Primary schools

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Preface

The Good Practice Project was a major 3-year project organised by the Transport Research Laboratory for the Department of Transport in an attempt to establish road safety education firmly within the curriculum of all schools. The authorities involved in the project were Sheffield [1] and Hertfordshire [2] , and evaluation was by the University of Reading [3] . A variety of methods of including road safety education in the curriculum were tried and tested during the duration of the project, and the subsequent evaluation revealed improvements in the awareness and knowledge of both teachers and pupils of the importance of road safety education as a result.

Arising out of this project four sets of guidelines have been prepared for the Department of Transport and the Department for Education by a working party of educationalists and others with an interest in road safety education.

This document indicates some of the ways in which primary teachers in the trial areas planned and organised road safety education within the context of the National Curriculum. It is intended to be used by teachers but should be distributed through the local authority's planned programme of road safety in-service training for teachers.

The other documents are:

- 'Organisations' which indicates how Road Safety Officers and the agencies involved in the promotion of road safety education can work together to reinforce each others' influence in schools and deploy their resources effectively.
- 'In-Service Training' which outlines how in-service training for Road Safety Officers, police officers, teachers and others can develop awareness of both the breadth of road safety education and the opportunities it provides for supporting the curriculum in schools.
- 'Secondary Schools' which indicates some of the ways in which secondary teachers in the trial areas planned and organised road safety education in the context of the National Curriculum.

[1] M Noble, K O'Leary and G Harland (1993) Road safety education good practice in Sheffield. TRL Project Report PR SE/010/94

[2] J Sykes, K O'Leary and G Harland (1993) Road safety education good practice in Hertfordshire. TRL Project Report PR SE/011/94

[3] A Singh, M Spear and R George (1993) Evaluation of the demonstration project in road safety education. TRL Project Report PR SE/O1 2/94

1 Introduction

Tracey’s Tree

Last year it was not there
The sapling with purplish leaves
Planted in our school grounds with care
It’s Tracey’s tree, my friend who died
And last year it was not there.

Tracey, the girl with long black hair
Who, out playing one day ran
Across a main road for a dare
The lorry struck her. Now a tree grows
And last year it was not there.

Through the classroom window I stare
And watch the sapling sway
Soon its branches will stand bare
It wears a forlorn and lonely look
And last year it was not there.

October’s chill is in the air
And cold rain distorts my view
I feel a sadness that is hard to bear
The tree blurs as if I’ve been crying
And last year it was not there.

Wes Magee

Sadly, in 1996, one hundred and seventy nine Traceys under 14 were killed on the roads of this country, and 36,200 were injured, some so severely that they may never again lead normal lives. If 1 child were killed and 200 injured every other day of the year in a single major traffic accident, vast media coverage would be given to each event and there would be public enquiries to ensure that such carnage did not continue, but little comment is made when the toll is distributed throughout the country over 12 months of the year, it must also be remembered that these are reported accidents and some estimates based on hospital treatment statistics suggest that the "real" injury figures may be considerably higher than the official ones. It is a sobering thought that nearly two thirds of the children killed or seriously injured are pedestrians and that the annual child pedestrian fatality rate in this country is one of the worst in Europe.

2 What is Road Safety Education (RSE)?

Safety in the road environment is a complicated issue involving all, or some of the following factors:

Attitudes and Behaviour

These are the basic factors which are the cause of almost all road accidents.

Self Esteem and Valuing Others

It is the valuing of oneself and others that leads to a greater awareness of the need for safety.

Valuing Safety

The consequences of the undervaluing of safety are very apparent in our society. We need to promote a safety culture in which safety is understood and has a high status.

Risk Management

This is concerned with the identification and assessment of risk and the development of strategies designed to avoid, lower or remove the risk.

Rules

These are not only the public rules but those personal rules that we construct for ourselves and which shape our behaviour.

Education

This provides the necessary structure for the acquisition of knowledge and skills, including decision making skills, and the examination and development of appropriate attitudes and values. It is concerned with both the present and the future.

Decision Making

This involves public decisions made by politicians, designers or manufacturers. It also involves personal decisions about behaviour such as wearing a helmet or not drinking before driving.

Politics and Economics

These two are the determining factors which inhibit or bring about change. It is the understanding of how these might be influenced that empowers our pupils and gives them a voice in the process of change.

Priorities

There are tensions over priorities, between cars and people, between mobility and safety. Over the last few years the balance has begun to move in favour of people and safety.

Public Opinion and Acceptability

These determine the success or otherwise of most safety measures.

Engineering

The way in which the environment is constructed can increase, lessen or remove risk.

Vehicle Design

Vehicles are increasingly being designed with an emphasis upon safety for passengers, pedestrians and the environment.

History

This has shaped our towns and cities, most of which were designed for earlier forms of transport but some cities have been planned to give cars priority.

The Weather

In the space of a very short time a change in the weather can transform what was a relatively safe environment into one that is extremely hazardous.

Education in Schools should seek to address all these issues, within the existing curriculum.

3 Road Safety Education in School

3.1 Why should we do it?

The road environment plays a large and important part in all our lives, both as children and adults. Our young people are more likely to die or be injured as a result of an accident on the road than from any other cause, the group most at risk being those between 12 and 21. It is estimated that the probable number of road accidents involving children is 270,000 a year. Such accidents can bring considerable suffering, not only to the casualty themselves but also to family and friends.

Under the Education Reform Act (ERA) 1988, every child is entitled to a curriculum which, among other things, "prepares children for the opportunities, responsibilities and experiences of adult life". Road safety education attempts to safeguard our children as they make increasing use of the roads and to prepare them for adult life as users, citizens and managers of that environment.

3.2 What can we do?

We need to ask ourselves "What do children need in order to keep themselves and others safe, now and in the future?"; and "What kind of a future do we want for them? How can we help them to bring about that preferable future as well as cope with the probable future?". We need to use the whole curriculum to answer these questions and to meet the needs of our pupils.

Road safety is too important and complex to be addressed through simple messages given a few times a year. Road safety education:

- provides a real and relevant context for work across the basic subjects of the curriculum;
- makes a significant contribution to the wider curriculum of the school;
- forges links between the school and the community at large - the public services, business and industry;
- meets the needs of pupils in keeping themselves and others safe, now and in the future; and
- should be ongoing throughout a child's life at home and at school.

3.3 Who needs to be involved?

Road safety is a community issue and there is a need for schools to encourage teachers and children to work in partnership with parents and to involve Road Safety Officers (RSOs), governors, police, engineers, health workers and other groups that have a concern for road safety in order to inform and empower their pupils.

3.4 What should we do?

Work with Governors

Governors have a statutory duty to provide for the safety and welfare of the pupils in their schools.

Invite the Road Safety Officer (RSO) to address governors about their responsibilities in the area of road safety in order to help them formulate the school's policy on road safety education.

Work with Parents

Signal our commitment towards the safeguarding of our pupils by including a reference to road safety education in the school booklet.

Invite parents to meetings and workshops run by the RSO.

Involve them in the planning and delivery of road safety activities.

Develop a working partnership and consult them about the school's policy and programme of road safety education.

With the support of the RSO have the parents draw up leaflets on different aspects of road safety in the area for other parents and members of the local community.

Work with Pupils

Begin with what the children know.

Involve them in the identification and the addressing of road safety needs around the school and in the community for different sectors of the local population.

Encourage them to invite into school those people with a responsibility for the road environment in order to discover more about how that environment is shaped and changed.

Look at the Curriculum

Audit the provision for safety education throughout the school and the place of road safety within it. In order for road safety education to be effective it is important to see it as part of the wider issue of health, safety and risk management rather than in isolation. Safety and road safety education are best when delivered "little and often".

Consult with the RSO in order to identify possibilities for integrating road safety education with the established curriculum.

Include Road Safety Education in Policy Statements

Include references to road safety education within the policy for safety or for health education. Ask for support from the RSO to do this.

Give Support to the Staff

Make use of the RSO to provide both INSET and planning meetings for staff.

Provide a planned and coherent programme of road safety education after consultation with the staff.

4 Key Questions for Schools Planning Road Safety Education

4.1 Curriculum

What road safety education is already going on? Could it be better planned?

What objectives of road safety education are appropriate for the school?

Are the approaches consistent with the objectives?

Where is the cover patchy, and how can we avoid areas being missed?

Is the road safety curriculum overloaded with information?

4.2 Policy

Does the ethos and the environment of the school promote or hinder the development and practice of the attitudes being encouraged?

Is road safety education included in the preparatory activities for the transition from primary to secondary school?

How can parents and the community be involved in planning, implementing and participating in the programme?

4.3 Staff

Which members of staff should be given the responsibility for the development, coordination and resourcing of the road safety curriculum?

What are the INSET needs of the staff? How can one cater for these?

Is there an effective and efficient storage and loan system for resource materials?

4.4 Pupils

Are the children’s road safety needs being taken into account?

How can children best be helped to relate information to themselves?

How do we ensure that the content is appropriate for the children’s development?

5 How Does RSE Relate to the National Curriculum?

There is a clear relationship between road safety education and the National Curriculum [4] The Education Reform Act of 1988 [5] establishes the legal right of pupils in maintained schools to "a balanced and broadly based curriculum which:

- promotes the spiritual, moral, cultural, mental and physical development of pupils at the school and of society; and
- prepares pupils for the opportunities, responsibilities and experiences of adult life."

Curriculum Guidance 3 The Whole Curriculum states that:

"the basic curriculum (the nine core and foundation subjects plus religious education)... is not intended to be the whole curriculum. The whole curriculum of a school goes far beyond the formal timetable. It involves a range of policies and practices to promote the personal and social development of pupils, to accommodate different teaching and learning styles, to develop positive attitudes and values, and to forge links with the local community."

A similar statement was issued in Wales by the Curriculum Council for Wales in their document ’The Whole Curriculum 5-16 in Wales’.

The core and foundation booklets produced by the National Curriculum Council and the Curriculum Council for Wales state that pupils should be provided with real and relevant contexts for their learning.

Each of these statutory educational requirements can be read as supporting road safety education, delivered through the use of the whole curriculum.

[4] In Scotland refer to "5 - 14 Scottish Curriculum Guidelines"

[5] In Scotland, the relevant document is "Curriculum and Assessment in Scotland : A Policy for the 90's Paper No 1 The Balance of the Primary Curriculum"

6 What are the Aims of RSE?

To help children:

to develop the skills necessary for the safe use of the road environment.

to identify and understand the behaviours and attitudes that have an influence on road safety.

to develop the knowledge and understanding of how systems work, and how they may be changed.

to develop the decision making skills which will enable them to make choices and to take responsibility for their own safety and that of others.

to develop self esteem and care for other people.

to develop their knowledge and understanding of the rules that govern the behaviour of road users.

to develop their knowledge and understanding of the causes and consequences of road accidents.

to develop the necessary knowledge, understanding and skills to travel safely in or on a vehicle, showing consideration for others.

7 How May RSE be Developed?

7.1 Curriculum

To help pupils make sense of the complicated nature of road safety issues schools need to employ a cross - curricular and integrated approach to road safety education. Road safety education can provide a wide range of examples from the pupil's everyday world that support the attainment of educational objectives across the curriculum. The links to be made with the National Curriculum are numerous, some of the possibilities are listed in section 9.

7.2 Continuity and progression

To achieve continuity and progression there needs to be not only co-operation and liaison within schools but also between the different schools (infant, junior, secondary etc.) through which the pupils progress in order that road safety education is a continuous experience. This implies that the programme of road safety education should be subject to regular review.

7.3 The need for planning

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. It should be part of the school's overall policy and scheme of work for health and safety education. This planned and progressive whole school policy should involve the wider community in both the planning of the policy and in its implementation.

8 How Can RSE be organised?

In primary schools, road safety education may be organised in one or more of the following ways:

- As a specific project, or topic in its own right, or central to a planned road safety event.
- As a topic or project component of safety education, health education or personal and social education.
- As a component part of a specific topic, eg Myself, Weather, Light, Colour, or Shapes.
- As part of a timetabled core subject such as science, English, mathematics, or technology.

Schools may well use a variety of these approaches, and this further emphasises the need for co-ordination.

9 Where does RSE Fit Into the Curriculum?

Road safety education supports the subjects and areas of the curriculum and in turn the curriculum supports the greater understanding of road safety.

Science

Movement, Friction, Stopping, Uphill/Downhill Travel, Forces, Energy Sources.

Use of Materials, Conspicuous/Protective Clothing, Surfaces and Friction.

Effects of Different Light and Weather Conditions on Safety, Headlights, Signals - Visible. Audible, Information, Orders, Warnings, Senses, Data Logging.

Human Influences on the Earth, Vehicles, Street Furniture, Safety, Risk, Pollution.

English

Rules, Communication - Non Verbal, Signs and Symbols, Ordering Events, Interpreting Information, Acting Out Events and Reactions.

Mathematics

Collecting, Classifying and Interpreting Data about How the Environment is Used, Traffic and Pedestrian Flow Shapes and Signs, Large and Small, Fast and Slow, Accident Statistics, Probability, Journey Times, Timetables, Energy Costs of Different Types of Transport.

Technology

Modelling the Artefacts, Systems and Environments Involved, Identifying Needs and Opportunities, Examining Costs and Benefits.

History

Cause and Effect, Risks Now and in the Past, Protective Clothing, Keeping Safe.

Geography

Mapping the Local Area, Safe/Unsafe Places, Changing the Area, Engineering.

Health Education

Responsibility for Oneself and Others, Me and My Community and Environment, Growing and Changing, People Who Help Me, First Aid, Safe People, Safe Places, Rules, Identifying and Managing Risk, Decision Making.

Citizenship

The Needs of the Community, How Change Occurs.

Industrial & Economic Understanding/Careers

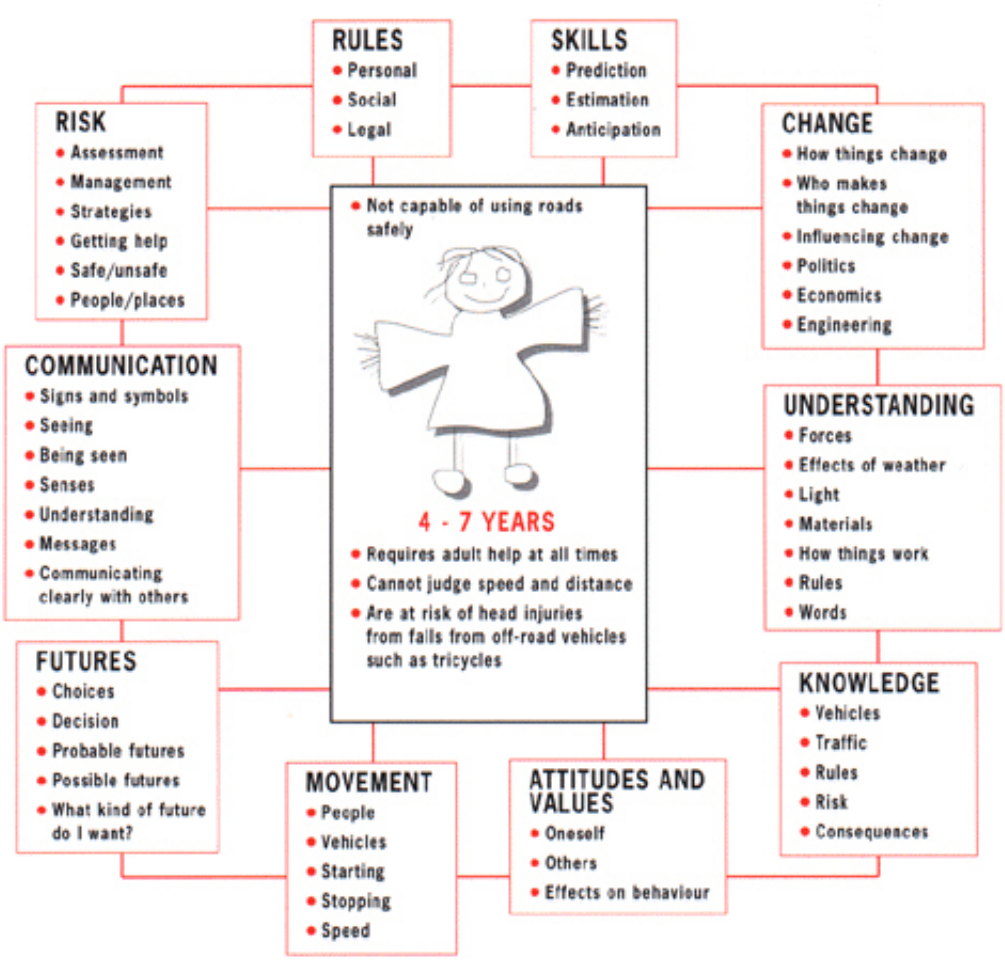
The People Who Design and Build the Roads, The Costs of Change.

Environmental Education

The Effects of the Motor Car, The Future.

10 How might RSE be Taught to Pupils at Key Stage 1? [6]

Road safety education is most effective if fully integrated with the curriculum.



10.1 What is appropriate for the 4 to 7 years age group?

Children of this age should be looking at safety in a wide context in which road safety is one aspect.

They need to:

Learn

- Who they are; where they live; who is there; their telephone numbers; where they can go if nobody is at home.
- Where they are and are supposed to be; who knows where they are; how long it takes to get somewhere.
- Safe places to play, safe routes to get there. The rules for safe play.
- What are dangerous places and why these are dangerous.
- Who to trust and who is safe to be with. Who are the people who help to keep them safe.
- To ask for help.
- The causes of accidents.
- That keeping safe is their job too.

- The difference between real and imaginary dangers.

Practice

- The skills needed to keep themselves safe.
- The rules that help to keep them safe.
- How to have fun, play safely and keep safe.
- Being a good passenger.
- Doing things on their own.
- How to ask for help and how to explain things clearly.
- Assessing risk in and around the school and in the places they visit.
- Using their senses to help keep safe.
- Making decisions and reflecting on the consequences.

Understand

- The many causes of accidents.
- That they can prevent accidents.
- The meaning of the words STOP, LOOK, LISTEN.
- What traffic is.
- What vehicles are.
- The vocabulary of the road - kerb, pavement, road etc.
- That the road environment is designed and built, that it can be changed; and how these changes can be brought about.

10.2 Example activities and related topics at key stage 1 [7]

Design and make:

- A bag
- A set of clothes

That will help keep you safe when you go to the shops with your family. (Dress a doll or cut and stick).

Technology; Science

SHOPS; MYSELF; CLOTHES; JOURNEYS; COLOUR.

Design and make a vehicle and add things to protect the family and other road users. Use your vehicle to test forces.

Technology; Science.

MOVING AROUND; HOLIDAYS; JOURNEYS.

Investigate which shoes are the best grippers/sliders. Look at tyres, brakes, road surfaces.

Science.

CLOTHES; TRANSPORT; JOURNEYS; MYSELF.

Draw a map of your school and grounds, put in all the areas of risk and ways to manage those risks. Use a concept keyboard so that others can look at your ideas.

Technology; Geography; Health Education; English.

OUR SCHOOL; LOCAL STUDY

Design and draw up a set of rules for behaviour in different parts of the school. Make a set of signs to go with the rules.

Technology; Health Education; English; Citizenship.

LIVING TOGETHER; OUR SCHOOL; JOURNEYS; COLOUR; SIGNS AND SYMBOLS

Design and make warning signals that can be seen or heard in different light/weather conditions.

Science; Technology; English

LIGHT AND COLOUR; SIGNS AND SYMBOLS; JOURNEYS; TRANSPORT

Design and make a game to help the family go to the local shops safely.

Technology; English.

LOCAL STUDY; SHOPS; TOYS AND GAMES.

Invite visitors into the school to find out:

- What the risks were when they were young.
- How they help to keep others safe Engineers, police, fire brigade, crossing wardens etc.

English; Careers; Econ. and Industrial Understanding; History; Citizenship.

PEOPLE WHO HELP US; CHANGES.

Act out what these mean: Stopping; looking; listening.

English.

SENSES.

Collect data on traffic flow at different times of the day. Use I.T. to handle the information.

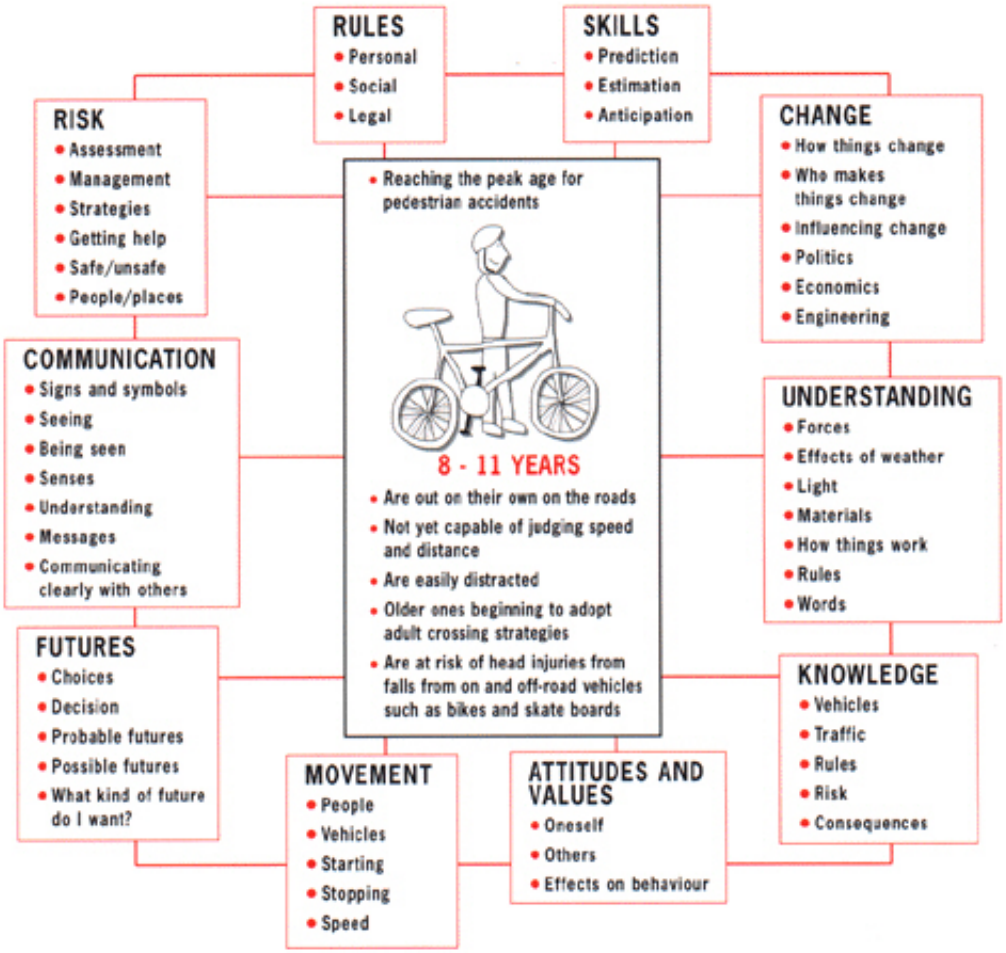
Maths; Science; Technology.

MOVING; LOCAL STUDY; TRANSPORT.

[6] For Scotland P1 - P3

[7] For Scotland P4 - P7

11 How Might RSE be Taught to Pupils at Key Stage 2? [8]



11.1 What is appropriate for the 8 to 11 years age group?

Learn

- Where they are and are supposed to be, who their friends are, the person in charge, and the person who needs to know where they are.
- How to get out and how to get home, how to contact home, another safe place to go. How to tell the time, use a telephone, judge speed and distance.
- How to get help when they need it.
- The risks and hazards they might find when they are on their own.
- Which people are safe and not so safe and how to recognise them.
- Where and when accidents might happen and what to do if one happens.
- The skills to keep them safe in traffic, when they are alone or with other people: simple lifesaving skills.
- To resist pressure from their friends to do things they know are not safe or sensible, and the words they need to use to do this.
- The safety rules for different situations and how to keep them.

How things in their local environment are changed and how they might influence those changes now and in the future.

Practice

- Using things safely and playing safely.
- The skills they need to have fun, feel good, feel safe and keep safe
- Being a good example to younger children and passing on their skills to others.
- Resisting threats, persuasion and bullying.
- Identifying and weighing up the risks in any new situation.

Speaking and writing to those people who can help them to bring about changes to their local and/or national environment to make it safer

Understand

- There are people who help to keep them safe, but that is also their job.
- If something is frightening or upsetting to them that they have a right to say "NO" and that this is not rude or silly.
- That being able to do more things away from the family means they have more personal responsibility.
- That they will still need help to keep safe and asking for help is useful.
- That their actions can have consequences for other people.

10.2 Example activities and related topics at key stage 2 $\frac{8}{}$

Make safety audits of the school and local area. Ask road safety officers and police to help. Take photographs or video. Use your findings to make recommendations. Present these to the head and governors.

Health Ed,; English; Environmental Ed.; I.T.; Citizenship.

LOCAL STUDY; OUR SCHOOL; SAFETY

Use bus and rail timetables to plan journeys around the city or to other parts of the country. These might be for school visits or family visits and holidays.

Geography.

LEISURE; TRAVEL; JOURNEYS; HOLIDAYS; SCHOOL VISITS

Investigate rules for getting on with people, cooking, class ground rules, being out with friends etc.

Health Ed.; English; Maths; History.

COMMUNICATION; LIVING TOGETHER; MIGRATION AND SETTLERS

Interview local people about the traffic situation. What are the problems? What might be done? Whose fault is it? What about public transport? Identify main concerns and suggest action.

Citizenship; English; Technology.

LOCAL STUDY; TRANSPORT; MOVEMENT

Write to the road safety office for the official accident statistics around your school. Do your own survey of accidents and near misses, and where they took place, among your schoolmates. Compare the two sets of statistics. Use I.T. to handle the data. Use O.S. maps to indicate where it happened.

Maths; English; Geography; I.T.

LOCAL STUDY; TRANSPORT; STATISTICS

Write a story about an accident. Make models such as cars, pelicans, telephone boxes. Read out your story and use control technology to make things work at appropriate times in the story.

I.T.; English; Technology; Science.

COLOUR AND LIGHT; VEHICLES; ELECTRICITY

Investigate the main risks in the historical period you are studying. How were these risks managed? Compare this with the main risks of today and how we manage these.

Health Ed.; History.

HISTORICAL TOPIC

Design and make a vehicle that keeps its occupants safe, is safer for pedestrians and is environmentally friendly. Use your vehicle to test forces eg. What happens to different material when they are hit?

Science; Technology

TRANSPORT; FUTURES; ENERGY; FORCES; MATERIALS; VEHICLES

Design and make a safety game for use with other classes.

Technology; Health Ed; English.

TOYS & GAMES; LEISURE; LOCAL STUDY

Collect data on the movement of traffic at different times of the day. Use I.T to collect and handle the information.

Maths; I.T.

TRANSPORT; MOVEMENT; POLLUTION; ENERGY

Estimate the time it takes for vehicles to cover measured distances and their speed. Time them, work out the speeds. Compare your estimates. Can you get better at estimating? Find out how long it takes you to cross measured distances. Investigate which surfaces make the best tyres and brakes. Test trainers for grip.

Investigate the effects of slopes upon speed stopping distances. Change the surfaces and look at the results. Compare stopping distances on foot, skates, skateboards, bikes. Use data logging to compare reaction times.

Maths; Science; I.T.

FORCES; MATERIALS; TIME; TRANSPORT; MYSELF; MOVEMENT; FRICTION; LEISURE

Use data logging to measure the pedestrian traffic flow in school. From the results design a way of managing that more effectively. Make signs to control and inform people using the school. Research traffic signs to find out the international meanings of the shape and colour to make signs that give orders, warnings and information.

I.T.; English; Science; Technology.

COMMUNICATION; SIGNS & SYMBOLS; MOVEMENT; OUR SCHOOL

Look at alternative futures for transport. Begin by looking at now. The good and bad points. What might the probable future be like? What would you want it to be like - your preferable future?

Health Ed.; English; Citizenship; Environmental Ed.

LOCAL STUDY; THE FUTURE; TRANSPORT

In dance explore the concepts of fast/ slow; priority; pollution; hard/vulnerable; managing risk; change; forces. Express through painting, drawings etc, using pattern and shape.

PE; Art.

FORCES; THE ENVIRONMENT; JOURNEYS; TRANSPORT

Design tourist information which also includes areas of risk and how to manage that risk. Use a concept keyboard or other I.T to make it available to others.

You could describe a real or imagininary place or one from history.

Technology; E.I.U; Health Ed.; English; I.T.; History; Geography.

SCHOOL VISIT; HISTORY TOPIC; LEISURE; ISLANDS

Model clothing that was used in the past to manage risk. Design and make clothing that will keep people safe today. You will need to test the materials for such things as impact absorption, conspicuity, water resistance, insulations etc.

Technology; Science.

CLOTHES; JOBS; WEATHER; OUTDOOR PURSUITS; VEHICLES

Keep weather records and give daily reports alongside the risks this might bring and how to manage these risks. Use a concept keyboard to handle your report.

Science; I.T.; English; Health Ed.

WEATHER; COMMUNICATIONS

Redesign parts of your local area. Make models, submit your ideas to the road safety office, police, R.S engineers, and governors. Ask them for comment.

Some may come in to discuss your ideas.

Technology; English.

CHANGE; COMMUNITY; JOBS

Collect data on how the community uses the area. On a large scale O.S map identify pedestrian routes and problems with these routes. Write to the road safety office for the maps and for details of how to do pedestrian networking.

English; Geography; Environmental Ed.

THE LOCAL COMMUNITY; JOURNEYS

[8] For Scotland P4 - P7

12 What Help is Available?

12.1 Road safety officers (RSOs)

The RSO may be able to help in the following ways:

Planning

Help with planning the integration of road safety education with ongoing work; support staff who are planning policies and schemes of work.

Resources

Matching resources to intended activities and the age of the pupils.

Support

Working with staff and pupils to support some of the activities planned together.

Information and Advice

Providing information and advice on a wide range of road safety matters including statistics, people to contact, and pedestrian and in-car safety.

Training

Providing support for in-service training for staff and workshops or meetings for governors and parents.

12.2 The police

Within the Police Service there may be officers with a specific brief to work within schools looking at safety and crime prevention. The local police headquarters will supply details of any officers who are trained in safety or road safety education in schools.

12.3 Other agencies

Contact the Road Safety Engineers for information about their work and about local traffic problems. Approach the Fire and Rescue Service, the Health Authority and the LEA Advisory Service for help to provide an integrated approach to safety education in the school.

13 What in-service and other kinds of training might we consider?

Staff

Some of the areas for in-service workshops and meetings are:

- **Raising Awareness of the Nature of Road Safety and Road Safety Education** - helping teachers and others to realise the breadth of the subject.
- **Road Safety and the Whole Curriculum** - looking at how road safety can provide a real and relevant context for learning, and exploring the links with the National Curriculum cross curricular themes of Careers, Environmental Education, Health Education, Education for Citizenship and Economic and Industrial Understanding.
- **Road Safety Education and the Subjects of the Curriculum** - examining the ways in which we can use subjects such as mathematics, science or English, for example, to explore road safety issues and give students a greater understanding of how they might keep themselves and others safer on the roads.
- **Continuity and Progression in Road Safety Education** - how to plan small inputs of safety education into ongoing work for each age group thus ensuring continuity and progression. This session could be followed up with very short planning meetings once a term with the possible help of the RSO.
- **Road Safety Education Resources** - an opportunity to look at the extensive range of available resources and to work through some of the activities appropriate for the agerange taught.

Parents

Workshops or meetings can cover some of the appropriate areas outlined above which include raising their awareness of road safety and road safety issues, the integration of road safety education and the curriculum, and supporting their role in road safety education.

Governors

Awareness raising and curriculum workshops, the responsibility of governing bodies, meetings to develop whole school policies.

14 Resources

The local Road Safety Unit provides an extensive range of resources which are available to schools. The resources provide support for curriculum areas and subjects and for work across the curriculum.

They include:

- Teaching Packs
- Video Films
- Movement Sensors
- Concept Keyboards
- Interactive Laser Video Player and Disks
- Pictorial Aids
- Slides

- Information Leaflets
- Large Scale Ordnance Survey Maps of the School Area

Local and National Statistics

The best way to use the service is to telephone the Road Safety Officer who can advise as to which resources are available and provide guidance to their most appropriate use.

Other agencies developing road safety education materials are:

RoSPA (Royal Society for the Prevention of Accidents)
Edgbaston Park
353 Bristol Road
Birmingham B5 7ST
Tel: 0121-248-2000

BITER (British Institute of Traffic Education Research)
Kent House
Kent Street
Birmingham B5 6QF
Tel: 0121-622-2402/6551

Appendix 1: Good practice examples from Hertfordshire and Sheffield

It is only by observing work in classrooms that the effectiveness of any educational strategy or change may be assessed. The following examples were not only selected for the work of quality undertaken in road safety education, but because they fulfilled other good educational criteria at the same time. Lessons were the result of careful individual and collective planning by teachers, and there was concern to identify what pupils needed to learn and what they had learned.

Pupils were encouraged to participate in the learning process through a range of activities clearly related to the objective of the lesson and supported by relevant materials. This links directly to the criteria within the National Curriculum that education should involve "exploration and investigations" which are set within the everyday experiences of children. Discussion is important to enable children to learn to express their views and opinions, and substantiate them, and this was particularly true when pupils worked in groups with certain videos such as "Dangerous Journey" and had to devise experiments to obtain information. Much of the work encouraged the development of vocabulary and language skills by recording and discussion and provided some mathematical experience.

Links with science frequently appear and observation and study of the environment which may or may not contribute to road safety education were included. Discussion of the causes of accidents and the statistics often lead to consideration of the human behaviour and attitudes that caused them to happen, and personal responsibility in terms of ethics and morality. Some work shows how pupils can participate in shaping their environment and make suggestions for its improvement through an investigation of real life issues.

The range of activities offered covered a wide field - oral, written, individual, group and class, provided opportunity for problem solving and decision making, and there was an increasing use of technology as exemplified by concept keyboards, data logging and video viewing, much of which was related to the realism of life on the road. Some work was of particular value in raising self-esteem - children who are valued and value themselves are more likely to behave with due regard to their own and the safety of others.

Every attempt was made by the teachers to give their pupils transferable skills in terms of road safety, and children appeared to listen, learn and remember what they had been taught, but sadly, we still cannot legislate for those who fail to put what they have been taught into practice in their daily lives. Pupils were encouraged to see that they themselves have a part to play in keeping safe, and language and concepts that they could understand were used.

1 Health Education/Safety Topic (Infant School)

Pupils in a reception class had made individual road safety books which contained drawings of crossing roads and simple maps, and written stories associated with road safety. Part of the dressing up corner had been turned into "Charlie’s Road Safety Office" containing police hats, traffic cones, and luminous police jackets. The children had made up a play about two families, one ’safe’, the other with a child who had run off, crossed a road between parked cars and was run down. This they performed to other children, taking the parts of police, parents, and car drivers in the story of the accident. The children had also done some science experiments to identify the safest colours for road users.

2 Links with Topic Work (Infant School)

The teacher of this class -(Year 1)- incorporates ideas about safety in all her work. A recent topic on books included the reading of the "Wind in the Willows". Toad and his vintage car and his dangerous driving provided fertile ground for road safety education. The pupils subsequently looked at their teacher’s car and considered headlights, full beam and dipped, fog lights and brake lights, and their brightness relative to visibility on the road. They stood behind the car to show how difficult it would be for a driver to see them. They also observed the reversing lights of delivery vans, and the bleeping which accompanies the manoeuvre.

On foggy days, the pupils went out into the playground, and in turn distanced themselves so that the rest of the class could decide who could be most easily seen in the clothes they were wearing. As a follow up, they studied visibility. They looked at the colours children were wearing, and used a viewing box into which pieces of material could be placed to see how visible they were in different kinds of light. A topic on machines involved pupils looking at machines in the home, making electrical circuits and using candles for secret messages. Pupils looked up the definition of vehicle in the dictionary and using wood, which involved safe use of saws, designed and made their own vehicles. Pupils also carried out a traffic count of the busy road outside the school and translated the results into graphs, and studied traffic lights and the reasons for the colours used, also zebra and pelican crossings.

The links to the National Curriculum here are very obvious and should forestall those who claim that room cannot be made for safety education.

3 Cross-Curricular Work (Infant School)

In this school a broad view is taken of safety overall and appropriate aspects are automatically included in any topic work and activity. A visit to the museum involved designing an outfit for the trip which could be clearly seen, and children were asked to wear their brightest clothes.

In one Year 2/3 class, pupils were being introduced to co-ordinates using road safety education symbols - policeman, traffic lights etc. set out on charts. Others had placed blocks on a large plastic road map on the floor to represent buildings they thought should be included - church, flats, terraced houses, factories, chemists, grocers, station and the hospital. Starting points were labelled by the teacher, and the pupils had to plan routes to various localities using north, south, east and west directions. Subsequently they had to design their own villages, putting in essential resources and shops, and this involved much discussion eg. hospital should be located in a quiet area, houses and school should be away from the main road, factory buildings should be near the main road to facilitate access by lorries for deliveries.

Each pupil wrote their own story about their village of which the following are two examples:

"This is a map of Gnomes village and is very busy with school, hospital and lots of shops roads are very busy with cars and lorries so to make it safe there are lots of traffic lights and crossings. There is a bridge over the river so children don’t drown".

"This village is called Spot village. It is a busy village and lots of people live there. Mums and Dads work in the factory or offices where they make spotty cakes. The roads are busy so there are lots of crossings and traffic lights for people to be safe".

This exercise was a prelude to designing mystery islands and working out route maps around them.

The combined Humanities Exhibition subsequently staged in the school hall included written descriptions of crossing the road, the purpose of different crossings, and an exercise on "Certain and Impossible" based on Streets Ahead, Module 4: Risks.

Classroom plans and exercises on orienteering which involved drawing street plans and inserting crossings and roundabouts were displayed, and another was concerned with a "Be Seen, Be Safe" display. This included photographs of children in bright clothes, and designs of bright ouffits by pupils to wear on a school trip. A fun and safety in the playground game - snakes and ladders type - was available for pupils to play.

On the floor was a superb model of a mystery island across which were placed ribbons dividing the area like a Concept Keyboard. Alphabetical letters marked top and bottom, numbers on sides. As one followed a walk around the island one encountered signs indicating danger. The co-ordinates of the sign were read off and these were then pressed on the adjacent Concept Keyboard, which revealed the danger eg, ice, dark tunnel, swarm of bees. Pupils then had to select the appropriate safety protection out of a nearby box - hard hat, net hat, reflective strips, a tabard, Wellington boots etc. This exercise represents a real crosscurricular input - modelling, geography, maths and safety, and literature as there could be a link with Treasure Island, and was the outcome of the work described earlier.

A subsequent development was the temporary transformation of a small cloakroom in the school into an outsize "dimmer" box where pupils could evaluate the conspicuity of different materials and colours under different light conditions. An important development was that parents were invited to see this evaluation by their children, and therefore realised the importance of fluorescent protection for them.

4 Dance Drama (Junior School)

Three schools, a secondary, junior and infant, are sandwiched between a motorway to the rear, and an extremely busy and dangerous major road to the front, and were in an area that was to be the subject of traffic calming measures by the Highways Department. It was felt that these measures might be incorporated into the studies of the pupils to facilitate their road safety and environmental education, and to this end a meeting to explain the measures was convened, and attended by staff representing the three schools, the Road Safety Office, an engineer from the Highways Department, the advisory teacher and representatives from the Rotherham Dance and Drama group.

It was explained how a study of the traffic calming measures could be undertaken to widen the pupils' awareness of road safety education and the part that the environment can play. This could be done either by specific study or incorporating the work into, for example, an integrated topic. It could involve statistical work on traffic surveys and accidents in the area, alternative suggestions for slowing traffic, environmental study, etc. It could encourage pupils to be aware that a community can also exert pressures to make roads a safer place by campaigning for crossings etc.

Statistics on deaths/accidents with particular reference to Sheffield and the 6-9, 10-14 and 14-17 age groups were presented. The Highways Department had identified accident prone areas near the schools, and intended implementing speed reducing measures by the use of ramps at all junctions, thus narrowing the roads at this point, together with a proposed speed limit of 20mph. A design for the 20mph sign was needed, and this could well involve the pupils.

The Road Safety Officer indicated the wide range of resources available from his office and his willingness to help with any planned project work. Representatives of the Dance Drama group indicated how they could give the road safety message a greater impact by working with staff and pupils as required.

As a result of this meeting the head teacher and staff of the Junior school reconsidered the topics for the forthcoming term to include aspects of road safety education, and decided to link road safety education with Dance/Drama. Two members of this group held a half day INSET course with the staff on dance/drama/music techniques. The advisory teacher also worked with the staff on the Concept Keyboard, and provided ideas for the inclusion of road safety education within topics.

The dance/drama project preparation took place over four weeks. Pupils were involved in selecting the themes for the project after much discussion with their teachers, and their ideas were incorporated to produce a programme covering many aspects of road safety. Their supportive work in the classroom included a study of their journeys to school, conspicuity, traffic observation, and friction which included braking and gears. Year 4 spent some 50% of their time during the four weeks on associated creative writing and art work. They used the Concept Keyboard and did much work on stopping distances, routes taken to school and danger points, and linked their work with graphs.

The final dance/drama presentation was an excellent production, and an extract was shown on one of the BBC's "Top Gear" programmes. Every pupil in the school was involved, either in Art, Music or Dance groups and very full consultation took place between staff, pupils and the dance/drama team. The school hall was used for the performance and was superbly stage-set by artistic panels and models made by the pupils; the percussion music was excellent and very appropriate for each theme. The dress rehearsal was attended by the contributory infant school, and the performance was also seen by the secondary school pupils. Parental support was excellent, both in attendance at the performance and in helping to make costumes.

Conversations with pupils at random indicated that they were far more aware now of the dangers of the road and the care that they must take, and some were educating their parents on the techniques of road crossing. Without exception, they had enjoyed working on, and participating in, the dance programme, and the fact that an extract was seen on BBC 2 enhanced their self-esteem. Unquestionably, environmental changes such as traffic calming can give rise to the development of good road safety education in schools.

5 Road Safety and Information Technology (Junior School)

Through liaison with the advisory teacher, the advisory teacher for technology and the adviser for geography a group of pupils in Year 6 became involved in the humanities and information technology project on "Journeys". As much information technology as possible was included in the project, and equipment was borrowed from the Authority Media Control Centre. Preliminary work included looking at traffic lights and their automatic sequence, then at crossing roads as pedestrians, using pelican crossings, where the sequence is not automatic but subject to pedestrian control. The class was also interested in the concept of Supertram - an unmanned vehicle - where the track is linked to stopping and starting. Problems can arise with the elderly getting on and off in limited time, so building in safety factors such as light sensors and buzzers was considered by the class.

Much work had been done in connection with traffic calming measures to be taken in the very busy suburban road upon which the school stands. This road is a bus route, and is also used as a short cut to another busy road by motorists. After considerable consultation with local residents it was decided to install traffic humps. One of the involved Highways Engineers came to talk to the pupils about accident statistics, and how the final decision concerning the humps was reached. He demonstrated the use of the police radar gun and referred to automatic devices such as touch pads which check up on the number of vehicles passing over.

The Media Centre lent data-logging equipment and materials for the pupils to make pressure pads - there is now one at their classroom entrance - and this led to an investigation of how speed traps work. The engineer supplied a map showing where the humps were to be installed. In order to decide which stretches of the road were the sites of the fastest traffic, the class recorded vehicle speeds over 50 metres in Km per hour and entered them on a spread sheet. This provoked discussion on their reasons for approving or otherwise the decisions of the engineers.

Not far from the school is an extremely complex set of lights at a junction of five roads with right and left flowing traffic lanes and pupils took a traffic count here. They repeated this exercise at a nearby roundabout with four exits, and discovered that a roundabout could not cope with the same volume of traffic as lights. Touch Explorer plus Concept Keyboard programme was used to demonstrate the volumes of traffic along the five roads at the traffic lights junction.

The pupils were going to monitor traffic along a nearby road which, it is suspected, will become the route taken by motorists to avoid the humps. They will also repeat their speed checks and traffic counts when the humps have been installed to see what difference they have made.

One class of Year 3 pupils made use of the video "Accident in Park Road" as a stimulus for work they were doing in control technology. This work was supported by members of the Information Technology team, the Science team and the Road Safety Officer.

The children watched the video and wrote a scenario of an accident based on ideas gained from the film. They constructed models which included cars, emergency vehicles, traffic lights and a telephone box, all of which made use of circuitry to operate lights, butters, bells etc. The children wrote a script and used the computer to write control programmes for each model. The programmes were linked to form a sequence which would fit the story line. The resulting piece was performed for an audience. The story was narrated by members of the class and at appropriate times in the story the computer programmes were used to control the models to give emphasis to the performance. This included the car indicators signalling, traffic lights working, an ambulance's siren sounding, the telephone ringing etc.

This work formed part of a much wider integrated topic which focused on the local environment, a topic which lent itself easily to the inclusion of other aspects of safety and road safety education and which were fully exploited by the teacher.

6 Topic Support (Special Unit)

Pupils between the ages of 5 and 8 in a speech impairment unit were following the topic of Moving. They had made an attractive class book with photographs of pupils who went for a walk to identify various signs - roundabout, bus stop, halt, fire hydrant etc. All the pupils could identify each sign and knew its purpose exactly. Excellent drawings, paintings and writing about their own cycles were displayed, and many were knowledgeable about cycle parts.

A detailed traffic count had been translated into a pictorially illustrated graph and there was a variety of individual paintings carrying appropriate road safety slogans, eg. use the zebra crossing to cross the road. One group of pupils was playing with a road safety board game played with dice on the snakes and ladders principle. The visiting speech therapist reinforces road safety education, as one of her resources includes an illustrated card of road scenes and an accompanying tape on "How do you get there?"

7 Core Subject/Science/Technology (JMI School)

Close links have been established with science and technology in this school which ensures that there is a regular road safety education input into every year group. Reception pupils had looked at simple maps, and using building bricks had made a simple triangular shaped village. Using model cars, children had to position parked cars and using two model figures select 'naughty' places and right places to cross the road. Pupils were quick to see that they would be in danger between parked cars because they could not be seen, and a driver might decide to reverse his parked car prior to driving out. Hand-holding with a grown-up was emphasised and pupils were encouraged to tell a grown-up when it was safe to cross the road. The use of a pelican crossing, and the reason for the bleeping noise were discussed very sensibly by the pupils.

Year 2 were studying different types of safety helmets and their use and differences between the hard hat for riding, and that for a cycle or motorcycle. They were also considering designs to make cycle helmets more attractive. They were then going to look at their own outdoor coats - could they be clearly seen in eg. foggy weather, and the dark, and if not, what steps should they take to ensure conspicuity?

Years 3 and 4 looking at sound, were testing materials for the best head gear to hear motors, cycle bells etc. Pupils made simple headbands and ear pieces of a variety of fabrics, including wadding and cotton wool. They were tested by a child wearing their headband standing with their back to another pupil who made the appropriate noise, and comparisons were made concerning the clarity with different fabrics. This was linked with the sort of headgear children wear, particularly in the winter, such as ear muffs and drawstring hoods, which diminish hearing capacity. Another small group was working with the dimmer box to find which materials were reflective and which were fluorescent. This was related to appropriate clothing and the protective jackets worn by police and lollipop people.

Year 5 were following the Science and Sound topic, and were engaged in making an alarm system for a cycle. This involved considerable discussion between the pupils, problem solving and decision making, use of circuitry etc. Butters were the alarm produced, and some pupils also linked this with lighting circuits.

Year 6 were studying headgear, and trying on a cycle helmet, riding helmet, balaclava, and woolly hats. They had to decide which one would keep them warmest and why, and devise tests for hearing and seeing when wearing them.

8 Whole School Speciflc Topic (Junior School)

Road safety in this school is the responsibility of the teacher who is the science co-ordinator. Each co-ordinator produces a teachers' resource pack and folder covering work for each year group. As the school does a whole school topic every term, all classes follow the same topic, albeit at different levels, so road safety education is incorporated where appropriate for every class.

One project undertaken by the school was Cycles, Chains and Circles. A local man who has a collection and interest in old cycles came to talk to the pupils who were given the opportunity to ride some of the models. The Road Safety Officers brought the reaction tester to school on loan for a week, so the pupils could test their own reactions in terms of braking times and this information was fed into a computer package which gave percentages and bar charts. During the entire term pupils studied bicycle maintenance - repairing punctures, sizing wheels and braking systems, the Highway Code and road signs and conducted various road safety experiments such as those concerned with stopping distances, and best colours to wear at night and during the day.

This work was jointly presented by Road Safety Officers and teachers across the age groups, in a modular workshop format. From this topic, everything from models to books were produced by the pupils. The latter were very well presented, and included work on different types of cycles, with pupils' own drawings, experiments on stopping distances for cars on various angles of slope, precautions for crossing roads, and descriptions of safer places to cross. It is particularly noteworthy that the school has successfully incorporated road safety education into the science curriculum, thus ensuring that all pupils follow related work where appropriate.

9 Safe Journey Topic (Junior School)

In this school Year 6 worked on 'The Safe Journey to School' topic. As a preliminary, pupils were asked to draw a plan of their journey to and from school, mark in safe and dangerous places to cross, and write about any accidents in which they had been involved or observed. All pupils in the school were asked about their routes to school, how they travelled and with whom, and this information was put on a database. Accident reports from local papers were collected and pupils wrote accounts of their own accidents in newspaper report format. As well as large class folders, each pupil had prepared their own indexed book on Safe Journeys.

Pupils considered road signs and their meanings, made dimmer boxes for experiments on conspicuity, and in the course of studying safe places to cross the road outside the school, noticed that there were no school signs. They wrote to the Highways Department concerning this omission, and as a result of this group action, at least one, if not two school signs will be erected.

Assemblies were planned by the pupils to be given to the contributory nursery and infant schools and their own school on road safety matters, and parents and governors were invited to attend. This assembly presentation was recorded on video for future use.

Pupils were not allowed to participate in the cycling proficiency test unless they wore a cycle helmet.

This project increased awareness of road safety education amongst pupils of this, and the feeder infant school. The work involved aspects of technology, geography, language, mathematics and science.

10 Whole School Project on Road Safety (JMI School)

Situated in a rural environment this small school has embedded road safety education into its curriculum. Class 1, which contains pupils in the reception year and year 1, had done a project on celebration as part of their religious studies. This had spin-offs in science and road safety: one aspect of celebrations is the use of decorative lighting such as candles. Study of a candle involved the consideration of how light sources may be enhanced by the use of lenses or mirrors, how candles need oxygen to burn, how some things are easier to see in poor light than others, and how lighting is provided to make roads safe at night. Work had been done with a light box and a range of cut out figures dressed in different materials to demonstrate the kinds of clothing that can be seen at night.

Year 1 had also gone into the village armed with a camera, to make a road safety survey. They had discovered that it was quite difficult for children of their size to see properly and cross the road safely near the village shops which are situated in the old part of the village, because of the parked cars. They had recorded that even some drivers had difficulty seeing when they wanted to pull out and they thought that many cars were driving too quickly past the shops, not least because the village play group operated quite close by.They were also worried by a hedge separating a public playground from the road: there was no footpath, and children coming out of the playground could not be seen until they were into the carriageway. All the visibility problems were beautifully illustrated by the children's photographs: one visiting father was overhead to say that he had not realised before the problems that children faced because of their size. The chairman of the parish council had been to the school to talk to the children about the survey but no information about actions proposed by the authorities seemed to be available.

Class 3 had been studying a project on colour and light. They had studied the different colours used on road signs and the reasons for their selection and their display included traffic signs. They had reinterpreted the school rules and presented them as DOT roundels and extended the exercise to include roundels with road safety messages that they had gleaned from working with the County Road Safety Officers' Association (CRSOA) "Survival Code Materials". Apart from the fairly conventional "Wear a seat belt", "Don't be dim, look", and "a helmet or a grave", there were two that were very memorable:

"Don't be a pratt wear a hat"

"Don't be flat like a mat"

The pupils had especially looked at red, as this colour is the danger sign for animals, birds and humans, and is associated with stop and danger. They had even observed that human skin becomes red when we are sick, or burned or angry.

The pupils play many games in PE which are intended to make them aware of the difficulty of stopping quickly and the importance of listening and concentrating when crossing busy areas. They play traffic lights, stopping quickly at different sounds, running across the hall from two sides at once, trying to avoid each other, and then doing the same thing, but holding an object at the same time to include more variables. Hoops and jumping stands are used to create bottlenecks and roundabouts and this gives rise to discussion concerning rules which are necessary to prevent accidents.

11 Development of Road Safety Education through linking with Engineers (Junior)

A group of schools was situated in an area where traffic calming measures were taking place, and the staff worked with representatives of safety engineers and Road Safety Officers to produce a teaching package. This included a rationale for including road safety education in the normal activities of a primary school, and many ideas for content within the context of the National Curriculum. Activities for both Key Stages 1 and 2 were outlined in a suggested topic plan and these were cross referenced within the National Curriculum. As a result, a considerable amount of work was undertaken which centred around environmental changes and included a concentration on many aspects of road safety education.

In one junior school it was decided that Year 6 should participate in this work, combining it with a study of the local environment. A major undertaking by this group was designing their own traffic calming schemes. They began by considering the published options of the county for road calming measures, and costed and assessed the effectiveness of each. They were able to work with an engineer carrying out traffic and speed surveys and watched the various stages as the road works were undertaken.

As a result of their speed surveys of traffic passing along a road without speed reducing humps installed, the pupils discovered that 70% of the passing vehicles were exceeding the 30mph limit, thus indicating the dangerous nature of this road. Using their knowledge and understanding of traffic calming measures, and taking costs into consideration, the pupils designed their own traffic calming schemes for this road, and turned their designs into papier-mache models. The County Engineer was very interested in the schemes produced by the pupils and took notes and photographs of them.

Throughout, the project provided pupils with opportunities for discussion, decision making and evaluation. The teacher prepared very well planned and interesting worksheets, and coordinated welfare help to assist groups of pupils in practical work near the roads; a science input from the advisory teacher dealing with forces, momentum and friction was linked with the project, and the head teacher covered for the class teacher when necessary and supported the work. The project was multi-disciplinary and very wide-ranging covering many aspects of the National Curriculum.

A second junior school had two displays in the entrance hall concerned with the road humps. One was a model road with circuit lighting, and the other of road signs made into clocks which the pupils could take home. Additionally a third year group was engaged in making an excellent model of the road outside the school, with the traffic humps, and models of the school and houses.

There was a wealth of pupils' stories, poems and accounts of installing the humps, exemplified by the following example:

Sing a song of sixpence
A pocket full of rye.
Four and twenty accidents
Since last July.
Humps were then constructed
To make the cars slow down
No-one uses Peascroft Road now
As a short cut to town.
The people in their Audis
Driving far too fast
Now all go another way
We're safer now, at last!

The children also collected and graphically illustrated remarks made to the head teacher by irate motorists such as "Fancy putting that width restriction by the school field. I used to get up a nice bit of speed there." "They've really overdone it with those humps". "Those humps have added five minutes to my journey from Aspley to Luton. This used to be a handy short cut." "Children will get run over with or without those humps. It's part of growing up!" "Those humps are ridiculous. I haven't any children anyway.

Pupils had also done surveys on the makes of car that passed the school and the numbers of cars using the road before and after the humps were built. Their graph revealed a sharp decline in cars using the road after the installation of the humps. Photographic records of every accident were kept.

A third junior school, in addition to traffic surveys and road signs had discussed the effects of accidents on the family and the community at large, and interviewed people using nearby shops to obtain their opinion of the humps. They found that opinions were evenly divided.

Unquestionably the local traffic calming scheme was a catalyst which stimulated road safety education throughout the curriculum, and which furthered relationships between schools and safety engineers. It also provided opportunities across the schools for work in English, art, maths, design and technology, craft, science and geography.

In addition to these examples described in some detail, there was other work of considerable interest and value being implemented in other schools. Two were using data-logging equipment, (Measure-it Kits, with the appropriate software, Prism) in order to investigate the effects upon road safety of different temperatures, light conditions and weather in general, reaction times, and traffic flow outside the school.

Particularly popular with many schools were activities using the light box. This enabled pupils following such topics as "Ourselves", "Light", "Colour", "Journeys" to investigate the conspicuity of different colours and materials, and in some cases extending this work into technological application such as designing and making clothing suitable for different weather conditions.

All schools used road safety education as a context for language development as exemplified by a reception class learning the vocabulary of the road, and the many discussions held by pupils which arose from road safety education activities including the use of Concept Keyboard overlays, and the interactive video.

There were many examples of schools using the local environment to study issues of road safety education, for example, pupils in Year 3 following a topic on ’Play Space’ investigated their local parks, with particular reference to the safety of the children’s play equipment provision, and hazards involved in travelling to the parks. The study increased concern amongst the pupils about a very dangerous crossroads near the school, which many had to use, and they were hoping to set up a pressure group to have traffic lights installed. This exercise thus provided a simple introduction to the use of peer group pressure and citizenship education.

There were many examples of the requirements of the National Curriculum in science being met by work associated with road safety issues such as friction, forces, materials and weather. Mathematical concepts are supported by traffic counts which provide opportunities for graphs and for problem-setting and solving concerned with the local environment. Studies of roads and vehicles and their development included in topics on ’Transport’ revealed the historical associations which may be made with road safety education. Children’s paintings and drawings are universally used together with creative writing to portray different scenes and situations in road safety education.

There was overwhelming evidence that strands related to road safety education were threaded throughout a multiplicity and variety of topics, ranging from tropical rain forests to the four seasons.

Demonstration of Good Practice Working Party

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