

**OVERSEAS
ROAD NOTE
17**



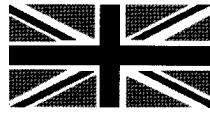
***Road Safety Education in
developing countries
Guidelines for good practice
in primary schools***



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DFID

OVERSEAS ROAD NOTE 17

ROAD SAFETY EDUCATION IN DEVELOPING COUNTRIES GUIDELINES FOR GOOD PRACTICE IN PRIMARY SCHOOLS WITH PARTICULAR FOCUS ON THE SITUATION IN GHANA

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ROAD SAFETY EDUCATION IN DEVELOPING COUNTRIES GUIDELINES FOR GOOD PRACTICE IN PRIMARY SCHOOLS WITH PARTICULAR FOCUS ON THE SITUATION IN GHANA

1. INTRODUCTION

FACTS

- Road accidents are a primary and growing cause of death and injury to children in developing countries.
- Road Safety Education is limited in developing countries, but the Transport Research Laboratory's research has demonstrated that this can be a cost effective remedial measure if the principles of good practice are followed.

WHY HAVE THESE GUIDELINES BEEN WRITTEN?

1.1 In response to the above facts, TRL, funded by DFID (Department for International Development), recently developed a specifically designed Road Safety Education resource, called 'SAFE WAYS', (Summary of 'Safe Ways'. Appendix A), for upper primary children, which was researched in Ghana. Preliminary results are encouraging.

1.2 Arising from this and other overseas work, and from their considerable experience of the British Road Safety Education scene, the authors have drawn together these international 'Guidelines' in the hope that people will be inspired by the good practice of others. Whatever cultural differences exist between countries the same fundamental principles of Road Safety Education underlie good practice.

1.3 The Guidelines illustrate the importance of Road Safety Education, and show how a developing country might put in place a system that ensures primary children receive adequate Road Safety Education.

WHO ARE THE GUIDELINES FOR?

1.4 The Guidelines will be helpful at a national planning and policy *level* to the following people:

- policy makers in Ministries e.g. Education, Transport, Health, Public Works, Police
- administrators in government services e.g. curriculum advisors in the education service.

1.5 The Guidelines give examples of what and how to teach and of Road Safety Education's place in a school's curriculum. They could be distributed at a district level

after in-service Road Safety Education training, and would be suitable for the following people:

- lecturers in colleges of education
- headteachers
- classroom teachers.

WHAT IS ROAD SAFETY EDUCATION?

1.6 In broad terms Road Safety Education is teaching children to be safer road users. It is providing a foundation and a guide on which the child can develop its own strategy for coping with the dangers and hazards of the road environment. Road Safety Education is an area of work which fits naturally into most *subject areas* and topics. How this can be achieved will be illustrated within *these Guidelines*.

WHAT ARE THE MAIN AIMS OF ROAD SAFETY EDUCATION?

1.7 To help pupils become safer road users by developing:

- their knowledge and understanding of the road environment
- their decision making and behavioural skills necessary to survive in the road environment
- their knowledge and understanding of the rules that influence and control the actions of road users
- their knowledge and understanding of the causes and consequences of accidents
- responsible attitudes to their own safety and the safety of others.

WHY IS ROAD SAFETY EDUCATION IMPORTANT?

FACTS

- 500,000 people are killed in road accidents each year, and 350,000 of these are in developing countries.
- Road accident fatalities in a number of African and Asian countries are increasing annually.
- Pedestrian accidents are a particularly serious problem in developing countries. For example, in Africa 42 per cent of the road accident fatalities are pedestrians compared with only 20 per cent on average in Europe and the United States of America.

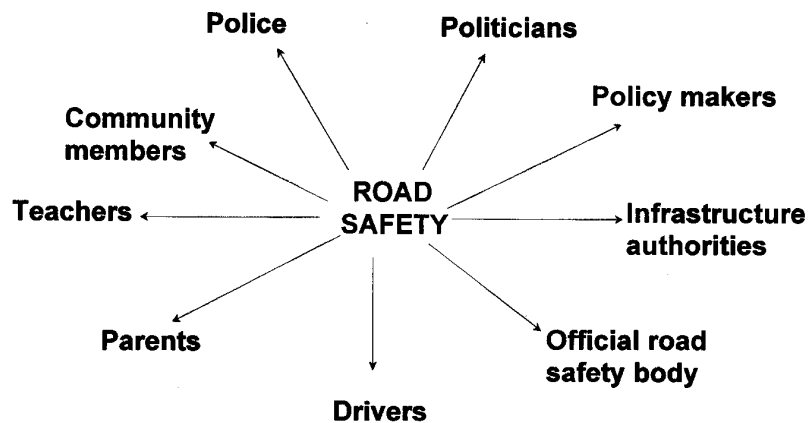
1.8 The road and traffic environment affects our lives in a profound way on a daily basis, whichever country we live in, whether we are adults or children.

1.9 Children in developing countries spend much of their time as pedestrians and are extremely vulnerable road users. Road Safety Education, improved driver behaviour, engineering measures and good practice measures need to be taken to reverse this fact. Ghana has begun this task.

1.10 Ghana has a particularly serious pedestrian accident problem, pedestrians representing 43 per cent of road accident fatalities of which 47 per cent were children. Ghana's Ministry of Transport and Communications is aware of the characteristics of its accident pattern, and is

using education as one means of addressing the problem. Any country should, like Ghana, be aware of its accident pattern before it can take remedial measures. In general, casualties increase as children get older and become more exposed to traffic. In Ghana child casualties are mostly in the 6-10 year old age group, as are most deaths. Other studies have shown that males have a higher pedestrian casualty rate per head of population than females, and this is also true of Ghana. In most European countries accidents to pedestrians tend to happen close together on local roads in areas where visibility is obscured. In Ghana most pedestrian accidents happen on urban roads away from junctions. The resource 'SAFE WAYS' is an example of a good practice measure written in the knowledge of the country's accident pattern.

WHO IS RESPONSIBLE FOR ACCIDENT PREVENTION?



1.11 Many different groups of people are responsible for accident prevention:

Police

They need to encourage safe behaviour, and prevent dangerous behaviour by applying the law.

Politicians

They need to know about the problems and how to resolve them: this may mean passing laws to do so.

Community members

They need to set an example of how to behave safely. Children copy what adults do. They need to be involved in initiating and supporting local action to improve road safety.

Policy makers

They need to be aware of the problems and be able to implement solutions through policy making at ministerial level.

Teachers

They need to receive initial teacher training, and in-service training in Road Safety Education in order to give planned educational opportunities to their pupils.

Parents

They need to set a safe example, protect and educate their children.

Infrastructure authorities

They need to consider children, particularly as pedestrians, when planning and developing roads.

Drivers

They need to be made aware of children's limitations in traffic, and measures need to be taken to improve driver behaviour.

Official road safety body

For Road Safety Education to be effective there needs to be a national commitment at all levels, indicated in the diagram above, and a means of ensuring that all efforts are coordinated into a cost effective programme. This national commitment can be facilitated by a national body responsible for communication, co-ordination and publicity within the road safety field. It is important to ensure, however, that any such organisation does not just exist in name only, but is effective and dynamic.

1.12 Ghana is fortunate to have the benefit of a powerful national committee (National Road Safety Committee) as its official body. It is active in a variety of road safety fields and has an overview of policy and practice.

WHY DO CHILDREN HAVE ACCIDENTS?

1.13 The nature of children is to be impulsive and unreliable.

They find it hard to give their- attention to two activities at once, and often they are absorbed in play perhaps making them less able to understand real life situations.

1.14 They have **limited experience**.

It should be remembered that children develop skills only gradually - they have not been alive for very long!

1.15 They are **smaller** than adults.

Their vision is restricted because of their lack of height. Their perception is immature.

1.16 They are often **unsupervised or poorly supervised** by their parents.

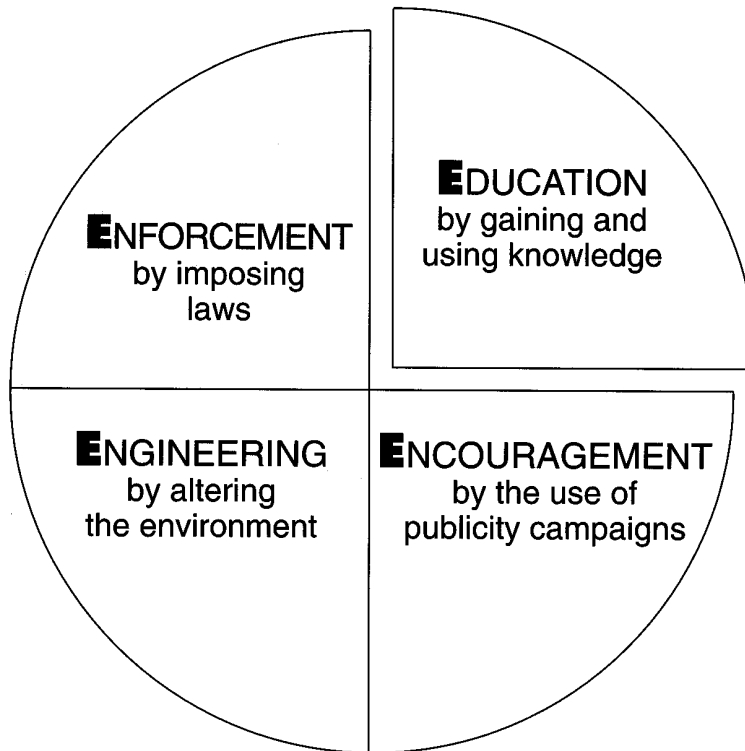
From studies of pedestrian accidents we know that children play outside their homes, and because these areas are sometimes quiet, perhaps some parents think that children can cope alone.

1.17 Various studies confirm these points: they found that children display:

- poor powers of perception, concentration, attention, memory, and physical and emotional control
- poor knowledge and understanding of traffic
- poor behavioural patterns in the traffic environment.

1.18 These characteristics apply to all children both from developed and developing countries.

HOW CAN ACCIDENTS BE PREVENTED?



1.19 Road accidents can be prevented in four main ways, namely the four **E**'s.

Engineering - by altering the environment.

Enforcement - by imposing laws.

Encouragement - by the use of publicity campaigns.

Education - by gaining and using knowledge.

1.20 It should be recognised that education is one measure in a package of measures that can improve road safety.

Engineering

1.21 Human error is the major causal factor in road accidents. However, engineering measures and planning improvements, such as, traffic signals, pedestrians crossings, junction layouts and speed control humps can affect road user behaviour in such a way that errors are less likely to happen or when they do happen the environment can make them less serious.

1.22 There has been very little research in developing countries into the relationship between highway design standards and accident rates; thus many developing countries have just modified schemes from developed countries. Ghana, however, is one of a few developing countries that

has introduced a scheme on a trial basis to improve accident prevention and reduce accidents.

1.23 To encourage the transfer of suitable technology in this field TRRL has published 'Towards Safer Roads in Developing Countries - a road safety guide for planners and engineers' (TRRL, 1991). It gives examples of good and bad practices around the world, and highlights the fact, that many underlying general principles for planning and engineering affecting safety are, to some extent, universal.

Enforcement

1.24 Accidents can be reduced through the application of the law. To be effective police need to be well equipped, knowledgeable and able to respond quickly and safely to any traffic incident. Traffic police also need to earn the respect of other road users by setting good examples of driving and general road user behaviour.

1.25 With generally lower standards of road user discipline in many developing countries than in developed countries, the potential for improving driver behaviour through the use of policing is high. This is especially true with regard to moving violations. Introducing a highway patrol on a major intercity road in Egypt led to a reduction in accidents of almost 50%. In Pakistan, regular highway patrols on selected sections of roads resulted in a 6%

reduction in accidents. On similar roads with no patrols accidents rose by 37%. However, police presence at signalised junctions in Kenya and Pakistan showed drivers having little regard for police presence in terms of the proportion of drivers passing red signals and stopping for pedestrians waiting to use zebra crossings.

1.26 In Accra, Ghana, traffic police hold regular training and instruction sessions for traffic violators. Apprehended drivers attend police headquarters for corrective training lessons by a police instructor. Public transport drivers allowing passenger overloading have their vehicles impounded for a limited time and are fined.

Encouragement

1.27 Encouragement is the role of publicity which attempts to inform and educate road users with a view to persuading them to change their behaviour to make accidents less likely. There are many channels through which encouragement can take place e.g. newspapers, radio, television, magazines, books, tapes, films and videos, leaflets, posters and stickers. Often many of these media are used to promote a road safety campaign based on an agreed chosen problem area.

1.28 In Ghana the National Road Safety Committee (NRSC) is the springboard for most road safety publicity, choosing one or two topics a year to focus upon. For example a campaign 'Save the Child' was launched in 1995

to inform the driving public of the vulnerability of children. The NRSC is responsible for many other media areas encouraging road safety awareness. Recently it has produced a video and a flip chart for use in schools and designed bill board posters to promote the use of seat belts and motorcycle helmets. The Committee also features regularly on television and in the newspapers to convey safety messages and produces information leaflets for distribution at work places and churches.

Education

1.29 Road accidents can be prevented by acquiring and using knowledge. It is recognised that Road Safety Education programmes should be graded and structured developmentally and that teachers need guidelines on what and how to teach. Such programmes need to be relevant to the particular developing country, although fundamental principles of Road Safety Education underlie all good practice.

1.30 Engineering, enforcement, encouragement and education give a framework in which a road safety team is capable of co-ordinating and integrating a wide range of road safety improvements. At a strategic level it is important that Road Safety Education as a remedial measure is planned and developed within this multi-disciplinary context. The remainder of this document focuses on the development and implementation of Road Safety Education as an effective accident prevention measure.

2. ROAD SAFETY EDUCATION - A NATIONAL POLICY

MAKING ROAD SAFETY EDUCATION WORK AT A NATIONAL LEVEL

2.1 For progress to be made nationwide in accident and injury prevention road safety has to be designed as a national goal with efficient management structures set up at national as well as at local levels.

2.2 The diagram below shows in a very simplified way how Road Safety Education can reach primary school children by following 5 steps. **It requires commitment, co-ordination and communication at all levels to reach implementation.**

STEP 1 - Collecting information

Information needs to be collected and collated when assessing a country prior to implementing a suitable Road Safety Education programme. A co-ordinator needs to be appointed for this purpose. Ideally this person should be appointed by one of the ministries responsible for children's safety e.g. Education, Health, Transport. They should have an education background since it will be their responsibility to assemble the **Road Safety Education Committee** mentioned in STEP 2.

Figure 2.1 'Organisational Inquiries' illustrates key areas to be addressed, key people to be visited and key questions to be asked by the co-ordinator.

Figure 2.2 'Organisational Model' displays the information gathered from Ghana. With this background information a country can begin the task of developing a structure to make Road Safety Education work. (See Figures 2.1 and 2.2).

STEP 2 - Creating a Road Safety Education Committee

A Road Safety Committee for education needs to be created by people with the power to generate change.

Representation should come from disciplines such as education, police, health, highways and transport, and the national road safety body, if such an organisation exists. The size of the committee should be restricted to 12 - 20 people (see Appendix B).

In Ghana the National Road Safety Committee (NRSC) has assumed the leading role in Road Safety Education. Education is one part of its function.

STEP 3 - Forming Policy and Delivery Structure

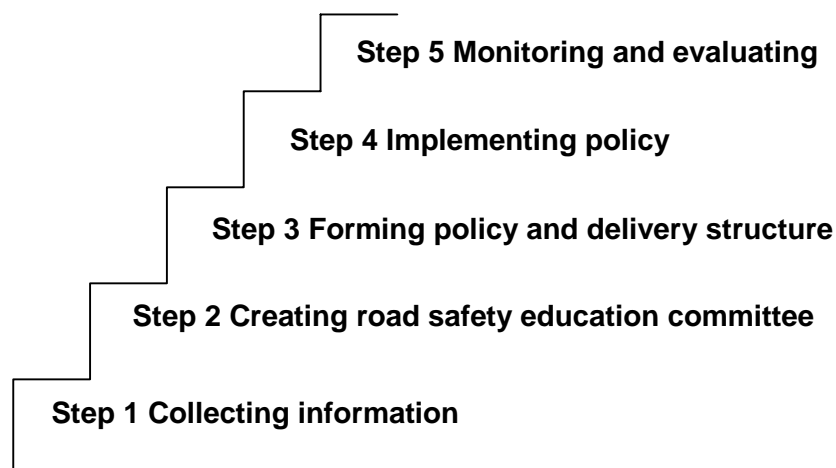
"In order that Road Safety Education be really effective it requires a clear structure within a recognised curriculum with a planned, sustained and coherent programme of learning" (DOT, 1995). Therefore the policy and aims of Road Safety Education need to be decided by the multidisciplinary committee referred to in STEP 2.

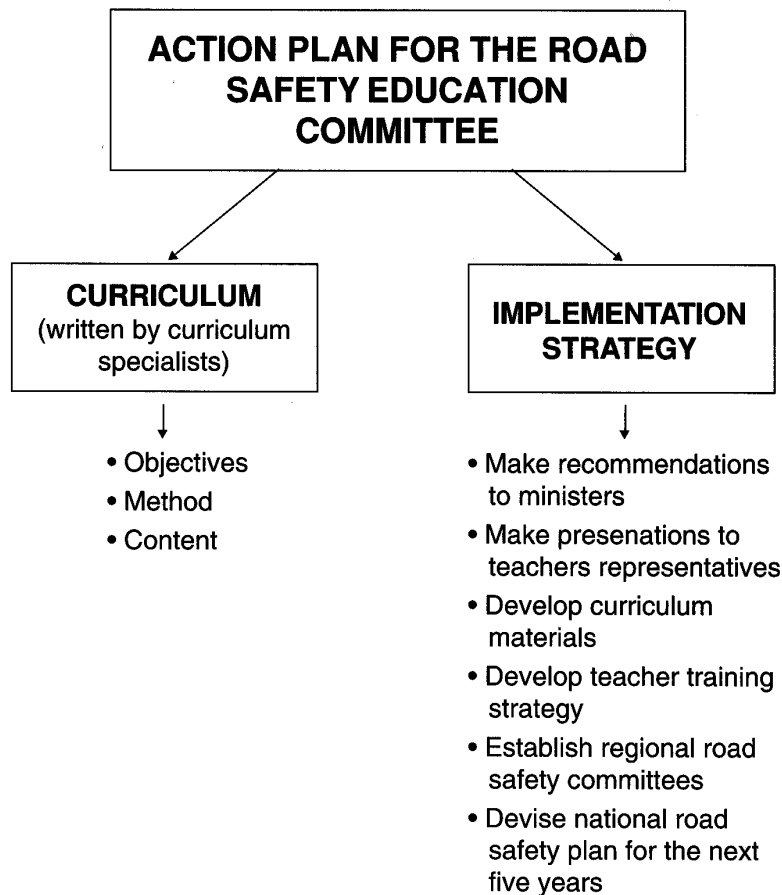
Details of content should be written by curriculum specialists based upon the core Children's Learning Objectives suggested in Chapter 4.

A feasible delivery structure needs to be carefully thought out and agreed upon, in the light of the information gathered. Cultural and religious considerations also need to be made when thinking about delivery. For example, a country might have a strong network of women's groups which is an established way of passing on health and safety messages. Successful transference of Road Safety Education for primary children in the UK is through teachers in schools.

Ghana has begun to follow good practice by:

- producing a policy report for Road Safety (Crown Agents, 1995). The Report suggests that the best approach to Road Safety Education in Ghana is to develop institutional provision in formal education, i.e. through curriculum development, and also to utilise non-formal education methods such as publicity.





- planning to establish Road Safety Committees in the larger cities and in each region, and by appointing 10 regional Road Safety Officers to assist with the delivery of Road Safety Education through teachers in primary schools.

STEP 4 - Implementing the Policy

Government ministries need to accept the recommendations of the Road Safety Education Committee and introduce policies to enable implementation at national and local level. Implementation at local level to primary aged children is usually through teachers in schools, but can be through the police, health workers, or community groups such as women's groups or churches.

Both the UK and Ghana have taken the **education route**. If an adequate school system is in place the education route is recommended with support from other disciplines. It is Ghana's intention through the National Road Safety Committee to give some in-service training to teachers.

In order to facilitate the inclusion of Road Safety Education in the school curriculum teacher training colleges will need to be encouraged to include it in their programmes. In

Ghana it is proposed to use NRSC staff as resource persons in teacher training colleges.

STEP 5 - Monitoring and Evaluating

The monitoring and evaluation of Road Safety Education should take place at all levels, for example at school as well as at ministerial level. Road Safety Education is difficult to monitor and evaluate, because it is impossible to decide whether an accident would have happened with or without an educational input. However it is important that the Road Safety Education Committee be assured that the expenditure is bringing an adequate return in terms of greater knowledge and safer behaviour, which should lead to reduced accidents in the long term. It is advisable that one person with a research background should be appointed to have an overview of the monitoring and evaluation.

According to the Policy Report for Road Safety (Crown Agents, 1995) the NRSC will link with the University of Ghana to carry out specified in-depth research and suggest ways of monitoring and evaluating publicity and education initiatives.

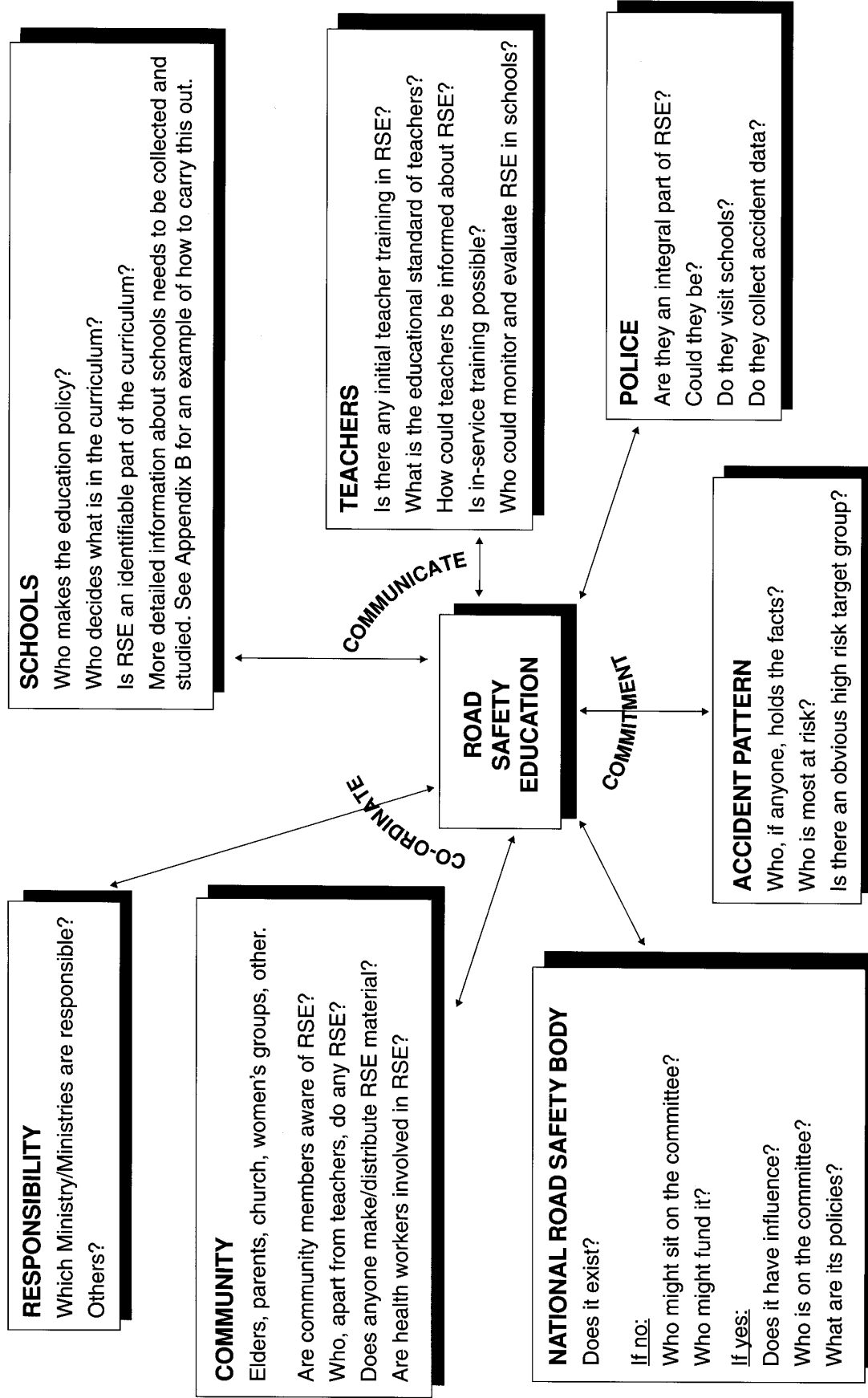


Fig. 2.7 Organisational inquiries for road safety education (RSE)

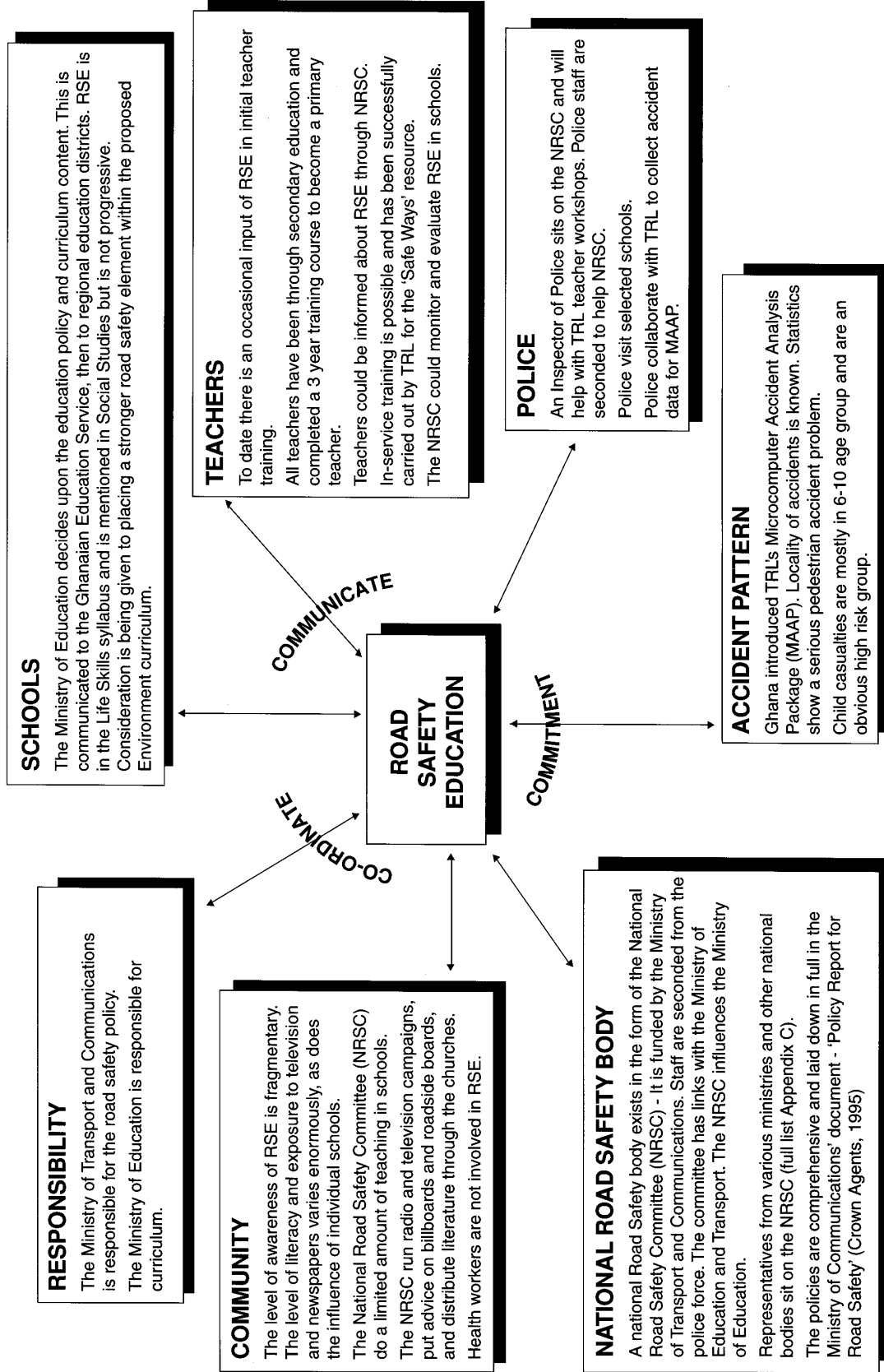


Fig. 2.2 Organisational MODEL for Road Safety Education (RSE) ref Ghana

3. ROAD SAFETY EDUCATION (RSE) - THE CURRICULUM

WHAT ARE THE KEY POINTS IN TEACHING ROAD SAFETY EDUCATION?

3.1 There are 5 important points ('the 5 Ps') to remember when teaching children road safety. They can be summarised as follows. It should

- begin **P**RE-SCHOOL
- be **P**RACTICAL
- follow **P**RINCIPLES of child development
- be **P**RESENTED frequently to school children
- have a **P**LACE in the school timetable.

RSE should begin PRE-SCHOOL

3.2 To be effective Road Safety Education should be given systematically and continuously throughout a child's school life. Its effectiveness largely depends upon an accumulation of learning and experience, which begins before the child can walk and never really ends.

RSE should be PRACTICAL

3.3 Research has shown that practical training is essential if pedestrian behaviour of young children is to be improved. Theoretical teaching in a classroom situation has been shown to improve knowledge without affecting the child's behaviour near roads.

RSE should follow the PRINCIPLES of child development

3.4 To begin with a very young child should be prevented by an adult from going near roads, and eventually the young person is competent alone in a busy traffic environment. To move the child from one extreme to the other teachers have to use their knowledge of the principles of child development. For example a child under 6 years old cannot put himself /herself in someone else's position; so it is difficult to imagine whether a driver can see him/her or not. The child under 11 years old finds it difficult to focus on the relevant and ignore the irrelevant - so perhaps would be distracted by a friend calling out when he/she is trying to cross the road.

RSE should be PRESENTED frequently

3.5 Children behave more safely immediately after some training and less safe some months later (Limbourg and Gerber 1981). This shows the importance of presenting Road Safety Education frequently.

RSE should have a PLACE in the school timetable

3.6 Road Safety Education must have a proper place in the school timetable. It must be decided where it belongs:

- **is it a subject in its own right?**
(`Road Safety')
- **is it part of another subject?**
e.g. life skills, health education, environment
- **is it to be integrated into other school subjects?**
e.g. mathematics, social studies, English, science (see Figure 3.1 below)
- **is it outside the school curriculum?**
e.g. road safety clubs in Ghana, cycle training in the UK, both take place after school hours.

CURRICULUM LINKS

3.7 In Ghana Road Safety Education is at present in the Life Skills syllabus, and the `SAFE WAYS' programme as a whole could be used there. Parts of the `SAFE WAYS' programme also link with other subject areas in the Ghanaian curriculum as shown below.

3.8 The most important thing is that Road Safety Education exists somewhere in the school timetable and it is identified.

3.9 Ghana has begun to address these issues. At present some Road Safety Education is in the Life Skills syllabus of their national curriculum (see Appendix D). More Road Safety Education is being planned for the future and is likely to appear in the proposed new Environment curriculum.

3.10 Two new resources are to be introduced:

- 1) **‘SAFE WAYS’** written by TRL for DFID, is for teachers of upper primary school children.
- 2) **‘Road Safety Education in Primary Schools’**. A Guide for teachers by the National Road Safety Committee.

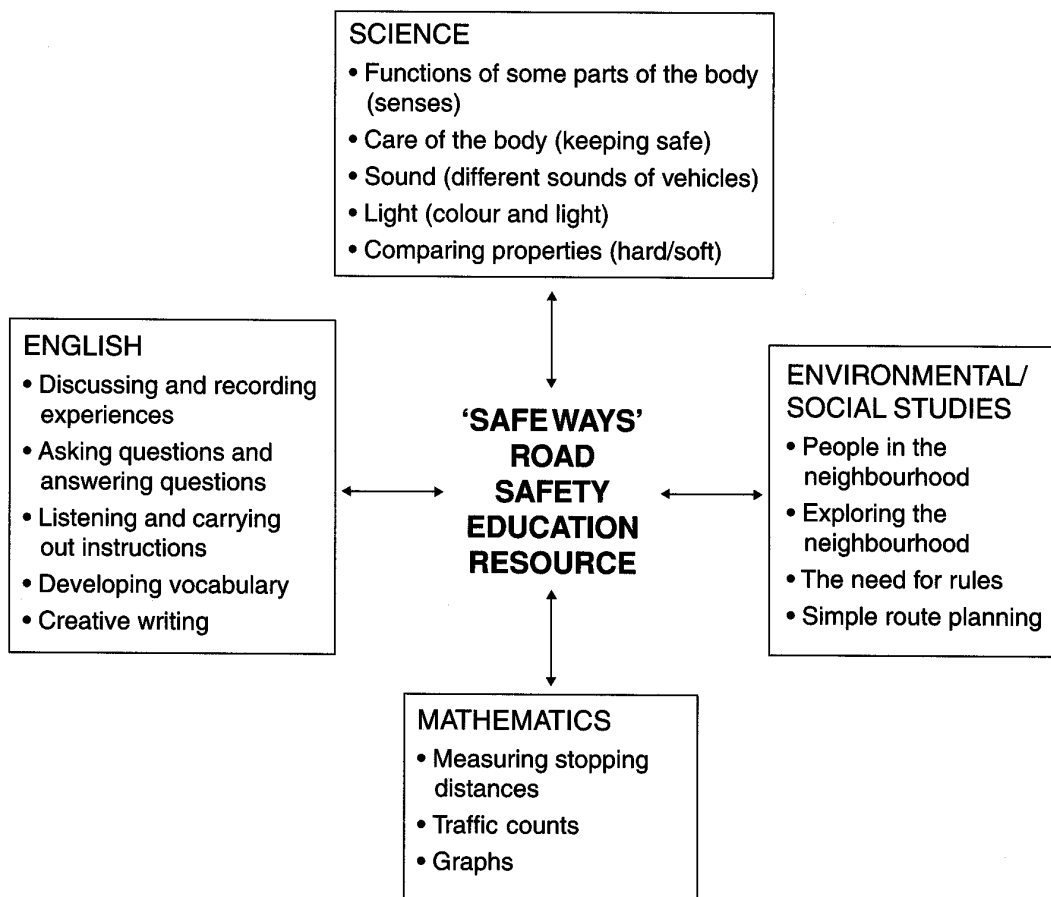


Fig. 3.1 'Safe Ways' Road Safety Education Resource

4. ROAD SAFETY EDUCATION - CHILDREN'S LEARNING OBJECTIVES

ARE THERE UNIVERSAL OBJECTIVES FOR CHILDREN LEARNING TO BE SAFER PEDESTRIANS?

4.1 In considering children's needs there should be a gradual progression from total protection to total independence. This involves interaction with parents/carers, teachers and peer groups with their importance varying at different times. Children should move through the progression as follows:

- total protection with adult leading child
- adult demonstrating good practice to child

- child demonstrating good practice to adult
- total independence with young person being the decision maker.

4.2 Passive methods of Road Safety Education are known to be poor. Recent research in the UK has shown that 5 and 7 year old children had virtually no ability to separate safe from dangerous places to cross (K Ampofo-Boateng and J Thompson, 1993). This shows that practical learning in the real road environment is vital. This approach has been used effectively in both the UK (RoSPA, 1994) and Ghana (Sayer, 1997), proving popular with teachers and pupils alike.

4.3 Each stage builds upon and reinforces previous learning. Therefore only new objectives are set out below. The stages are only a guide and one must always be aware of an individual's starting point.

FIRST STAGE (0-4+ YEARS APPROX).

This stage is one of **total protection**, supervision and training, as well as education, and this means that ideally children should be accompanied at all times. Carers have more opportunities than anyone else to do this with the very young.

Even when they are very small, children benefit from having relevant items in the road environment pointed out and talked about. In the beginning they have no understanding of the words, but this process leads to them recognising and naming things, gradually building up a road safety vocabulary. Because small children are good mimics, it is important too for the carer to set a good example and display safe behaviour her/himself outside near roads.

CHILDREN SHOULD LEARN TO:

- Hold hands when out near the road.
- Walk on the footpath/pavement/edge of the road where appropriate.
- Recognise and play in safe places (designated by adult).
- Begin to develop a road safety vocabulary (name: road, footpath/pavement/edge of the road, traffic, car, lorry, bus, truck, bicycle etc).
- Recognise that roads are for traffic, footpaths are for people.
- Recognise that roads and traffic are dangerous.
- Recognise features of their local roads.
- Know that they must stop at the edge of the road before crossing.
- Know the direction of traffic by sight and sound.
- Know that they must stop, look all around and listen before crossing, and walk directly across when safe to do so.
- Know that traffic might appear from places other than the road.
- Use one local protected crossing correctly, before learning how to use others.
- Know the safest place to cross near home (where a protected crossing does not exist).
- State where traffic might come from on the above road.

SECOND STAGE (5-7+ YEARS APPROX).

This stage still has the emphasis on protection and supervision. Under the guidance and example of teachers and carers practical learning in the real road environment is paramount as well as observing good practice.

CHILDREN SHOULD LEARN TO:

- Know that ideally they should be accompanied.
- Extend their road safety vocabulary based on their local environment.
- Recognise people who help them cross roads.
- Know where it is safe to play.
- Know how to stop, look all around and listen before crossing, and walk directly across when it is safe to do so.
- Know how to travel safely to and from school (accompanied).
- Understand the dangers of stationary vehicles.
- Know that there are rules governing the behaviour of pedestrians and traffic.
- Know (in simple terms only) the factors involved in vehicle design which contribute to safety or danger.
- Understand (in simple terms only) the problems faced by all roads users, particularly of conspicuity, and the effect of the weather.
- Understand that traffic accidents cause injury and death.

THIRD STAGE (8-11+ YEARS APPROX).

At this stage the children should be demonstrating good practice, still under the guidance and supervision of an older person. They should be becoming more independent and responsible for their own actions. It is important to remember that the capability of the individual child varies widely, as does and the complexity of a particular environment.

CHILDREN SHOULD LEARN TO:

- Understand how to cross the road using a crossing code e.g. the Green Cross Code.
- Understand the problems of controlling animals safely near roads.
- Identify safe places to play.
- Understand the dangers of stationary vehicles, including crossing by or playing near them.
- Look at local traffic conditions and dangers, and think about how to be a safe pedestrian.
- Recognise and understand traffic lights, road signs, road markings and signals, given by road users and the police.
- Observe traffic and think about their differing speeds.
- Be able to summon help in an emergency.
- Understand which road signs and signals must be obeyed, which are warnings, and which give information (refer to your country's Highway Code, if appropriate).
- Understand the roles of people who direct and control vehicles and pedestrians.
- Understand more about the problems and difficulties of all road users e.g. visibility, conspicuity, adverse weather, vehicle control and braking.
- Understand the special problems faced by particular groups in the road environment e.g. the very old, and the disabled.
- Know the problems of alcohol and other factors such as drugs and fatigue in relation to road accidents.
- Understand the immediate and long term consequences of road traffic accidents.
- Be aware of the importance of planning a new safe school route if moving to another school.
- Set a good example to younger people.

FOURTH STAGE (12-16+ YEARS APPROX).

Life at this age is one of increasing independence and responsibility.

Road Safety Education gained over the years should be passed on to family members and friends.

YOUNG PEOPLE SHOULD LEARN TO:

- Know how to travel safely to and from school.
- Develop changing safe crossing strategies as they mature.
- Understand more about their country's 'Highway Code', if applicable.
- Identify and understand the causes and contributory factors of traffic accidents, and how to reduce risk (includes behaviour of others).
- Observe traffic and judge speeds and distances in more depth than previously.

N.B. Most of the above is based upon TRRL Laboratory Report 992, and RoSPA Safety Education Curriculum.

5. ROAD SAFETY EDUCATION - EXAMPLES OF GOOD PRACTICE

GHANA

5.1 The SAFE WAYS programme presented school pupils in Accra with novel opportunities to learn, both in the classroom and school compound, and in practical situations outside near real roads. The programme aimed to increase their road safety awareness culminating in the children making safer journeys to and from school.



Plate 5.1) Upper primary school pupils in Accra participate in Road Safety Education using 'SAFE WAYS'.



Plate 5.2) Primary school teachers in Accra participate in workshops before using 'SAFE WAYS'.



Plate 5.3) A teacher in Ghana uses a poster discuss crossing the road safely with her class.



Plate 5.4) A poster based upon the National Road Safety Committee's flip chart used to discuss safe places to cross the road.

NEPAL

Nepal uses puppets to teach Road Safety Education

5.2 Nepal has changed drastically in recent years. Kathmandu was virtually a village 30 years ago. The roads now carry a mixture of bicycle, buses, lorries as well as ox carts and rickshaws, with the additional hazards of many farm animals moving along.

5.3 A road safety programme was implemented in 1992 because of the large number accidents. With illiteracy rates of 80% for women and 50% for men, puppets were chosen as a means of portraying road safety messages to children. Teams of men were recruited through the Scouts and trained to work in designated areas.

5.4 The puppet show lasts about 20 minutes and deals with a single problem e.g. running into the road. The

puppets are cheap, transportable and easily made. After the show a discussion takes place to test the children's understanding. Then a demonstration is given with the help of teachers preferably near the roadside, or in the school grounds.

5.5 This approach has apparently been very successful; not only have the children benefited but teachers and mothers have also become involved through the demonstrations.

PAPUA NEW GUINEA


5.6 Papua New Guinea has produced a road safety book called 'Road Smart' aimed at school children.

5.7 A variety of road safety messages, rules and information is contained within its 40 pages. They are presented in appealing and exciting ways. (See Figure 5.1 below).

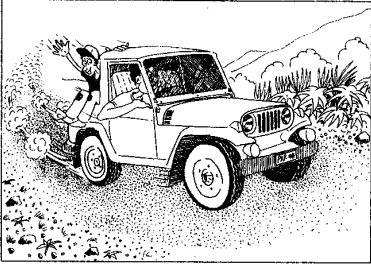
Read the following safety rules for passengers and drivers, then explain why each rule is important. Explain what could happen if you break the rule.

Safety rules for passengers and drivers

- ✓ Always fasten the seat belt.
- ✗ Never hold babies or small children on people's laps in the front seat of the car.
- ✗ Never sit on the side of the back of utilities.



- ✗ Never have any part of your body (eg your arm) outside the vehicle.
- ✗ Never overload the vehicle.
- ✗ Drivers should never try to solve a problem in a vehicle, eg children fighting, while still driving.



- ✗ Do not ride in a vehicle if the driver has been, or is drinking alcohol.
- ✗ Never jump on or off a moving vehicle.

Can you make a list of the mistakes that were made in Uncle Dara's vehicle?

Fig. 5.1 Example of a road safety message

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APPENDIX A: SUMMARY OF `SAFE WAYS'

LESSON 1 STEPPING OUT

(Where and how to walk)

- Classroom: Work: Accidents and pedestrian behaviour are discussed.
- Practical Work: Practice in walking and stopping takes place in the compound.
- Homework: Learning is reinforced and the children are encouraged to pass on their knowledge to younger children.

LESSON 2 LOOKING AND TELLING

(Observing and environment)

- Classroom Work: Rules for safe walking are discussed.
- Practical Work: This looks at what can be found on the footpath and road, and takes note of observations made from the compound and/or near the road.
- Homework: Observation work continues and includes road signs.

LESSON 3 ZEBRAS AND OTHER CROSSINGS

(Using protected crossing places)

- Classroom Work: Discussion takes place on what protected crossing places are, their names, and how to make use of them. The Green Cross Code is featured.
- Practical Work: This takes place in the compound or outside the school, and includes a demonstration of how to use at least one of these crossings.
- Homework: The personal use of crossings is considered especially on the journey to and from school. Passing on knowledge to younger children is encouraged.

LESSON 4 SEEING AND BEING SEEN

(Crossing where there are no protected crossing places)

- Classroom Work: There is a classroom discussion on how to choose the safest place to cross when no protected crossing places exist.
- Practical Work: Practice in the selection of a "safe" place, and crossing in a safe manner is carried out in the compound and/or outside the school.
- Homework: Using the Green Cross Code is included, and the importance of explaining it simply to younger children.

LESSON 5 GETTING THERE SAFELY

(Choosing the safest route between home and school)

- Classroom Work: Discussion takes place on the problems encountered on school journeys, and suggestions are made on how to make routes safer. A large poster is studied for this purpose.
- Practical Work: On the way home pedestrians are observed, and personal routes to and from school to home are considered for their safety value.
- Homework: Pupils evaluate and try to improve their school route.

APPENDIX B: AIDE MEMOIRS

NAME AND ADDRESS OF SCHOOL

HEAD TEACHER

NUMBER ON ROLL

BOYS

GIRLS

DESCRIPTION OF CATCHMENT AREA

DESCRIPTION OF SCHOOL SITE

STAFF LIST AND RESPONSIBILITIES

ORGANISATION

- length of school day
 - length of lessons
 - number in class
 - age range in class
-

CURRICULUM

- who decides it?
 - are subjects taught separately?
 - is there any topic work?
 - is any RSE taught? If yes, how does it fit into the school's timetable? If no, is RSE feasible?
 - is general safety/health education taught?
-

RESOURCES

- books
- flannelgraph
- flip chart
- classrooms
- slide projector
- chalk board
- display opportunities
- models
- computer
- video

SPEAKERS e.g.: Police

OUTINGS e.g.:

(a)	observation of local environment
(b)	traffic gardens

METHODOLOGY

- | | |
|------------------|--------------------|
| • chalk and talk | • class |
| • discussion | • group |
| • audio/film | • individual |
| • other | • radio/television |
-

OTHER CONSIDERATIONS

Are there any after-school activities or clubs?

Do you know the number of children in the school involved in road accidents?

How do the majority of children travel to school?

Are there any problems likely to arise in teaching RSE?

Are older pupils responsible for younger ones?

Do pupils have an existing knowledge of RSE?

If yes, how was it gained?

Is parent involvement in RSE a possibility?

Is community involvement in RSE a possibility?

Which school year would you choose as your target group?

APPENDIX C: PROPOSED COUNCIL MEMBERS FOR NATIONAL ROAD SAFETY COMMITTEE IN GHANA

1. Chairman of the Council
2. Ministry of Transport and Communications
3. Ministry of the Interior
4. Ministry of Health
5. Ministry of the Environment
6. Ministry of Local Government and Rural Development
7. Ghana Police Service Motor Transport and Traffic Units (MTTU)
8. Ghana Education Service
9. Ghana Highway Authority
10. Department of Urban Roads
11. Vehicle Examination and Licensing Department (VELD)
12. Building and Road Research Institute (BRRI)
13. Police National Ambulance Service
14. Environmental Protection Agency
15. Accra Metropolitan Authority
16. Automobile Association
17. Ghana National Chamber of Commerce

APPENDIX D: EXAMPLE FROM THE LIFE SKILLS SYLLABUS IN GHANA

CONTENT /CONCEPT	OBJECTIVES	SKILLS	TOOLS/MEDIA/ MATERIALS	SUGGESTED ACTIVITIES	NOTES TO TEACHER
DRESSING OF WOUNDS	Pupils will be able to: 1. Identify medicines for the dressing of wounds 2. Dress wounds 3. State the importance of keeping wounds clean	Dressing of wounds, appreciation	Disinfectant, gauze, cotton wool, pairs of scissors, plaster, bandage	1. Discuss why wounds should be dressed 2. List and discuss medicines and materials used for dressing wounds 3. Demonstrate how to dress wounds 4. Pupils role play nurse dressing wounds at clinic	1. Oral questions and answers 2. Teacher should stress the importance of keeping wounds clean, observe pupils and caution them
ROAD SAFETY	Pupils will be able to: 1. Observe road safety signs 2. Cross roads safely 3. Help siblings and peers and other younger children to cross roads	Observation, carefulness	Charts, pictures, actual road crossing signs	1. Explain road signs e.g. zebra crossing, traffic lights, etc. to pupils 2. Discuss the importance of observing road signs 3. Take pupils out to observe and demonstrate how to cross roads safely 4. Pupils dramatize safe road crossing in the classroom	1. Oral questions and answers 2. Assess class work 3. Stress the importance of observing road signs

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Guidelines for good practice in primary schools**

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