

# Road safety coverage in primary and middle schools

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A recent survey of road safety education in primary and middle schools throughout the United Kingdom provides much-needed detail about the scope and variety of road safety teaching. This article focusses on the specific road safety topics taught and the pupils that they were most likely to be taught to. These findings are then compared with what teachers think ought to be taught. It is concluded that the actual coverage of most road safety topics is inadequate.

It is now widely recognised that health education should include aspects of road safety. The recently published DES document *Health Education from 5 to 16* advises that 'work in schools, and in infant schools in particular, should encourage the behaviour and skills necessary for safety on the roads'. Teachers and health-care professionals share this view. In a recent survey (1) of primary school topics, these two groups of people were asked which of 22 health education topics did they consider to be the three most important for inclusion in the primary school curriculum. More teachers placed road safety in the *three most important* category for both infant/first curricula and junior/middle curricula than any other topic. Road safety also headed the 'top three' list provided by health care professionals for infant/first curricula, and was in second place in their list for junior/middle curricula. Replies were also obtained from parents, and again they placed road safety at the top of the list for both age groups. These results show considerable consensus

amongst the three groups over the importance of teaching road safety to primary and middle school pupils.

Having regard for the importance attached to road safety education, it is not surprising that road safety is indeed taught in most primary and middle schools. A survey of health education in West Sussex schools (2) revealed that children in primary schools were more likely to be taught road safety and care of the teeth than any other health education topic. Over 90% of primary schools reported that they taught road safety to 5-7 year olds.

Although there is widespread acceptance of the importance of teaching road safety to primary school pupils, and without doubt some form of road safety is actually taught, there are few details available about the precise coverage given to road safety. For instance, which topics are taught and to which age groups? How does current practice compare with what teachers think ought to be taught? Such details would be most helpful to those seeking information and guidance

concerning the inclusion of road safety education within the primary school curriculum.

### The survey

In June 1984, a large-scale review of all aspects of road safety education in primary and middle schools was carried out by the University of Reading for the Transport and Road Research Laboratory. Questionnaires were sent to a 10% stratified random sample of all maintained and independent primary and middle schools in England, Wales, Scotland and Northern Ireland. A total of 2647 schools were contacted, and 1813 (68 per cent) replied. Most of the questionnaires were completed by headteachers. They accounted for 89% of the respondents, the remainder being deputy headteachers and class teachers.

Of the schools represented in the sample, 14% were infant schools (5-7 years), 55% were primary (infant and junior) schools (5-11 years), 12% were junior schools (7-11 years), 10% were first schools (5-9 years), 2% were combined first and middle schools (5-12/13 years), 5% were middle schools (9-12/13 years), and 2% were independent schools. They also varied in size, location and traffic environment. Further details can be found in the full report (3, 4).

### Schools teaching road safety

Over 90% of the schools reported that they taught some form of road safety. The percentage was higher in Scotland (97%) and in Northern Ireland (98%) than in the rest of the United Kingdom. Road safety was also more frequently taught in state schools (on average 92%) than in independent schools (67%), and in schools for younger pupils (infant: 96%; first: 94%) than schools for older pupils (junior: 88%; middle: 82%).

The most frequent ways in which road safety was covered were talks by visiting speakers such as the police and road safety officers (83% of the schools) and road safety advice in school assemblies (67%). Road safety advice was also given by class teachers within the context of the personal and social development of

their pupils (37%). Over 60% of the schools relied upon incidental coverage of road safety topics in normal lessons, and nearly 30% of the schools left road safety to the discretion of individual teachers. In barely 15% of schools was road safety taught as a separate topic, as part of health education, or as part of other school subjects.

### Road safety topics taught

To find out the specific road safety topics that had been covered in the schools, respondents were presented with a list of 15 topics taken from RoSPA's *Curriculum for Road Safety Education*, and they were asked to indicate those that had been taught in their school during the school year 1983-84. The question was purposely phrased so that it would include any teaching of road safety topics by road safety officers, police officers, etc., as well as by teachers. Replies revealed that the four most widely taught topics were *safe places to cross*, *where and how to play safely*, *the Green Cross Code*, and *people who help children to cross roads*. All of these topics had been taught in more than two-thirds of the schools in the survey. The next most frequently-taught topics were *the dangers of stationary vehicles*, *seeing and being seen*, *local roads* and *road safety vocabulary*. These topics had been taught in over half the schools. *Traffic signs and signals*, *a simplified crossing code* and *safe behaviour as passengers*, had been covered in more than one third of the schools surveyed. The remaining topics in the list had only been taught in a smaller proportion of the schools (see Table 1).

Some topics were more likely to have been taught in certain types of schools, i.e. to pupils of a certain age, than others. For example, *a simplified crossing code*, *road safety vocabulary* and *people who help children to cross roads* had more often been taught to 5-8 year olds (the infant and first years of schooling) than to 8-13 year olds (the junior and middle years of schooling). The reverse was true for topics such as *types and causes of road accidents*, *action in an emergency*, *traffic signs and signals* and *local roads*.

Table 1. Percentage of schools of different type teaching a range of road safety topics

Road Safety Topic	Infant	Primary	Junior	First	Com- bined	Middle	Indep- endent	All schools
Safe places to cross . . . . .	63	73	64	67	70	66	50	69
Where and how to play safely . . . . .	64	71	62	67	63	63	41	67
Green Cross Code . . . . .	55	73	63	62	65	63	41	67
People who help children to cross roads . . . . .	64	69	61	66	63	55	38	66
Dangers of stationary vehicles . . . . .	59	65	57	59	61	58	38	61
Seeing and being seen . . . . .	49	61	55	51	44	55	31	56
Local roads . . . . .	42	61	54	48	58	54	21	55
Road safety vocabulary . . . . .	56	58	47	53	58	47	33	55
Traffic signs and signals . . . . .	28	52	48	36	47	47	29	46
Simplified crossing code . . . . .	43	41	33	43	37	39	26	40
Safe behaviour as passengers . . . . .	29	39	26	30	21	37	41	35
Problems of controlling animals on the roads . . . . .	17	33	24	24	21	30	17	28
Action in an emergency . . . . .	7	34	26	19	28	29	14	27
Types and causes of road accidents . . . . .	15	31	28	23	28	28	21	27
First Aid . . . . .	1	2	7	5	12	10	12	8
Number of schools . . . . .	246	993	225	181	43	83	42	1813

Other road safety topics were taught more uniformly to all pupils regardless of age (Table 1), although doubtless the content and approach would vary according to age.

The frequency with which topics were taught in independent schools was generally similar to that for state schools, bearing in mind that much less road safety was taught in independent schools.

However, the coverage devoted to three topics was strikingly different. A much lower proportion of independent schools than state schools had covered *local roads* (for example, their traffic and danger-points). In contrast, *First Aid* and *safe behaviour as passengers* had been taught in a higher proportion of independent schools in spite of their lesser commitment to the teaching of road safety. The

greater emphasis on *safe behaviour as passengers* by independent schools was presumably in response to their pupils' likely form of travel.

The teaching of certain road safety topics varied noticeably with school location. For instance, *local roads* and *action in an emergency* had been taught in a greater proportion of village and isolated schools than in urban or suburban schools. Other topics such as *where and how to play safely* and *the Green Cross Code* had been taught more frequently in isolated schools only. Topics like *safe behaviour as passengers* and *problems of controlling animals on the roads* had been taught most frequently in isolated schools, much less frequently in village schools, and least frequently in urban/suburban schools. The only topic that had been taught in a greater proportion of urban and suburban schools than in village and isolated schools was *people who help*

*children to cross roads*. These findings can readily be explained in terms of the environment, life style, and experiences of the pupils attending schools in different locations – for example, children attending isolated schools are more likely to travel to school by car.

### Perceived importance of topics

The headteachers were asked to indicate the importance of the 15 road safety topics on a 5-point scale. The scale ranged from *not important* (scored 1) to *essential* (scored 5). The median rating (that used by most respondents), the mean or average rating associated with each topic, and the percentage of respondents who judged the topic to be either essential or very important are shown in Table 2, where it will be seen that the 15 topics fall conveniently into three groups. Those in the first group, with a median rating of 5, were judged by over 75% of the teachers

Table 2. Teachers' ratings of the importance of road safety topics

Road Safety Topic	Median rating	Mean rating	% rating topic 'essential' and 'very important'
Safe places to cross . . . . .	5	4.7	90
Where and how to play safely . . . . .	5	4.5	88
Dangers of stationary vehicles . . . . .	5	4.4	85
Seeing and being seen . . . . .	5	4.3	78
People who help children to cross roads . . . . .	5	4.3	77
Green Cross Code . . . . .	4	4.2	74
Local roads . . . . .	4	4.2	73
Simplified crossing code . . . . .	4	4.0	66
Safe behaviour as passengers . . . . .	4	3.9	62
Traffic signs and signals . . . . .	4	3.7	55
Road safety vocabulary . . . . .	4	3.7	51
Action in an emergency . . . . .	3	3.6	46
Problems of controlling animals on the roads . . . . .	3	3.5	45
Types and causes of road accidents . . . . .	3	3.1	32
First Aid . . . . .	3	2.6	21

Table 3. Teachers' rankings of the suitability of road safety topics for different age groups

Road Safety Topic	Age Group			
	5-7	8-9	10-11	12-13
Playing safely . . . . .	1	6	9	10
People who help children to cross roads . . . . .	2	9	14	14
Safe places to cross . . . . .	3	4	10	11
Dangers of stationary vehicles . . . . .	4	1	7	9
Seeing and being seen . . . . .	5	2	6	4
Simplified crossing code . . . . .	6	13	15	15
Green Cross Code . . . . .	7	5	12	13
Road safety vocabulary . . . . .	8	11	13	12
Local roads . . . . .	9	3	5	8
Safe behaviour as passengers . . . . .	10	8	8	7
Traffic signs and signals . . . . .	11	7	2	5
Control of animals on the roads . . . . .	12	10	4	6
Types and causes of road accidents . . . . .	13	14	3	3
Action in an emergency . . . . .	14	12	1	2
First Aid . . . . .	15	15	11	1

to be either essential or very important. The second group of topics, with a median rating of 4, were judged by between 50 and 75% of the teachers to be essential or very important, while the third group of topics received a median rating of 3. Less than 50% of the respondents judged these topics to be essential or very important.

Besides rating the importance of each road safety topic, the headteachers were also asked to indicate which topics were appropriate for different age groups. The topics were then ranked on the basis of the number of teachers indicating that they should be taught to a particular age group. This procedure clearly indicated which topic was judged to be the most important (ranked 1) through to the least important (ranked 15) for each age group. The results are presented in Table 3. This Table also shows in a very simple way the comparative importance of the differ-

ent topics across age groups. For instance, the teachers regarded *where and how to play safely*, *people who help children to cross roads*, and *a simplified crossing code* to be more important topics for 5-7 year olds than for older children. *Safe places to cross*, *dangers of stationary vehicles* and *the Green Cross Code* were judged to be more important for 5-9 year olds than for 10-13 year olds. In contrast, *problems of controlling animals on roads*, *types and causes of road accidents* and *action in an emergency* were thought to be more important for the 10-13 age group. Some topics were judged to be equally appropriate for all ages, for example *seeing and being seen* which received a consistently high rating and *safe behaviour as passengers* which got a lower rating. The use of different type-faces in Table 3 is intended to show how the rank order of topics tends to reverse from the 5-7 to the 12-13 year old age groups.

## Discussion

Over 90% of the schools in the survey reported that they had taught road safety and a similar proportion of headteachers agreed that it is very important that road safety related topics be taught in primary and middle schools. Yet, when the teachers were asked which specific topics had been covered, it was found that the two most frequently taught topics, namely *safe places to cross* and *the Green Cross Code*, had only been taught in 73% of primary schools. Other topics had been taught in fewer schools, often barely 60% or less. These figures show that even the most basic principles of road safety had not been taught in an identifiable form in all the schools that claimed to have covered road safety. Furthermore, a gap existed between the number of teachers who accepted that a topic was important and the number of teachers who actually taught it.

When the percentage of teachers who had judged a topic to be very important was compared with the percentage of schools that actually taught the topic, it was found that all of the topics were being taught in fewer schools than would be expected. The expected level of teaching was approached for three topics only, namely *people who help children to cross roads*, *traffic signs and signals*, and *road safety vocabulary*. This finding suggests that teachers had devoted sufficient attention to teaching topics that contained a lot of factual knowledge, but that their coverage of topics which depended more upon skill and attitude changes was inadequate when compared with the importance that teachers attached to the topics. Perhaps teachers need more guidance to encourage them to give greater emphasis to topics that involve behaviour and attitude modification.

The detailed analyses of topics taught to pupils of different ages and to pupils from different backgrounds showed that teachers were tailoring their choice of topics to the experiences of their pupils. This point was amplified when the teachers were asked to indicate the importance of road safety topics for different age

groups. Their responses clearly reflected their understanding that the road safety needs of children vary with their age.

In conclusion, the survey has provided a detailed picture of the topics that were taught under the umbrella term of road safety during the school year 1983-84. By documenting the variety and extent of road safety teaching in primary and middle schools, the survey provides a baseline against which groups of schools can compare their road safety education accomplishments. At a more personal level the findings may encourage those concerned about health education to clarify their own thoughts as to which road safety topics should be taught to different groups of children. This might then stimulate discussion and a reconsideration of road safety education provision within individual schools. Finally, the detailed insight provided of recent road safety teaching practices should prove helpful to anyone involved in curriculum development within the broad field of health and safety.

## Acknowledgement

The survey was carried out under a contract placed on the University of Reading by the Transport and Road Research Laboratory. The views expressed are not necessarily those of the Department of Transport.

## References

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