of these general findings together with the presentation of a number of recommendations.

# 6.2 Recommendations

6.2.1 <u>Effective communication networks between road safety education</u> providers and u<u>sers</u>

# Levels of activity of providers

Providers of road safety education are many and varied in Australia but they tend to have a common, over-riding goal – to reduce road accidents, casualties and fatalities. They differ considerably in areas of emphasis, some concentrating upon individual, human factors, while others focus predominantly upon social factors. This is not surprising considering the origins and functions of the various providers which include:

- organisations responsible for legislation, licensing and enforcement of road traffic usage;
- head office education departments;
- professional-medical groups;
- consumer groups;
- tertiary education researchers;
- community service groups;
- private industry/community groups;
- parent groups;
- pre-service teacher training organisations.

These organisations/agencies can make valuable contributions to road safety education and this has been the case in a number of States and Territories. However, it is very evident that some are far less active than others and means need to be devised to encourage higher levels of emphasis. From observations made in all States and Territories and from information obtained from questionnaires, it is evident to the authors that two groups which have the potential to make a significant contribution but which are presently underrepresented are parent groups and pre-service teacher training organisations.

Parent groups were observed in action in one or two schools only, where recent, local, road accident catastrophes had galvanised them into action. There were several isolated examples (Tables 39, 53) where local traffic centres used volunteer parents and community members to run programmes for pre-school and primary school children. In these cases, local government authorities had provided the organisational structures and it may be that this is an appropriate level of government to enlist parent participation in road safety education programmes.

It was also most disconcerting to the authors to note that pre-service teacher training institutions were involved very minimally in road safety education. There was evidence in one state that a re-structuring of teacher education had resulted in the virtual demise of an effective road safety education programme due to competing demands for course time. Teacher educators were rarely aware of recently developed road safety materials and few included topics or even part-topics on road safety. The negative multiplier effect that this must have, and is having upon practising teachers, is cause for considerable concern (and noted as a major problem by educators in the UK (TES, 1989).

#### RECOMMENDATION 1:

Incentives and structures need to be provided by agencies to develop greater participation from parent groups in matters relating to road safety education.

# **RECOMMENDATION 2:**

Post secondary/teacher training accreditation agencies need to consider, as a matter of urgency, the inclusion of units/courses on road safety education as a requirement in all pre-service teacher education programmes.

# Informal contacts between road safety providers

Data from the questionnaires revealed that some providers have joint membership on official committees, especially government department committees. However, it was very evident to the authors that significant joint projects between providers were initiated by individual policy-makers who had established close, informal ties with each other. This was especially evident in the smaller urban communities such as Darwin and Hobart, where significant cooperative ventures have been initiated.

The establishment and maintenance of close informal contacts between policy makers is difficult to achieve, especially in the larger cities but efforts need to be taken by State and regional co-ordinating committees to ensure that providers are kept informed of current projects in road safety education and are given opportunities to interact with each other. As an example of an appropriate structure, the *Blackman Report* (1987) recommended the formation of an interdepartmental road safety education management committee in South Australia to co-ordinate activities of various government and non-government agencies, but to date the report has not been acted upon the South Australian government.

#### **RECOMMENDATION 3:**

State or regional co-ordinating committees need to be established to promote informal and formal links between providers with the object of developing common interests leading to joint project initiatives.

# Publicising successful practices

Some road safety education groups have had considerable success over the last decade, as measured by changed public attitudes. Three examples became very evident to the researchers in this study, namely professional-medical

groups, State bicycle committees, and government/private industry joint project groups.

Medical practitioners, especially in Victoria, have been very active in publicising the horrific injuries inflicted upon child bicyclists and the need for children to wear safety helmets and reflective clothing by their books, scientific reports and public addresses. The initiatives taken by medical practitioners, the police and road safety agencies, together with considerable support from the media, have brought about creditable increases in the usage of safety helmets by cyclists, especially those of primary school age.

At the school level this initiative has been extended to good effect. The authors were very gratified to note that a number of the case study schools (especially case studies 2, 3, tables 51, 52), had run their own bike helmet campaigns (often initiated by parents) and that levels of usage of helmets were rising significantly. At some schools, the principal and/or the school council had introduced a school rule which made the wearing of safety helmets obligatory for all children riding their bikes to and from school. Local firms have also facilitated the process by donating helmets for special competitions and events.

State bicycle committees have taken various initiatives in a number of states to provide safer riding environments and to encourage higher levels of skills for cyclists. "Bike-Ed" teaching kits, based to a large extent on the original programme developed in Victoria in 1979, have been produced in most States and Territories and distributed widely to schools. Without doubt, "bike-ed" programmes in their various formats, are the most widely used of all road safety education materials, due in no small measure to early initiatives and on-going financial support provided by State bicycle committees.

In several States and Territories, "symbiotic" relationships between government and private enterprise firms in joint projects have had considerable success. For example, a joint project by the Police Department and an insurance office in South Australia has produced a comprehensive and well received Youth Driver Education programme. In the ACT, a joint project between a private driving school and a senior college has also resulted in a very successful student driver programme.

It can be argued that these successful ventures need to be highlighted and brought to the attention of other road safety education providers as exemplars worthy of their consideration.

#### **RECOMMENDATION 4:**

Successful practices in road safety education should be disseminated widely to other road safety education providers using appropriate media forms such as brochures, newsletters, journal articles, posters and videotapes.

# Incorporating road safety in formal Education Department syllabi

Education systems can play a major role in facilitating the teaching of road safety principles by establishing firm policies and time allocations for them to be taught in primary and secondary schools. It is unrealistic in an era of extreme curriculum competition to assume that education authorities are likely to advocate that road safety education should be taught as a discrete subject, or that it should occur across all grades K-12.

However, appropriate incentives for teachers can be applied by incorporating specific road safety concepts and activities in mandatory curricula such as in Health Education or Social Studies. As an example, the recently developed Health Education syllabus in Tasmania, mandatory for all children K-10, has had the effect of legitimising road safety as an essential element to be studied by all students as from the beginning of 1989.

At the secondary school level, students are only likely to select road safety education electives (for example, driver education) if they have the status of board approved/registered subjects.

#### **RECOMMENDATION 5:**

Education systems should examine the extent to which road safety concepts and activities are included in current official curricula/syllabi and where necessary, they should take steps to incorporate them in future official documents.

# The effects of political initiatives upon road safety education programmes

Just as school principals play a pivotal role in determining the quality of teaching that occurs in their respective schools, it has been evident to the authors that the States and Territories which enjoyed strong support and leadership from politicians for road safety education have been able to maintain active, and relatively successful programmes.

For example, student driver education has had a history of strong support from politicians in several states, such as in Victoria and Queensland, over the years, and more recently, in Tasmania.

In a period of considerable financial restraint, especially upon government departments, it is crucial that strong political leadership and financial support for road safety education is sought out and is forthcoming. The questionnaire data from policymakers revealed that lack of finance, lack of personnel and insufficient resources were major impediments preventing them from initiating important road safety education programmes at the present time.

#### **RECOMMENDATION 6:**

Policy makers in road safety education agencies need to inform appropriate ministers about the serious financial problems they are experiencing currently in initiating viable programmes. They should use various informational/media outlets to provide ministers with up-to-date information and convincing arguments regarding the substantial human and material losses which continue to occur due to road accidents and how these might be reduced by appropriate educational programmes.

#### The role of road safety education consultants

It was very evident to the authors that in the States and Territories where full-time consultants were used to introduce road safety materials into schools and to support teachers in their use of these materials, levels of teacher adoption and implementation rates were relatively high. Notwithstanding, there were only a few States and Territories where there were sufficient numbers of consultants available to undertake these functions (ACT, Victoria, NSW and Tasmania) and, of these, NSW consultants seem destined to be short-term appointments only.

As noted in the case studies, consultants external to a school came from different backgrounds (including curriculum developers, ex-classroom teachers, traffic officers and police officers) but common attributes were their enthusiasm and their ability to interact well with teachers and students. Questionnaire data revealed that many of these consultants had accepted these positions because they had deep-seated concerns about the safety and welfare of children – they were committed and motivated by altruistic factors. However, it was disturbing to note from the questionnaire data that even in those States and Territories where there was a sizeable number of road safety consultants they had received minimal training for their role; their assignments to schools were exceptionally heavy;

few were involved in any on-going development of road safety materials or trialling/evaluative activities; and few procedures seemed to be available for consultants to obtain evaluative feedback from schools about their performance and levels of effectiveness in this role.

Lack of funding is a major reason in a number of States and Territories why road safety education consultants have been reduced in numbers so drastically as to make their task exceedingly difficult, if not impossible. There are also some States and Territories where no commitment to consultants has occurred, presumably because it is considered that road safety education should not be given a high priority. This is indeed surprising and disappointing, considering that the literature on curriculum implementation over the last decade is replete with examples about the need for external assistance if teachers are to be convinced about, and willing to experiment with, new curriculum materials.

#### **RECOMMENDATION 7:**

Education systems in all States and Territories should give high priority to the provision of a minimum number of full-time consultants to facilitate the use of road safety education materials in schools.

#### **RECOMMENDATION 8:**

Appropriate training procedures, including programme management and evaluation practices, need to be adopted by education systems and other agencies to ensure that consultants are given sufficient background to undertake their role effectively.

#### **RECOMMENDATION 9:**

As an integral part of their responsibilities, consultants should undertake curriculum development activities (for example, modifying packages from other states), trialling and evaluations of existing materials in schools.

#### **RECOMMENDATION 10:**

In any new curriculum development project it is essential that the project budget contains sufficient resources to obtain the services of consultants to facilitate the acceptance and implementation of the materials into schools.

## The role of road safety education administrators/coordinators

For road safety education to be included as part of the school curriculum for primary and secondary school students it is self-evident that education systems need to have one or more administrators who have this as their sole or major responsibility. From interviews conducted with incumbents in some States and Territories it appears that their responsibilities include:

- representing road safety education on curriculum policy committees;
- formulating procedures for road safety education consultants to visit schools:
- providing a clearing-house function for schools;
- promoting road safety education programmes;
- organising and administering curriculum development, trialling and evaluation associated with road safety education topics/units.

Although most education systems have a contact person who is nominated as the road safety education administrator/coordinator, it was very evident from the questionnaire data that many of these individuals have a number of curriculum responsibilities, of which road safety education is a very minor component. As indicated in Tables 3.30, 3.31 and 3.32, only 33% of respondents spent a substantial amount of their time on road safety education as part of their duties; 67% of respondents had held the position for less than 3 years and of these 33% had less than 1 year's experience; and 42% of incumbents indicated

that they had no colleagues or subordinates working with them on road safety education.

Road safety education is unlikely to be given a high priority in schools unless education systems recognise the need to have full-time administrators to give the subject area visibility and status. Curriculum policy committees need to be kept informed about the importance of road safety education and this is unlikely to happen unless the subject area has full-time officers extolling the potential advantages of it in an already overcrowded curriculum.

#### **RECOMMENDATION 11:**

All education systems need to give urgent consideration to the appointment of at least one full-time administrator/coordinator for road safety education, to ensure that the subject is perceived to be an important element of the school curriculum.

#### **RECOMMENDATION 12:**

Road safety education providers should ensure that senior policy executives in education systems are kept fully informed of developments in road safety education and ensure that they are invited to participate in activities (for example, seminars, conferences) which could lead to road safety education being given a higher priority in schools.

## Knowledge about teachers' rates of adoption and implementation of road safety education materials

The Maggs and Brown (1986) study revealed that primary school teachers' use of road safety education materials was extremely limited. Specifically, they concluded that road safety was taught incidentally and that less than 40% of teachers used available kits or programmes.

From visits made by the authors to all States and Territories it is evident that the situation appears unchanged in many primary schools, despite some exemplary teaching practices that were observed in a few schools. At the secondary school level, apart from some isolated examples of exemplary practices in student driver education, the situation is possibly even more limited than in primary schools.

Although the brief of this study did not include any surveys of teachers' use of road safety education materials, the impressions gained by the authors from interviews with key personnel and a number of visits to case study schools are that the teaching of road safety education is at an alarmingly low level at both primary and secondary schools.

It might be argued that comprehensive information about the teaching of road safety education in schools should be a major responsibility for administrators/coordinators having this designated role in education systems. Unfortunately, there was little evidence either from questionnaire data or from interviews undertaken by the authors, that the incumbents collect this information.

The chief exception was in Victoria where Road Traffic Authority education officers have obtained data on teachers' use of specific packages such as *Bike Ed*, *Roadswork* and *Streets Ahead* over a number of years. In NSW, education officers of the Roads and Traffic Authority are also embarking upon an elaborate series of surveys to collect information on their recently developed packages, namely *Kids and Traffic* and *Street Sense*. However, it should be noted that these agencies have major responsibilities for the development of curriculum materials and do not have direct links or responsibilities with schools. In contrast, administrators for road safety education in government and nongovernment education systems have not undertaken these surveys, presumably because of insufficient resources or because of directions given to them by their senior officers.

#### **RECOMMENDATION 13:**

Administrators/coordinators in education systems should monitor regularly appropriate aspects of teachers' use of road safety education materials, and the nature and extent of road safety teaching practices in schools.

### Evaluations of road safety education packages

Although over 80 packages have been produced by various agencies over the last ten years in Australia, very few comprehensive evaluations have been undertaken of the materials themselves; of the dissemination strategies used to get the materials into the schools; of support given to assist teachers with implementing specific packages; or of the development of measures to evaluate changes in students' attitudes and behaviours. In Chapter 2, reference was made to some evaluation studies that had been undertaken but with the exceptions of those by Trotter and Kearns (1983) and Gardner (1984), the remainder have been limited to largely descriptive accounts. As noted in Chapter 3, administrators, coordinators and consultants have had very little involvement in evaluation studies of their packages or of packages produced by other agencies.

#### RECOMMENDATION 14:

Road safety education providers need to establish mechanisms co-operatively with each other so that comprehensive evaluations of packages are undertaken and so that the results are made available to other interested groups.

# Use of the media to publicise road safety education principles and programmes

From discussions with providers in various States and Territories, it is evident that the media, especially television, is being used increasingly to portray various aspects of road safety education. Television documentaries and features on road safety education as well as advertisements, are likely to have a powerful impact upon viewers, even though few research studies to date have been undertaken on this matter. Television can also provide an ideal vehicle for joint projects by providers varying their contribution from active participation in the planning and preparing of programmes to limited participation but financial support through sponsorship.

Consideration needs to be given to road safety television programmes that will attract parents as well as students and which depict parents as role models for their children. Programmes transmitted at early morning and weekend time slots could be effective opportunities to attract parent or whole family viewing.

In addition, attention needs to be given to new and varied ways of providing road safety education information in newspapers and journals. Computer games based on road safety education principles and videotapes are also vehicles that have enormous potential.

#### **RECOMMENDATION 15:**

Road safety education providers should give increased attention to media outlets, especially television, for raising the awareness of road safety issues among parents, children and community members.

# Curriculum competition and teachers' receptivity to using road safety education materials

The questionnaire data revealed that consultants and administrators/
coordinators were most concerned about the amount of curriculum competition
and how this was having a deleterious effect upon road safety education.
Teachers tend not to teach road safety education because of the competing
curriculum demands of so many other subjects, especially those deemed to have

core status. One solution, described above, is to attempt to persuade policymakers that road safety education needs to be elevated to the status of a mandatory unit(s), possibly within the syllabus framework of Health Education or Social Studies.

Another solution is to ensure that road safety materials are "user friendly". Teachers are more likely to use materials, even if the subject is not mandated, if they are attractively packaged, if the instructions for use are easy to follow and minimal preparation is required, and if they can be used in a variety of teaching situations, especially as discrete topics. The questionnaire data indicated that consultants and administrators/ coordinators perceive that teachers are most disposed to road safety education materials about pedestrian and bike safety. By contrast, it is perceived that teachers have far less interest in passenger safety, driver education and bus safety. Although it is not surprising to note a lower priority for passenger and bus safety, the low regard for driver education might not be a disregard for the topic as such but a realization of the enormous amount of time and effort involved for teachers assigned to student driver education programmes.

#### **RECOMMENDATION 16:**

Road safety education materials should be produced in areas of most interest to teachers (for example, bicycle and pedestrian safety). Curriculum developers must ensure that their respective packages are attractively presented, with simple instructions and a built-in-flexibility so that they can be used in a variety of teaching situations.

### 6.2.2 Exemplary practices in road safety education in schools

## The Principal as a major player in initiating and maintaining effective road safety education programmes in schools

In a number of the case study schools (case studies 6, 7, 16, 20, 22), it is evident that the school principal has a pivotal role in determining whether road safety education is emphasized or not. Principals can provide the leadership – the drive, enthusiasm and follow-up to ensure that programmes are initiated and completed. By contrast, in schools where road safety education gets little more than an assembly talk prior to school holidays, the principals in these schools are culpable, even though they may be actively pursuing other school goals.

Various means need to be pursued to enlist the support of principals. Road safety education providers should ensure that school principals are kept informed about new products and see that they are invited to demonstrations, promotions and related social events. Providers also need to find opportunities to give presentations at professional associations of principals. Opportunities for publishing brief accounts of new products in teacher magazines and journals also need to be explored. Various media outlets should be considered for publishing materials, especially those that are likely to be used by school principals.

### **RECOMMENDATION 17:**

Road safety education providers should recognise that school principals have a major leadership role in schools and that various dissemination strategies must be used to enlist their interest and support for the teaching of road safety education in their respective schools.

# Recognising the contributions made by enthusiastic road safety education staff members

As noted in Chapter 5, a key factor responsible for successful road safety education programmes in 32% of the case study schools was a committed, active and well-respected staff member. In many schools it is one person who works single-handed in organising materials, enlisting staff support, and co-ordinating various programmes.

Rarely are these individual staff members given any formal recognition for their endeavours, in terms of an official position in the school or a salary increase. The highly structured regulations regarding staff appointments and positions mitigates against this possibility. At best, in some secondary schools these teachers are given a slightly reduced teaching load.

However, in times of increasing devolution of powers to individual schools, it is now possible for principals in many States and Territories to investigate ways and means of appointing a "road safety education officer" in each school and to provide some appropriate status for these persons.

It is crucial, also, for school principals to enlist the support of additional staff in road-safety matters as a safeguard against the inevitable – that a keen stalwart will not keep up his/her activities year after year without suffering 'burn-out' and/or wanting to be transferred elsewhere to other schools or to seek another career.

#### **RECOMMENDATION 18:**

School principals should be encouraged to provide ways of recognising the contributions of enthusiastic road safety education staff members by creating a special staffing position or providing special amenities/privileges for these staff members.

# Parent support and the viability of road safety education programmes in schools

In several of the case study study schools visited (case studies 5, 7, 15, 19), parents played an active role in road safety education programmes by undertaking such tasks as co-ordinating safety helmet campaigns, doing busy-bees on bike tracks and bike racks, and agitating shire councils to rectify local road hazards.

Without doubt, strong parent support can provide the momentum and continuity to ensure that road safety education programmes are not ephemeral, and that they do not terminate upon the transfer of an active staff member.

Curriculum developers need to be aware of the potential role of parents and to ensure their support by including materials in kits that will interest parents and/or will require inputs from them. School principals need to take all possible opportunities to enlist the support of parents in road safety education programmes. It would be advantageous for developers to consider compiling guidelines/strategies for school personnel about how they might encourage parent support in their road safety programmes.

#### **RECOMMENDATION 19:**

Curriculum developers should consider including components in their road safety education packages which are likely to be of interest to parents and which would provide them with opportunities to be directly involved in various ways in their school programme.

# The potential of simulated materials to raise levels of interest and action in road safety education programmes

In a number of the case study schools visited (case studies 16, 21), there had been recent road accident incidents where children from the school had received serious injuries, and in some instances, they had been fatally injured. Understandably, such traumatic events galvanised parents and teachers into action and a number of comprehensive road safety education programmes were introduced. It is lamentable that school communities seem to require serious calamities as catalysts for initiatives to be undertaken.

There seems scope therefore for simulations to be developed which can arouse the consciousness of school communities *prior* to horrific accidents occurring. Although some videotapes are available which present graphic details of accidents and which are used in student driver programmes, there is a need for curriculum packages (including videotapes, posters, computer games) which simulate possible scenarios for school communities and which would be appropriate to use with parent/teacher/community groups. The package might consist of role-playing activities or computer-based simulations or other simulation formats. It is envisaged that the package could be a powerful complement to *Road Safety Resource Package for Community Groups* (FORS) and videotapes such as "Your Turn Next" (Tasmania) and "Safe Cycling" (Queensland).

#### **RECOMMENDATION 20:**

A simulation package appropriate for parents and teachers in school communities should be developed which uses current expertise in simulation techniques and includes modern, audio-visual/computing software.

### Studying children's behaviour in real traffic situations

In Chapter 2, reference was made to a study by Bowen (1985) in which the author advocated the use of unobtrusive observations of children's behaviour in real traffic situations to determine the success of road safety education programmes and especially programmes on pedestrian safety.

From an analysis of over 85 curriculum packages (see Chapter 4), it appears that very few of these kits include activities which enable teachers to observe whether their students' behaviour as pedestrians has improved or not. It is a fruitful area for further study and could lead to a promising performance indicator.

#### **RECOMMENDATION 21:**

Curriculum developers should include observational activities in their respective packages and should provide guidelines to teachers as to how these observations might be used as performance indicators to test the level of success of their teaching.

## Availability of road safety education materials for pre-school/kindergarten children

The literature contains many references to the need for road safety education programmes to be introduced to children at a very early age, both informally by parents and formally at appropriate agencies such as playgroups, playschools, kindergartens, and pre-schools (for example, Milne (1982), Boughton (1983), Renaud and Suissa (1989)).

The authors gained the impression after visiting a number of pre-schools in various States and Territories that road safety education providers have produced very few curriculum materials at this level. *Kids and Traffic*, produced recently in NSW is one notable exception and which is being received very positively in pre-schools in NSW and is likely to be used in South Australia. *Out and About* is also available and it is used in a number of pre-schools but the material lacks the comprehensive array of songs, music, storybooks, stickers and calendars that are provided in *Kids and Traffic*. *Starting out Safely* has been released recently in Victoria.

There is a need for additional packages to be made available that include colourful material, exciting activities (including role playing and dramatising) and a wide range of follow-up activities.

#### **RECOMMENDATION 22:**

Curriculum packages aimed at pre-school/kindergarten levels should be given a high priority by curriculum providers/developers in all States and Territories.

## Videotapes as an extremely effective way of communicating and examining road safety education issues

The authors observed that a number of schools were using videotapes to communicate various aspects about road safety such as positive behaviour and appropriate skills for cycling, crossing roads as a pedestrian and driving motor vehicles. Also, it should be noted that a number of the recent curriculum kits and packages have included one or more videotapes.

School students, especially at the secondary school level, are attuned to video-clips as part of the teen culture. Attention will need to be given to increasingly sophisticated formats for road safety videotapes so that students will not judge them adversely compared with teen-culture video clips. New and varied ways of combining videotapes with other mediums of communication (especially new computer technology) needs to be explored.

#### **RECOMMENDATION 23:**

Curriculum developers need to be reminded that videotapes are a powerful instructional tool and that varied and sophisticated forms need to be developed for inclusion in future road safety education packages.

#### Bike trailers as an effective

#### teaching aid

Bike trailers, complete with 15-20 bikes and multiple numbers of helmets and vests, are being used regularly in several states. They were observed in action at several case study schools (case studies 13, 22, 23 and 26), and were evidently very popular with both students and teachers.

A number of advantages of bike trailers should be cited. In some states, the entire cost of the trailers has been incurred by local councils who perceive it to be a worthy local community venture. In so doing, it attracts the attention of community people to road safety matters and so this can be an additional bonus.

In addition to the trailers being made available for nominal rentals, an additional advantage, as observed in some case study schools, is that it places some pressure upon teachers in schools to do their forward lesson planning to ensure that they can make use of the bikes in their "bike-ed", or similar programme. It is an additional incentive therefore, for schools to plan specific programmes to make use of this very tangible and useful resource.

#### RECOMMENDATION 24:

Local governments in all States and Territories and education systems should be encouraged to consider the potential gains from purchasing bike trailers and making these available to schools on a rotation basis for a nominal rental.

## Student driver education as an important element in secondary schools

This aspect of road safety education appears to have run the gamut of strong support in the early 1970s to declining interest in the late 1980s, due to various financial and educational problems.

As noted in Chapter 2, evaluation studies of student driver education in the USA and Canada, have produced some negative results, although the results are far from unequivocal. Reduced market opportunities for motor vehicle distributors has caused them to withdraw their vehicles and this had led in turn to the decline of student driver programmes in some states.

Yet there are promising developments which should not be discounted. The student driver education programmes for motor bikes (for example, in the Northern Territory and South Australia) appears to be extremely successful and expanding.

Several secondary case study schools (case studies 5, 6, 21) were visited where the teachers assigned to student driver education had developed very popular courses with Year 11 and 12 students. It appeared that these students had developed appropriate practical driving skills (as measured by passing learners' permits and in some states, drivers' licences). Equally as important, the teachers had been able to gain the confidence and trust of a number of students who had not been successful with academic subjects but student driver education had provided them with a valuable opportunity to develop confidence and a more positive outlook to society and a career in it.

Because of the massive number of traffic accidents which involve young persons driving motor vehicles, student driver education must be evaluated thoroughly and various alternatives need to be considered. As noted in Chapter 2, student driver education programmes cannot be evaluated by standard pre/post control group methods. Attention needs also to be given to various attitudinal and personality factors (Jolly 1988).

Various questions need to be raised about current student driver education programmes. For example, are pre-driver education courses with an emphasis upon theory and little upon practical driving skills a better alternative, as practised in case study 14? Should student driver education programmes be offered earlier, such as at lower secondary level, to ensure that appropriate

attitudes to driving are developed? Should student driver education programmes be available to students in senior secondary schools but taught by outside professional groups such as driving schools (see table 5)?

#### **RECOMMENDATION 25:**

A comprehensive evaluation study of student driver education programmes in Australia, involving a longitudinal element, is needed urgently to collect information about the effectiveness of current programmes with regard to skills development, attitudes and values about driving and road safety.

#### Resources available to schools

Having a range of up-to-date materials on pedestrian, passenger and bike safety appears to be a major prerequisite for exemplary practices to occur in schools. Some outstanding materials are available free to schools (for example, Out and About) or are supplied at nominal costs (for example, Constable Care).

Road safety education packages costing \$20 or more were not evident in many libraries/resource centres visited by the authors. This is partly due to school's limited budgets and their inability to purchase expensive curriculum materials. It also appears to be the case that many schools (and road safety agencies) are not always aware of packages produced in other States and Territories. For example, Careful Cobber is a very useful road safety education package but it tends to be used mainly by schools in easy driving distance from Shepparton. It was not evident in case study schools in Melbourne and it was certainly not known to teachers in other states.

Some road safety education agencies have opted for the less expensive alternative of making minor adaptations to existing materials produced in other States and Territories. In some cases, only the titles are changed (with appropriate acknowledgements made to the original authors). In other cases, major changes

are made to the content and format. Further rationalisation of scarce resources is needed if wasteful duplication of expensive materials is to be reduced. For example, there are at least six different bike education packages available in States and Territories, although most are based on the original *Bike Ed* course developed in Victoria. There is considerable overlap between major primary level packages developed in Victoria and NSW, such as *Streets Ahead* and *Streets Sense*.

#### **RECOMMENDATION 26**;

A directory of road safety education materials available from various sources in Australia is needed urgently and copies should be distributed to all schools.

#### **RECOMMENDATION 27:**

A working party comprising senior representatives from major road safety education providers in all States and Territories should be established to consider duplication occurring in current curriculum development projects and to consider ways of rationalising the use of scarce resources.

# Integration of road safety education concepts across a number of subjects

A major difficulty noted above is the curriculum competition occurring in schools. There are so many subjects vying for a place in the timetable that principals and teachers tend to select those that are deemed to be high status ones, and/or ones with officially sanctioned syllabuses. Unless road safety education concepts are given prominence in another subject, such as Health Education or Social Studies, there is little chance that teachers will devote much time to it.

An alternative is to encourage teachers to integrate road safety education concepts across a number of subjects such as English, Social studies, Science, Art

and Mathematics. Some of the road safety packages produced recently (for example, *Street Sense* in NSW and *Streets Ahead* in Victoria) have recognised this need and contain topics which enable primary school teachers to integrate their teaching across a wide range of subjects. Curriculum developers planning new materials should be encouraged to consider the advantages of an integrated approach to road safety education.

In some case study schools visited by the authors (case studies 2 and 3), teachers demonstrated high level skills in integrating road safety concepts across a number of subjects. Intensive periods of 2-3 weeks, using road safety themes, appears to be an excellent way to introduce road safety across a variety of subjects. These skills and approaches developed by teachers could be of considerable value to other teachers interested in integrating road safety into their classrooms but who lack the knowledge or the confidence to embark upon these activities.

#### **RECOMMENDATION 28:**

Curriculum developers planning new road safety education packages should be encouraged to consider the merits of an integrated orientation/approach.

#### **RECOMMENDATION 29:**

A handbook of practical suggestions on how to integrate road safety education concepts across a variety of subjects, at pre-primary, primary and secondary school levels, needs to be compiled and distributed widely to schools.

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### Appendix 1

## Interview Checklist used with Individuals/Organisations in each Australian State/Territory

State / System	
Contact Person	·
SPE	CIAL HISTORICAL / CONTEXTUAL FACTORS
Major time period	S
Special governmen	nt initiatives
Major goals / thrus	sts
levels	pre-primary primary secondary
staff involved	temporary permanent career structures
Outside funding so	ources: government
	industry

### Organisations and groups involved in P.S.

Major Ones	Main focus	Contact
		persons

### Curriculum Materials Development

Levels	preprimary
	primary
	secondary
Main foo	cus
Curricul	um areas
Evaluati	on studies done
Recent d	levelopments
Achieve	ments
Problem	s

### **Dissemination Strategies**

Mail	
Personal contact:	teachers
	parents
	pre-service
Media:	TV
	Radio
Evaluation of effec	tive methods

Current preferred approaches

### Implementation Strategies / How Monitored

Materials been trialled evaluated	
Best strategies to use with principals	
Best strategies to use with teachers	

Major problems

### **Exemplary Schools**

Names	Addresses	Contact
		persons

.

### Professional development

for consultants e.g. induction

for teachers

for parents

Packages available

Reports available

Papers

### Your Role

Areas of responsibility?
FT or Road Safety?
How many others work with you?
Resources available?
What are your special interests in Road Safety?
Linkages with any other agencies?
Ideally what extra things would you like to do?
Are you aware of materials from other states?

Do you use them?

## Achievements / Problems

Main achievements so fa	ar	

# Problems

That you can do something about

That are beyond your organisation

# Appendix 2

Final Versions of the Three Questionnaires Distributed to Road Safety Education
Personnel/Organisations in each Australian State/Territory

- (a) Policy Directors/Senior Administrators
- (b) Education Officers/Administrators/Coordinators
- (c) Consultants and Curriculum Developers

# ROAD SAFETY EDUCATION QUESTIONNAIRE for POLICY DIRECTORS / SENIOR ADMINISTRATORS

Bi	ographical Information
	hat does your position entail in respect of road safety education in hools?
	or how many years have you been responsible for road safety education in hools (or as a wider brief such as health education)?
	ow many staff have road safety education positions and are responsible to ou?
	hat factors caused road safety education in schools to be within your area responsibility?
_	
W	hat special interests do you have in road safety education in schools?
_	

How is roa organisatior	-	education	in schools	related	to oth	er parts	of

	education in schools?
	<del></del>
Briefly descri	ibe the strategies which are employed to achieve these goal
	are the country of many of the country of the count
	ent would you like to redirect any of the goals relating to tion in schools?
What resourd in schools go	ces do you have available to achieve your road safety educ oals?

Activities, Responsibilities and Issues

B.

Other resources	
Are there other secresources to achieve	ctions / divisions of the organisation which pro your road safety education in schools goals?
Number of staff	
full-time	
full-time part-time	
full-time	
full-time part-time	
full-time part-time	
full-time part-time	
full-time part-time	
full-time  part-time  Facilities	

1	Names of other agencies / organisations
	9
-	
-	
1	Nature of contact, linkages
	vacare of contact, initiages
-	<del></del>
-	
,	To what extent are you involved in joint projects on road safety educat
	with other agencies? If <b>yes</b> , please give examples:
	The second of th
-	
-	
]	If you are not involved, please give reasons why this is not possible
	desirable?
-	
-	
	Are there other agencies / organisations which operate independently l
	reinforce your activities in road safety education in schools? If <b>yes</b> , ple give details:
Ş	in a ciano.
_	

In the short	term					
	<del></del>					
	<del></del>			. <u></u>		
<b>.</b>						
In the long t	erm			•		
				<del></del>		
		<u></u>				
Briafly av	olain why the	so are majo	r priorities	for you?		
Briefly exp	plain why thes	se are majo	r priorities	for you?		
Briefly exp	plain why thes	se are majo	r priorities	for you?		
Briefly exp	plain why thes	se are majo	r priorities	for you?		
Briefly exp	plain why thes	se are majo	r priorities	for you?		
Briefly exp	plain why thes	se are majo	r priorities	for you?		
Briefly exp	plain why thes	se are majo	r priorities	for you?		
Briefly exp	plain why thes	se are majo	r priorities	for you?		
Briefly exp	plain why thes	se are majo	r priorities	for you?		
Briefly exp	plain why thes	se are majo	r priorities	for you?		
What do	you regard	as the m	ajor proble		onting	road s
What do		as the m	ajor proble		onting	road s
What do	you regard	as the m	ajor proble		onting	road s
What do	you regard	as the m	ajor proble		onting	road s
What do	you regard	as the m	ajor proble		onting	road s

To what extent are these problems beyond the control of your organism.  To which agencies / organisations should these problems be directed?  What other perspectives / opinions do you have about road safety edin schools?		organisation?	
To which agencies / organisations should these problems be directed?  What other perspectives / opinions do you have about road safety editations.			
To which agencies / organisations should these problems be directed?  What other perspectives / opinions do you have about road safety editations.			
To which agencies / organisations should these problems be directed?  What other perspectives / opinions do you have about road safety editations.			
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What other perspectives / opinions do you have about road safety edu			-
What other perspectives / opinions do you have about road safety edu			
What other perspectives / opinions do you have about road safety edu			
What other perspectives / opinions do you have about road safety edu	To which	agencies / organisations should the	se problems be directed?
What other perspectives / opinions do you have about road safety edin schools?			
What other perspectives / opinions do you have about road safety edin schools?		·	
What other perspectives / opinions do you have about road safety edin schools?			
	What oth in schoo	ner perspectives / opinions do you h ls?	ave about road safety edu
		<u></u>	
		<del></del>	

If available, please forward me copies of any trialling reports and evaluation studies with your completed questionnaire.

Thank you for your cooperation in completing this questionnaire. Please place it in the self-addressed envelope and return it as soon as possible to

Associate Professor C. Marsh School of Education Murdoch University Western Australia 6150

# ROAD SAFETY EDUCATION QUESTIONNAIRE for EDUCATION OFFICERS / ADMINISTRATORS / COORDINATORS

Biographical Information
What is your position and to whom are you responsible (position) for road safety education in schools?
Why did you decide to accept this position?
Briefly describe what the position entails in terms of road safety education in schools.
For how many years have you been responsible for road safety education in schools in your education system?

How much time do you spend on matters directly related to road safety education in schools?
·
How is road safety education in schools related to other parts of your organisation?
What do you consider are your special interests in road safety education in schools?
How many other colleagues in your office / branch are involved in road safety education in schools?
only me
colleagues

What does your office / branch produce, such as packages, guideling					
policies, activities, course outlines on road safety education in schools? Please give details					
Title	Date first produced	Grade level	Major Features		
f not applic	been trialled and cable, go on to ite e, give details bel	em 11.	Yes / No		
⁄laterials T	rialled				
)ate	Number of S (e.g. no. of so period of tin	chools,	Key Outcomes		
<del></del>					
<del></del>					
Oate	(e.g. no. of s	chools,	Key Outo		

(If available, please provide me with a copy of the trialling reports)

Material E		
Date	Major outcomes	Availability details
(Please inc	ude a copy with this questionr	naire if available)
What othe use/promo	r package, guidelines, policies ete in schools?	, activities, course outlines do you
Can you es unit or top	timate the percentage use by te ic available to teachers in your	eachers of any particular road safety state?
	Name of topic/unit	% use

Which specialist agencies / individuals do you typically contact in undertaking your role as road safety education officer?
for encouragement / advice
for training
for financial support
Which specialist agencies / individuals typically contact you in your role as road safety education officer / administrator / coordinator?  Give details:

improve your role as road safety education officer?
for encouragement/advice
for training
for financial support
Which methods do you use to get teachers to teach about road sandy and a second section in section 2.
education in schools?

,	What do you consider are major constraints in your role as road s education officer / coordinator?
•	education officer / coordinator?
•	
	Please comment on the effectiveness of your role as a road safety educ
	officer / coordinator.
•	
•	· · · · · · · · · · · · · · · · · · ·
1	What strategies do you find most effective in gaining the support of a s
	principal to have road safety education materials taught in his/her scho
	· · · · · · · · · · · · · · · · · · ·
	What strategies do you find least effective in gaining the support of a s principal to have road safety education materials taught in his/her scho
	principal to have four surery education materials taught in his her sene
•	

(a)	preschool level
(b)	primary school level
(c)	post primary / secondary school level
In v	what ways might these problems be overcome?
(a)	preschool level

(c)	post primary / secondary school level
Wha teacl	t are the features of road safety education units / topics to where attach high priority?
	· · · · · · · · · · · · · · · · · · ·
	t are some features of road safety education units / topics whers tend to give low priority?
	t are some features of road safety education units / topics where tend to give low priority?
Have	
Have	e you used the media to communicate information about road safe
Have	e you used the media to communicate information about road safeation materials?  Yes / No
Have	e you used the media to communicate information about road safeation materials?
Have	e you used the media to communicate information about road safeation materials?  Yes / No

-							
List the scho	ools you would	d nominate	as ones	with ef	fective	road	Sã
							_
						-	
What other education?	perspectives	opinions	do you	have	about	road :	sa 
				<u> </u>			

If available, please forward me copies of any trialling reports and evaluation studies with your completed questionnaire.

Thank you for your cooperation in completing this questionnaire. Please place it in the self-addressed envelope and return it as soon as possible to

Associate Professor C. Marsh School of Education Murdoch University Western Australia 6150

# ROAD SAFETY EDUCATION QUESTIONNAIRE for CONSULTANTS AND CURRICULUM DEVELOPERS

No and	te: In the following items, $C/C$ refers to persons who work as a Consultant l/or as a Curriculum Developer.
Α.	Biographical Information
1.	What is your position and to whom are you responsible (position) for road safety education in schools?
2.	What factors influenced your decision to accept a position as a C/C?
3.	For how many years have you been working as a C/C?
4.	Do you operate at a particular school level or subject area? Give details.
	school level
	cubiact area

Wha	at proportion of your time do you spend on:
(a)	planning/developing curriculum materials
(b)	visiting schools
<i>(</i> )	
(c)	providing/organising workshops

What do you consider are your special interests / strengths as a C/C?
special interests
strengths
Give details of any special orientation / induction training you had prior to or just after commencing the C/C position.

В.

produced	level	

10. Have these been trialled and/or evaluated?If not applicable, go on to item 11.If applicable, give details below:

Activities, Responsibilities and Issues

Yes / No

#### **Materials Trialled**

Extent of Trialling

Date Number of Schools Key Outcomes
(e.g. no. of schools, period of time)

(If available, please provide me with a copy of the trialling reports)

## Material Evaluated

Date	Major outcomes	Availability details
	· · · · · · · · · · · · · · · · · · ·	
	· · ·	
(Please incl	lude a copy with this questions	naire if available)
policies, a	ls of any road safety education ctivities, course outlines you entirely or mainly by you).	n curriculum packages, guidelines have developed recently (either
-		
	ls of <b>any other</b> packages, gui ou use/promote in schools.	delines, policies, activities, course

for financial support

	Name of topic / unit	% use
If you are direct major priorities	ctly involved in producing curriculus for you.	um materials indicate
Priorities	Specific Subject/integrated	Level of Schooling
1.		
2		
3.		
4.		
	list agencies / individuals do y our role as a C/C?	ou typically contac
for encouragemen	nt / advice	
for training		
for training		

-	
_	
-	-
	Which specialist agencies / individuals typically contact you in your role C/C?
-	
-	
1	Are there other sources / ways you use to keep abreast of recent issues appenings in road safety / road safety education?
-	
-	
	Which specialist agencies / individuals would you ideally like to contact mprove your role as a C/C?
i	
i	
i	mprove your role as a C/C?
i	mprove your role as a C/C?
i f	mprove your role as a C/C?
i f	mprove your role as a C/C?  or encouragement/advice

Which methods do you use to get teachers to teach about road sa education in schools?
Which methods do you think are most effective to get teachers to teabout road safety education materials?
What do you consider are major constraints in your role as a C/C?
Please comment on the effectiveness of your role as a C/C.

	nt strategies do you find least effective in gaining the support of a sch cipal to have road safety education materials taught in his/her school
	at do you consider are the main problems in getting teachers to te
roac (a)	l safety education in schools?  preschool level
(b)	primary school level
	,
	post primary / secondary school level

26.	In what ways might these problems be overcome?							
	(a)	preschool level						
	(b)	primary school level						
	(c)	post primary / secondary school level						
27.		at are the features of road safety education unit / topics to which teachers ch high priority?						
28.		at are some features of road safety education units topics which teachers to give low priority?						

	Yes / No
I	f yes, please give details.
-	
_	
_	
	n working with parents on road safety materials what are some materials.
Ţ	ionis to consider.
_	
-	
_	
-	<del></del>
	list the schools you would nominate as ones with effective road sat
е	education programmes.
-	
_	

32.	What other education?	perspectives	/	opinions	do	you	have	about	road	safety
	<u></u>								<del></del>	
	<del></del>						•-			<u>.</u>

If available, please forward me copies of any trialling reports and evaluation studies with your completed questionnaire.

Thank you for your cooperation in completing this questionnaire. Please place it in the self-addressed envelope and return it as soon as possible to

Associate Professor C. Marsh School of Education Murdoch University Western Australia 6150

#### Appendix 3

### Listing of Personnel interviewed in each State/Territory

#### Australian Capital Territory

Anne O'Loughlin National Catholic Education Commission

Ron Cody Catholic Education Office

Dianne Kerr Principal Executive Officer, O'Connell Centre

June Hicks Health Education Consultant, ACT Schools Authority

Bob Davies Senior Coordinator, ACT Administration

Trudy Morton Consultant, ACT Administration
Laura Lubans-Bates Consultant, ACT Administration
Greg Zakharoff Schools Supervisor, Action Bus Service

Constable Donna Sloane
Kal Peljo and staff
Gordon Dowd and staff
Bill Atkinson and staff
Di Hocking and staff

Tuggeranong Police Station
Fadden Primary School
Macgregor Primary School
Flynn Primary School
Macquarie Primary School

Bill Donovan and staff
Margaret Wedgewood
Hawker College
Dickson College

#### New South Wales

Ken Eltis Director of Studies, Department of Education Syd Smith Studies Directorate, Department of Education Alf Colvin Studies Directorate, Department of Education

Robyn Kidd Health Studies Team Leader

Gail Bruton Road Safety Education Project Coordinator

Geoff Stein ACORSE Executive Officer

Robbie Parker Non-government Road Safety Education Project Coordinator

(until February, 1989)

Eamonn Murphy Non-government Road Safety Education Project Coordinator

(since February, 1989)

Helen Notley Catholic Education Office, Newcastle

Sister Brenda Kennedy St Paul the Apostle School

Lori St John Manager, Education Unit, Roads and Traffic Authority
Eve Barboza Evaluation Research Officer, Roads and Traffic Authority

David Martin

John Bruton

Rosie Doyle

Dave Riches

Anne Marrins

Rosie Diamond

NSW State Bicycle Committee

Road Safety Education Consultant

Constable Lee-Anne McDonald Sydney Police Centre

Janet Robinson and staff
Leanne Howie

Director, Erskineville Pre-School
Director, Forest Lodge Nursery School

Julian Tobin and staff St Martins Primary School Ronald Grimes and staff Mt Kuringai Primary School Lance Richardson and staff Artarmon Primary School Principal and staff Cairnsfoot Primary School Graeme Bond Miller High School Brian Jux and staff Bossley Park High School Cecile Wheeler and staff Girraween Primary School Paul Manning Dawson Primary School

Simone Shanley Director, Redfern Day Pre-School

Northern Territory

Peter Winckler Schools Policy and Operations North, Department of Education

Don Boyd Executive Officer, Road Safety Council

Harry Payne Director, Curriculum and Assessment, Department of Education

Nick Cockshutt Superintendent, Curriculum, Department of Education Superintendent, Darwin North, Department of Education Charlie Carter

Greg Smith Driver Education Unit, Open College of TAFE

Jack Ilet Traffic Services, Police Department Community Affairs, Police Department Mick Smith Scott Mitchell School-based Constable, Police Department School-based Constable, Police Department Paul Dixon

Tony Cadet-James Motorcyclist Education Training and Licensing, Department of

Transport and Works

Casuarina Secondary College **Bob Bradley** 

Seby Raoli Chairman, Pularumpi Aboriginal Council

Ted France School of the Air

Erhard Lee Road Safety Council, Alice Springs

Queensland

Barry Collis Coordinator of Road Safety Education, Department of Education

George Goddard Senior Traffic Coordinator, Department of Transport Greg Smith Traffic Safety Division, Department of Transport Bruce Jackson Traffic Safety Division, Department of Transport Russell Massev Traffic Safety Division, Department of Transport Ken Robertson Assistant Director General, Department of Education Brian Banisch Acting Director of Curriculum, Department of Education

Russell Saint District Support Officer, Department of Education

George O'Brien and staff Mudgeeraba State School Stuart Fawley and staff Biggera Waters State School Athol Durrie and staff Gordonvale State School Brother Adrian and staff Good Counsel Primary school Red Lynch State School Brian Stevenson

Trinity Beach Special Education Unit Smithfield High School Wayne Johnston

Kathy Caswell Ray Pendall Coolangatta High School Benowa High School Ric Jobson

South Australia

Trevor Harden Coordinator, Road Safety and Driver Education, Education

Department.

Don Blackman Nailsworth High School

**Barry Stanton** Superintendent, Education Department

Mike Scandreth-Smith Manager, Road User Branch, Department of Transport

Peter O'Connor Road Safety Division, Department of Transport Road Safety Division, Department of Transport Ian Smith Road Safety Division, Department of Transport John Walker

Linden Park Junior Primary School Denise Evans

Robin Day and staff Braeview Primary School

Barbara Fox Coordinator, Tea Tree Gully Kiwanis Road Safety Centre

Tim Bell Croydon High School George Fistr Reynella East High School

Police Department David Hearn

Tasmania

Barry Madden Director of Road Safety, Transport Tasmania Paul Stevens Assistant Director, Catholic Education Office

Russell Clark Road Safety Education Officer Jenny Connor

Gwynne Wilson-Browne

Eunice Flakelar Phillip Hughes

Principal Education Officer, Education Department

**Education Department** 

Health/Drug Education Officer, Education Department

Centre for Education, University of Tasmania

Brian Caldwell

Brendan Hibberd and staff John Butterworth and staff

Steve Barker Nora Reid Rod Miller Elaine Smith Centre for Education, University of Tasmania

Rosetta Primary School

St James College

Judbury Primary School Illawarra Primary School Ogilivie High School Beachside Kindergarten

#### Victoria

Linda Ivett Road Safety Section, Road Traffic Authority Graeme Baker Catholic Education Office of Victoria Senior Policy Officer, Ministry of Education Betty Mander Ron Shepherd School Programs Branch, Ministry of Education

Ann Arnold Ministry of Education

Ray Taylor Transport Accident Commission

Eric Montgomery and staff DECA

Russell Lindsay Traffic School, Ballarat

Kieran Griffith **DECA** 

Jenny Loughead Careful Cobber, DECA

Gordon Trinca Royal Australasian College of Surgeons Royal Australasian College of Surgeons Ric Bouvier Graham Hawthorn Personal development, Ministry of Education Graeme Gardner Post primary Cycling Project, Road Traffic Authority Tony Mackay Association of Independent Schools of Victoria

Anne Randall Road Safety Education Consultant Lyndall Horton-James Road Safety Education Consultant Ross Bailey Road Safety Education Consultant

Joyce ... Road Safety Education Consultant Sister Jennifer St Francis Primary School

Brian Wright and staff Aldercourt Primary School David Treyvoid and staff Nathalia Primary School Mordialloc Primary School Les Stevens and staff Principal and staff Ormond Primary School Ann Wagstaff and staff Murrumbeena High School Chris Wilson Frankston High School

Meg Caniana Frankston Special Development School

#### Western Australia

Terry Lindley Bike West Jim Krynan Bike West

Geoff Hayes Consultant, Ministry of Education Don Knapp Consultant, Ministry of Education Gavin Maisey Research Officer, Police Licensing Branch

Ross Pengelly Community Education Section, Police Department

Bill Robertson Bicycle Safety Section, Police Traffic Branch Ron Bonny Road Safety Section, Police Department Max Raper Road Safety Section, Police Department Alan Cox Traffic Safety, Police Department

Peter Pope School-based Police Officer, Girrawheen High School Margaret Sullivan Public Relations, State Government Insurance Commission

Alasdair McKellar Director, Child Accident Prevention Foundation

Zelda Marsh Education Officer, Child Accident Prevention Foundation Pam Albany Ken Hussie Health Promotions Services Branch Customer Services Branch, Transperth

### Appendix 4

# Distribution of Questionnaires to Road Safety Education Personnel per State/Territory

#### (a) Policy Directors/Senior Administrators

**Federal Office of Road Safety** 

John Bonnett Acting Director, Special Projects, Federal Office of Road

Safety

Bob Heacock Acting Director, Research, Federal Office of Road Safety

**Australian Capital Territory** 

Antoinette Ackermann Health Faculty, Canberra CAE

Dianne Kerr Principal Executive Officer, O'Connell Centre
Jim Maher ACT Administration, Transport Industries
Rev. J. Rheinberger Acting Director, Catholic Education Office

Coordinator Road Safety Education Unit, Australian Federal Police

Kerry Kennedy Curriculum Development Centre

Secretary Australian Council of State School Organisations
J. McMorrow Executive Secretary, National Catholic Education

Commission

**New South Wales** 

Alf Colvin Australian College of Physical Education

David Martin

Behavioural Coordinator, State Bicycle Committee
Syd Smith

Studies Directorate, Department of Education
Chris Corben

Road Safety Bureau, Roads & Traffic Authority

Lori St John Manager, Road Safety Bureau, Roads & Traffic Authority

Colin Keay School of Physics, University of Newcastle Lynne Jarman Armidale & NSW Traffic Education Centre

Warren Saloman Trades Hall

I. Matheson University of Newcastle

Caroline Whiteman Awareness & Prevention Team, Royal Northshore Hospital

Trevor Cook University of Newcastle

Maggie Stubbs Executive Officer, CAPFA, Children's Hospital

David Leonard Executive Officer, "Investigators", ABC Richard Jones Senior Education Officer, Railsafe

President Eastwood Apex Club Alan Davies Ku-ring-gai Apex Club

Secretary Australian Independent Schools NSW

Bruce Searle NRMA

John Boyling Police Department

Chris Ford Road Safety Manager, Western Region, Roads and Traffic

Authority

Ken Dobinson Director of Technical and Development Services, Roads and

Traffic Authority

Harry Campkin General Manager, Roads and Traffic Authority

Ray Reynolds CAPFA

Peter Robinson A/CEO Services Directorate
Pamela Smith Catholic Education Office

Anne Eggins Chairperson, ACORSE, Department of Education
Larry Bolitho Local government representative, ACORSE

311 Terry Dowsett Coordination and Development Unit

Joan Watson Coordinator, Child Safety Centre, Royal Alexandria Hospital for Children

Jim McGrath Secretary, Australian College of Road Safety

Graeme Giles Representative, ACORSE

Elizabeth Roberts (F.O.S.C.O.) representative ACORSE

Bro. J.A. Taylor Executive Director, Catholic Education Commission, NSW

Pam Hungerford Kindergarten Union of NSW

Wendy Lindgren Coordinator, Early Childhood Education

#### **Northern Territory**

R.O. Grimshaw Chairman, Road Safety Council

Don Boyd Executive Officer, Road Safety Council Geoff Spring Secretary, Department of Education

Nick Cockshutt Superintendent of Curriculum, Education Department

Erhard Lee Road Safety Council, Alice Springs

Malcolm Pash Automobile Association NT

Tony Cadet-James Department of Transport and Works

Bill Baird Chairman, NT Aboriginal Education Consultative Group

Richard Creswick Council of Government School Organisation

Mike Bradley NT Teachers Federation
John Ingram Principal, Batchelor College

Br. Neville Feeney Director, Catholic Education Commission

Fred McConnel Director, Medical & Allied Services, Department of Health

Mick Smith Police Department

John Hewitt Manager, Legislation & Safety, Department of Transport and Works

Jim Cook Manager, Motor Accidents Compensation Scheme, TIO

Stephen Badderley Darwin

Greg Smith Senior Lecturer, Driver Education Unit, NT Open College of TAFE

Charlie Carter Superintendent, Darwin North, Education Department
Jack Ilet Traffic Services Directorate, NT Police Department

#### Queensland

George Goddard
Ken Robertson
Russell Massey
Russell Meares
Traffic Safety Section, Department of Transport
Assistant Director General, Department of Education
Executive Officer, Traffic Safety, Department of Transport
Assistant Commissioner, Traffic Safety, Department of Transport

Alan Druery Chairman, Queensland Catholic Education Commission
Coordinator Alcohol & Drug Program Unit, Department of Education

Coordinator RACO, Traffic and Safety Section

Ray Debruin Public Relations Centre, Queensland Police Department

Coordinator Citizens Against Road Slaughter, People Against Drink Driving

G. Everett Secretary, Queensland Catholic Education Commission

#### South Australia

John Walker Community Development, Road Safety Division, Department of Transport

D. Williamson Secretary, SA Commission for Catholic Schools

David Prideaux SA College of Advanced Education

David Hearne Thebarton Police Department

Jack McLean Road Accident Research Unit, University of Adelaide

Peter Dyer Executive Officer, National Safety Council

Peter O'Connor Program Development & Review, Road Safety Division, Depart. of Transport

Ella Tyler Red Cross

John Mendoza Drug and Alcohol Services Council Brain Woods Assistant General Manager, SGIC Malcolm Heard State Bicycle Committee, Highways Department

Gwen Secomb SA Association of School Parents Club

Dean Lenton Thebarton Police Department

Vin Keane SGIC

Donald Beard Royal Adelaide Hospital
Ray Hanel Thebarton Police Department
John Fotheringham Royal Automobile Association

Ron Summers Health Commission

Mike Scandrett-Smith Manager, Road User Branch, Department of Transport

Bob Howie Police Department

Barbara Fox Tea Tree Gully Kiwanis Road Safety Centre
Barry Stanton Superintendent, Marden Curriculum Unit
H. Weston Cyclist Protection Association of SA Inc

Andrew Stanley Health Commission

Kathy Alexander Social Health Policy Unit, Health Commission

Jenny Allan Children's Services
David Hunt Police Department

Tasmania

P. Scanlon Secretary, Tasmanian Catholic Education Office

Barry Madden Director, Transport Tasmania

Bryan Walpole Director, Accident & Emergency Services, Royal Hobart Hospital

Barry Edwards Royal Hobart Hospital

Tony Pedder Commissioner for Transport, Transport Tasmania

Denis Nation General Manager, RACT

Jacob George Alcohol and Drug Services, Mental Health Commission

David Guinane Alcohol and Drug Dependancy Board

Geoff Phelps State President, Driving Instructors Association of Tasmania

Ian Thurstans Tasmanian Teachers Credit Union

Laurie Caelli General Manager, Motor Accidents Insurance Board

Malcolm Brooks Manager for Tasmania, Australian Associated Motor Insurance

Peter Wettenhall Director, Department of Main Roads
Pat Cliffe-Hickling Director, Office of Consumer Affairs
Henry Catchpole Managing Editor, Advocate Newspaper

Victoria

Graeme Hawthorne President, VASET

Ray Taylor Transport Accident Commission

David Healey Road Traffic Authority
Bill Griffiths Ministry of Education

Eric Montgomery DECA

John Cummingham Road Construction Authority

Ron Anstey Assistant Commissioner of Traffic, Victorian Police Department

Ric Bouvier National Safety Council

Peter Hill Victorian Curriculum and Assessment Board
Director Monash University Accident Research Centre

Director Australian Road Research Board

Peter Vulcan Monash University, Accident Research Centre Frank McDermott Royal Australasian College of Surgeons

Maurie Hevern State Bicycle Committee

Coordinator Community Policing Squad, Geelong

Tony Mackay Secretary, Association of Independent Schools Victoria

Secretary Life Education Centre

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Keith Edmonston
Marion Camiller
Community Action for Road Education
Judy Cowden
Paul Gardiner
Faculty of Education, Monash University
Faculty of Education, Monash University

Roger Cross La Trobe University

John Sanderson Manager, Road Safety, RACV

Gordon Trinca Royal Australasian College of Surgeons Rev. Fr. T. Doyle Catholic Education Commission Victoria

Public Relations Officer Hospital Benefits Association

Bob Kilder AAMI

#### Western Australia

Peter Tannock Director, Catholic Education Office WA

Alasdair MacKellar Executive Officer, CAPFA

Rex Campbell Coordinator, WA State Bicycle Committee
Noel Dawkins Chairman, WA State Bicycle Committee

E. RichardsonJim KellyCath MargrainMartin BunnyBike WestBike West

Rex Joyner Commisssioner of Health

Mike Maher Bike West

Gavin Maisey Research Section, Police Department

Malcolm McKercher WA College of Advanced Education - Claremont

Bryant Stokes Royal Perth Hospital

Ian Smith Accident Prevention Research Unit, Department of Public Health/Medicine

Jonathon Cook Manager, Curriculum Policy Department, Ministry of Education

Valerie Doherty Commissioner's Executive Officer, Police Department

Jim King Police Department

Sandra Brown Director of Curriculum, Ministry of Education

Jean Rice Early Childhood Education Consultant, Ministry of Education

Bill Robertson Police Department

#### (b) Education Officers/Administrators/Coordinators

#### **Australian Capital Territory**

Bob Davies Transport Industries, ACT Administration

June Hicks Consultant, Health Education, ACT Schools Authority

Ron Cody Director of Curriculum and Professional Services, Catholic Education Office

Anne O'Loughlin National Catholic Education Commission

Dale Yeoman ACT Road Safety Council Inc.

Coordinator Belconnen Traffic Demonstration Centre, C/- Australian Federal Police Coordinator Deakin Traffic Demonstration Centre, C/- Australian Federal Police

**New South Wales** 

Geoff Stein Executive Officer, ACORSE, Department of Education

Gail Bruton Executive Officer, Implementation Coordination, Department of Education

Robbie Parker Catholic College of Education Sydney

Robyn Kidd Studies Directorate, Department of Education

Ian BakerCatholic Education CommissionDirectorAustralian College of Road Safety

Roslyn Young School Road Safety Education Program, Roads & Traffic Authority of NSW

Toni Cross IECS, Sydney CAE

Richard Lynn Senior Programme Officer for Children's Services

Susan Bigg Project Officer, Children's Services Resource & Development Ltd

Neroli Williams School Directorate, Department of Education

Maureen White Chipping-North Resource Centre

Michelle Booth Senior Research Officer, Traffic & Safety Department, NRMA

**Northern Territory** 

Peter Winkler Principal Education Officer, Schools North Branch, Education Department

Bob Bradford Police Department

Bob Bradley Casuarina Secondary College

Queensland

Barry Collis Road Safety Education Officer, Department of Education

Bruce Jackson Department of Transport

Dianne Perrin Paraquad

Pam Drewson Curriculum Officer, Department of Education

Meg Driver National Injury Surveillance & Prevention Project, Mater Children's Hospital

Bev Chernley Playground and Recreation Council of Queensland

Allen McDonnell Paraquad

Ray de Braun Police Department

Glen Merry Queensland Road Trauma Committee, Royal Australian College of Surgeons
Robyn Allen Child Accident Prevention Foundation of Australia, Royal Children's Hospital

South Australia

John Walker Community Development, Road Safety Division, Department of Transport

Ian Pearce Royal Automobile Association

Morris Crosby Community Training Officer, National Safety Council

Brenton Boothby Port Pirie Police Station

Trevor Harden Road Safety & Driver Education Officer, Marden Curriculum Unit

Tasmania

Public Relations Officer Health Department

Public Relations Officer Tasmanian Government Insurance Office Ken Buntain Child Accident Prevention Foundation

G. Johns Police Department

Jim Nicholson Australian Institute Advanced Motorists

Jenny Connor Principal Education Officer, Education Department
John Annells Principal Education Officer, Education Department
Lucy Fisher Senior Education Officer, Education Department

Graham Wise Executive Officer, Division of Road Safety, Transport Tasmania

Victoria

Ron Shepherd Ministry of Education
Ted Wilson Corio Police Station

Bruce Henzell Victorian Police, Alcohol Abuse Unit Liz Napthene Child Accident Prevention Centre

Sue Radchenko Moorabbin RACV

Graeme Lee Traffic Centre, Brunswick
Secretary Motorcycle Riders Association
Secretary Teachers Federation, Victoria
Secretary Victorian Teachers Union

Jack Keating Victorian Secondary Teachers Association
Secretary Technical Teachers Association of Victoria

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Road Safety Officer Waverley City Council
Reg Dickson Caulfield Council

Sports Permit Officer Melbourne City Council
Val Painting Dandenong Police Station

Bill Mildenhall Kew City Council

Secretary Bus Proprietors Association, Victoria

Western Australia

Julieanne Hilbers CAPFA
Zelda Marsh CAPFA
Miriam Young Red Cross

Alec Abbott RAC Driver Training School, RAC

Margaret Sullivan Manager, Public Relations, State Government Insurance Office

Ross Pengelly Community Education Section, Community Affairs Branch, Police Department

Pam Albany Health Promotion Branch

Geoff Hayes Physical Education, Ministry of Education
Jim Krynen Bike Ed Officer, Ministry of Education

Terry Lindley Education Officer, WA State Bicycle Committee

Vinder Singh Engineer, WA State Bicycle Committee

Michael Yakovina Research Officer, Department of Local Government Tania Patroni Youth Representative, WA State Bicycle Committee

Peter Moses Main Roads Department

Don Knapp Health Education, Ministry of Education

Gavin Maisey Research, Police Department

Glenn Bennett Social Studies Consultant, Ministry of Education

Diane Wilkins Police Department

#### (c) Consultants and Curriculum Developers

#### **Australian Capital Territory**

Kerry Webber Special Projects, Federal Office of Road Safety
Barry Evans Transport and Industry, ACT Administration
Laura Lubans-Bates Transport and Industry, ACT Administration
Trudy Morton Transport and Industry, ACT Administration

Greg Zakharoff Kingston Bus Depot

Donna Sloane Tuggeranong Police Station

**New South Wales** 

Eve Barboza Evaluation Research Officer, Road Safety Bureau, Roads and Traffic

Authority of NSW

Rosie Doyle Road Safety Education Consultant, Teluba Education Centre

John Bruton Road Safety Education Consultant, Naremburn Professional Services Centre

Lois Diamond Road Safety Education Consultant, North Parramatta Professional

Services Centre

Dave Riches Road Safety Education Consultant, Cartwright Centre

Ken Thurlow Road Safety Education Consultant, Department of Education, Lismore

Jim Cooper Road Safety Education Consultant, Mt Ousley Professional Services Centre

Ken Close Road Safety Education Consultant, Adamstown Professional Services Centre

Sue Platt Road Safety Education Consultant, Tamworth

Road Safety Ed. Consultant Riverina Reginal Office, Wagga Wagga

Kate Allen Road Safety Education Consultant, Bathurst Professional Services Centre

George Paccullo Road Safety Education, Roads and Traffice Authority of NSW Michael Shipman C/- Dave Riches, Road Safety Education Consultant, Cartwright

**Northern Territory** 

Patrick Horner Road Safety Council
Jan Mullins Road Safety Council
Arthur Poole Road Safety Council
Scott Mitchell Police Department
Steve McGeorge Police Department

Queensland

Greg Smith Department of Transport

Russell Saint District Support Officer, Department of Education, Cairns

Stan Bishop Department of Transport, Townsville

**South Australia** 

John Walker Department of Transport

Ian Smith Road Safety Division, Department of Transport

**Tasmania** 

Eunice Flakelar Education Department
Gwynne Wilson-Browne Education Department
Angela Kadziolka Education Department

Victoria

Linda Ivett Road Traffic Authority

Western Australia

Ross Pengelly Police Department Bill Robertson Police Department